

## Changing Together Eco-Schools 1994-2019





## **Changing Together**

### Eco-Schools 1994-2019

Changing Together was developed by the Foundation for Environmental Education on the occasion of the 25th Anniversary of the Eco-Schools programme.

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FEE is an NGO and a non-profit umbrella organisation spread all over the world. FEE is registered as a charity in England and has member organisations based in 77 countries, who are all locally implementing a number of FEE's five programmes; Blue Flag, Eco-Schools, Green Key, Learning about Forests (LEAF) and Young Reporters for the Environment (YRE). The Eco-Schools programme was developed in 1994 with the aim of creating active citizens who are equipped to handle future challenges through action-based student-led Environmental Education.

#### Cover picture: Provided by Keep Northern Ireland Beautiful

(Left to Right) Carol Forster, Head of Operations, Keep Northern Ireland Beautiful Catherine Rutledge, Nursery Assistant, Downpatrick Nursery School Lorna Burns, Principal, Downpatrick Nursery School Alan Rutledge, Former Student, Downpatrick Nursery School, son of Catherine Rutledge Kelsie Erskine, first Principal, Downpatrick Nursery School Eboni Rutledge, Student, Downpatrick Nursery School, daughter of Alan Rutledge

Eboni Rutledge is holding a picture of her father's class during the first Green Flag award ceremony in Northern Ireland in 1994. The cover picture of the publication was taken on the occasion of the 10th Green Flag award celebration at Downpatrick Nursery School, Northern Ireland.

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# Acknowledgements

#### LAURA S. HICKEY, FEE BOARD MEMBER

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We acknowledge the collaboration and support received from UNESCO and UNEP over the years, and the partnership of MARS Wrigley Foundation, Toyota Motor Europe, Alcoa Foundation and the Lucart Group.

Started in 1994, the Eco-Schools programme has grown to be the largest school programme focused on Environmental Education and Education for Sustainable Development. It is a shining light into how the world can become a better place for today's and future generations, and we are beholden to our national operators and the more than 59,000 participating schools around the world who are the heartbeat of the Eco-Schools programme.



Students interacting with Alexander Leicht, Chief, Section of ESD, Education Sector, UNESCO

## Foreword

#### **UNESCO - 25 YEARS OF QUALITY EDUCATION FOR CHANGE**

## //

Education for Sustainable Development (ESD) aims to empower everyone with the knowledge, skills, values and attitudes that are needed to contribute to sustainable development, locally and globally. In light of the challenges that the world is facing, ESD must be considered as a central element of what quality education means today. Moreover, ESD serves as an important instrument to achieve the Sustainable Development Goals, which were adopted by the global community as an ambitious roadmap for transformational change.

The Eco-Schools programme of the Foundation for Environmental Education makes a major contribution to ESD across the world. Eco-Schools integrate environmental issues into every aspect of the school life and involve all concerned stakeholders along the way. Eco-Schools promote learning that is hands-on and that ultimately results in beneficial actions in the community. In this way, Eco-Schools are spearheading the 'whole-school approach' to ESD, where students learn what they live and live what they learn.

UNESCO, as the lead UN agency for ESD, has been pleased to be able to work closely with the Foundation for Environmental Education and its Eco-Schools programme for many years. Eco-Schools are a strong and credible partner for UNESCO. They work on the ground, every day, to make ESD a reality for students worldwide. With its over 59,000 schools in 68 countries, and a strong network of National Operators, the Eco-Schools programme provides quality ESD at a large scale. For five years, the Foundation of Environmental Education and its Eco-Schools programme have been one of the most active Key Partners of UNESCO's Global Action Programme on ESD (2015-2019).

At UNESCO, we look forward to continue working with the Eco-Schools programme as we move beyond the Global Action Programme into a new ESD framework that will strive to accelerate the transformational change that is needed across the world to achieve the Sustainable Development Goals.

#### Alexander Leicht, Chief, Section of ESD, Education Sector, UNESCO



#### **UN ENVIRONMENT**

### //

Eco-Schools is Education for Sustainable Development in action. It is a well-structured programme with clear steps to get involved and with 25 years of experience, success is certain. It is a meeting point for youth worldwide driven by aspiration, commitment and actions towards a sustainable environment. Its clear structure and consistency in activities have not only made Eco-Schools a well-established institution in its 25 years long-standing history, but it has also made it sustainable in itself. It constitutes a great example that we, at UN Environment, hope others will follow. For UN Environment, the Eco-Schools programme is an entry point to disseminate messages and information to the largest global network of schools in the world. At UN Environment we hope that the programme will continue to accelerate working with the communities that surround the schools, with the Sustainable Development Goals and with aligning advocacy at the national level.

#### Mari Nishimura, UN Environment Associate Programme Management Officer





#### MARS WRIGLEY FOUNDATION



The Mars Wrigley Foundation is proud to support the Eco-Schools Litter Less Campaign because it allows students to contextualise the issue of litter and waste and make it relevant in their lives. By giving students the opportunity to learn more about the various challenges and identify solutions, they become leaders in protecting our environment. And their energy and ingenuity benefit communities around the world. Eco-Schools has broadened my view on what is possible when addressing the challenges of litter and waste. There are many problems and there are also many solutions. The students are truly inspirational and set a great example for everyone to follow.

Anne Vela-Wagner, Mars Wrigley Foundation Executive Director



#### DANIEL SCHAFFER, FEE CEO

Foundation for Environmental Education (FEE) is an umbrella organisation of NGOs working nationally in their local communities. Eco-Schools, as an educational programme drives excellence through assessment of processes. It fits very closely with FEE's vision and mission as well as the way FEE engages through its programmes.

Eco-Schools is a large programme and one through which FEE as an organisation is recognised internationally. When one looks at the size of the Eco-Schools programme, the number of schools involved, the number of countries that are running it and the fact that it is growing so progressively, it is evident that its Seven-Step methodology, clear whole institutional approach towards Education for Sustainable Development (ESD) and its flexibility in terms of local context (culture, economic and environmental) is what makes the programme appealing and successful on such a large and wide scale. Generally speaking, many formal education systems around the world, unfortunately, see ESD as an extracurricular activity, or a choice in the midst of the fundamental challenges before the governments in terms of access, retention and quality that need attention. Even though in some countries there are strong connections between the programme and the Ministries of Education, in general, it is the Ministries of Environment and civil societies that are involved and committed to champion the importance of education in bringing about positive sustainable change.

We are challenged by the need to look at the workplace of the future, as it represents the place where we create problems and solutions for future generations. We need to ask ourselves, how can we get children and youth to develop skills that will help them be aware, productive and skilful in the fields we need to develop for a sustainable future. We have to ask what kind of society we want to have and what kind of challenges we will be facing in 10, 15, 20 or 30 years' time. We believe that the Eco-Schools programme is a way to create that dialogue within these structures to recognise the fact that sustainability will be a key factor in years to come and that the expectation of reaching sustainability should be reflected in the educational systems. When you have such a large number of schools, teachers, students, parents and educational systems involved, then you have increased impact addressing these challenges at all levels. This is why Eco-Schools is such an important programme for FEE. We work with other sectors such as the tourism sector with our Blue Flag or Green Key programmes, but we need to make sure we create the hotel managers of the future or the next civil servants in municipalities that have an understanding of the need for sustainability. We need to have a future working force, political and business leadership and an electoral base that is educated and aware of the importance of sustainability in the decisions we all make. Eco-Schools is a very good programme to try and achieve this.

### ...the Eco-Schools programme is a way to create that dialogue within these structures to recognise the fact that sustainability will be a key factor in years to come...

The long term strategy should include educational reform. We need to think about how we actually change the way educational systems perceive themselves and what is their role, vision and mission. We need to ask ourselves if the systems we have in place today are succeeding in forming adults that understand, value and are committed to the sustainable world we aspire for. The short term goal, on the other hand, should be to adapt ESD to the current curricula and current systems. Many of the challenges that we are facing at the moment are so urgent that we cannot only invest in the long term reconstruction of all our systems. We just don't have the time. We urgently need to invest time, effort and resources in developing and adapting our ESD materials to fit different disciplines and in creating tools that do not interfere with the system's official objectives, but actually support their work, save time and still communicate and teach the sustainable development message loud and clear. We need to show that ESD can be embedded in STEM, language and social studies without marginalising the academic required results. We need to show how a programme like Eco-Schools helps municipalities save funds in energy spending, reduce costs associated with vandalism, or how Eco-Schools Eco Committees allow for the inclusion of students with special needs into the daily school life.

This approach should include impact measurements of awareness, wellbeing and the relationship between ESD and academic results. It is hard to measure these qualitative aspects compared to measuring how many litres of water or kWh of electricity the school has saved - but we have to do both. As we move forward, we, as a network of organisations will continue to work hard so we can affect these outcomes. We need and we can showcase the aspects of achievement of Quality Education through the Eco-Schools. And we can do this because Eco-Schools simply works!

#### **Daniel Schaffer, FEE CEO**

#### **LESLEY JONES, FEE PRESIDENT**

Eco-Schools is a remarkable programme. It currently reaches out to 20 million students, but it has the potential to reach every student in every school, in every country across the globe.

One of the most important responsibilities we have is to engage and empower young people, supporting them to understand and take positive action to tackle the serious environmental issues that face our world.

Eco-Schools is such a powerful programme because it is student-led. We are not telling young people what to do, but supporting them to do it for themselves and bringing the adults with them. Eco-Schools is about more than academic learning and carrying out projects in schools. The learning is taken into the home and the wider community, encouraging and persuading people to do the right thing to protect our precious environment.

I have asked some of our members – significant organisations that run other Environmental Education (EE) programmes in their own countries, why they joined FEE to take the opportunity to run Eco-Schools. One reason is, of course, the important international dimension, but equally important is the structured framework of the Seven Steps. Every school will have an Eco Committee, be carrying out environmental reviews, learning and taking action and spreading the message out to the wider community. But the themes followed and the actions taken will be different reflecting the circumstances, culture and challenges of each country. FEE gives NGOs the opportunity to become members of an international organisation, whilst running programmes at the national level. This ensures quality and consistency, but also a diversity of approaches. There are tremendous opportunities to learn from one another and share ideas.

We need to do more to communicate our messages. We must let the world know, from the highest level of government and business to local people in villages and towns across the globe, about the positive impact Eco-Schools can have – we need to tell our story – shout it from the rooftops!

Since I joined the FEE Board in 2012, I have been fortunate to visit many Eco-Schools around the world, being inspired and humbled every time by the enthusiasm and determination of students and teachers. So many memories, but one that stays in my mind is a visit to a school in India, where I stood before hundreds of expectant faces sitting in an open courtyard and told them about Eco-Schools. When I explained they would be joining a family of 20 million students in 51,000 schools across the globe, they cheered and clapped.

### That is the power of Eco-Schools – bringing people together with a united approach and a belief that it is not too late to ensure a bright future for ourselves, our children and our planet.

**Lesley Jones, FEE President** 

## Preface

#### PRAMOD KUMAR SHARMA, FEE SENIOR DIRECTOR OF EDUCATION

For a quarter of a century, the Eco-Schools programme has been engaging young people in taking positive actions that transform their lives. From its modest beginnings in a few European countries, the programme has expanded to effect change **in** some 59,000 schools in 68 countries across the globe. The impact of the programme is well-recognised and respected by stakeholders that range from UN agencies to the communities in which a school isingrained. Anne Vela-Wagner from Mars Wrigley Foundation, a long-standing partner of Eco-Schools, was moved to the realisation that the programme has broadened her view and made her appreciate that, while there are many problems, there are also many solutions. Eco-Schools students are truly inspirational in what they do and set a great example for everyone to follow. Recognised by UNESCO and UN Environment as a world-leader within the fields of Environmental Education (EE) and Education for Sustainable Development (ESD), the Eco-Schools programme is not just an economic model to lower costs, it is also a humanistic model that places the students and stakeholders at the centre of a process of change towards sustainability, connecting them to the real issues in their communities.

#### The impact of the programme is wonderfully reflected by Nojuel;



"It changed my perspective on things that I once turned a blind eye to and it widened my view, enabling me to think outside of the box rather than just stay in my comfort zone. The Eco-Schools programme taught me that despite having different beliefs, different dreams, different races and just being different in general, we humans are still living on ONE planet with ONE mother nature. Throughout my four years of being in this programme, I also realised that changes are possible and it is up to us to help make our world a better place so that our future generations could have a chance to live in a world filled with the wonders of mother nature."

#### Nojuel JC Soluku, Student, SM St Michael Penampang, Malaysia



We felt that the milestone of the 25th year of the Eco-Schools programme is an opportunity to reflect and tell our story. A story of change that has impacted everyone who has come across the programme where every interaction has helped develop the programme as we know it today.

This realisation gave rise to what seemed like the most apt title for the publication:

#### "Changing Together!"

Eco-Schools, like any other programme of the Foundation for Environmental Education (FEE), draws its strength from the members and National Operators who lead it at the country level. The celebration of the success of the programme is due to the hard work that they have put in over the years. The Dream Team of National Operators meets once a year to discuss developments, share their notes and plan for the future. The selfless attitude of openly sharing resources and experiences for free has ensured that the learning curve is easier and faster for a new country that joins the programme or for a new National Operator who takes on the mantle of leading the programme in a country. This process is made even easier through technology and the emergence of social media. Experience has shown that the hands-on approach of National Operators has been a vital contributing factor to the success of the programme.

This publication is divided into two sections. The first section tells the story of how Eco-Schools was conceptualised, its history and evolution, and also describes the famous "Seven Steps" – one of the most recognised aspects of the programme. The Seven-Step process is the basic framework that guides an Eco-School to plan and implement the learning journey. The steps are intended to be flexible enough to accommodate any school context and environmental theme. The Seven-Step methodology has stood the test of time as an effective pedagogy across different contexts of educational systems, types of schools, cultural and socio-economic conditions. The nature of each of the Seven Steps and the order in which they are implemented allows for incremental change in sustainability literacy through active learning, as the actions of students improve the environmental performance of the whole institution, starting first with their behaviour. This robust pedagogical process empowers students with the drive and confidence to continue to have a positive impact in their bid to make the world a better place to live in.

The first section also includes a chapter with a literature review of more than 68 research reports from multiple countries. The results have been synthesised and summarised under four major categories, Academic and Skills Development Changes, Environmental Impact Changes, Behaviour/ Attitudinal Change and Whole School Sustainability Programme Approach with selected country case studies highlighted. The second section tells the story of the development of the programme in different member countries. The presentations detail basic information about each country, the status of EE in terms of national legislation, K-12 curriculum and professional development. The different stages of evolution and maturity which the programme is at in different countries is illustrated in the reflections of different stakeholders.

We will be analysing the data we have collected in the process of developing this publication and publish synthesis papers to support the development of the field of EE and ESD in the coming months. A quick analysis of the data and experiences shows that the programme draws its strength from how it engages young people and how their work draws others to engage in positive action. There is evidence that EE/ESD is shifting from being an add-on subject to being an integrated part of mainstream curricula.

The Eco-Schools programme is a testament of a good EE and ESD development programme that has been able to demonstrate its effectiveness in different contexts. The strength comes from the way it was conceptualised – a process of child-centred and child-lead pedagogy, symbolised by Seven Steps that can be adapted and contextualised by teachers around the world. The process ensured making a positive difference every day along with a focus on long term impact. Over the years, the experiences have been codified into a handbook, which is still more of a guide with the flexibility to make the programme the schools' own without compromising essential values and characteristics. It can link well to the Curriculum for Excellence and its international dimension is highly valued.

This publication is dedicated to the teachers who are at the forefront of providing children with the most stimulating experiences possible: it is they who have built this programme. Though their role is envisaged as facilitators, it takes many hours to glean the necessary experience owing to all the challenges that our education systems are faced with. It is their belief and commitment that has created the Eco-Schools we see today. As part of their master thesis, two students from Malmö University, Catarina Alves and Felipe Araya, interviewed Eco-Schools teachers from eight different countries and identified them as conscious people, people with a particular spirit, people with environmental and social awareness, people worried and engaged with making the future better by taking concrete actions. Their concerns inspired them to develop new pedagogical ways to transmit awareness and knowledge to their pupils, enhancing the efficiency of their job, spending their free time and weekends researching, preparing materials and guiding students to lead their Eco-Schools projects. Being part of a network sustains their strength to keep working or even engage new people. As one teacher said: "teachers get motivated by other teachers". The country chapters acknowledge that they not only learnt a great deal but also experienced a change in the level of satisfaction they felt in seeing how motivated their students are with their Eco-Schools projects.

Diversity is one of the strengths of the Eco-Schools programme. For the school staff, the opportunity to develop collaborations and friendships with other schools is highly valued as all the good practices and ideas can be pooled together. Another important aspect is that the Eco-Schools programme has been giving teachers a chance to participate in many local and international projects where they can exercise their creativity and learn about examples of best practice from elsewhere.

### The Eco-Schools programme is a testament of a good EE and ESD development programme that has been able to demonstrate its effectiveness in different contexts.

Hard work, collaborative actions, a resilient attitude and a consistent commitment to promoting sustainable actions in schools and communities are keywords that can be found in the statements of a multitude of different stakeholders throughout the world. It is widely acknowledged that the programme has developed skills and values through its educational model that also help realise the importance of democratic participation, ethics reflected in caring for one another, a shared vision of hope, individual and collective empowerment and resilience.

Lesley Jones, FEE President, is convinced that the power of Eco-Schools is its ability to bring people together with a united approach and a belief that it is not too late to ensure a bright future for ourselves, our children and our planet. The stakeholders feel privileged to have been involved in the programme which has provided opportunities to bring fresh and dynamic initiatives to complement the traditional pedagogical approaches in schools. The programme has infused curriculum with a meaningful purpose for the wellbeing of our planet. The success of the programme also put a certain pressure on the community as a whole to think more about sustainability. In many countries, it was parents or schools that pushed the introduction of the programme.

The thing that sets the Eco-Schools programme apart from other EE programmes is the framework and the fact that it is international, allowing Eco-Schools from different countries to collaborate at a global level. As we use a bottom-up approach, schools are aware that their daily actions that happen on a small local level in the school are being carried out every day in the numerous Eco-Schools around the world. With the small, local actions, the schools are in fact continuously participating in a large, global movement. The reflections in country reports also highlight the fact that, as education is changing globally and becoming hands-on, the schools that are involved in the Eco-Schools programme find it easier to adapt and understand the new goals and methods as they follow very similar principles: collaboration, teamwork, learning by doing, Project-Based Learning, problem-solving, critical thinking, real-world experiences etc.

We have reflected and identified various areas of future developments in the programme that need to be prioritised. One major gap is a lack of longitudinal studies to share the impact the programme is making to show how Eco-Schools participants maintain their enthusiasm as they grow older and leave school. We offer collaboration in such research along with various other questions being asked. The programme also has to keep pace with the changes that are happening in education itself, particularly in the area of using the developments of Information Technology and harness its potential.

### Eco-Schools is the largest global school network built with an investment of 25 years that can support education and the Agenda 2030.

The other key thrust area would be regional cooperation amongst members. We already have two networks that have been initiated and we are excited by the possibilities to initiate large learning and sharing projects for greater impact.

We are now in the process of development of our next strategic plan and have identified the global challenges of climate change, pollution - especially plastics related issues - and biodiversity loss as priority areas of action. We look at these as integrative themes that provide an opportunity to break away from the silos of different environmental issues. In Eco-Schools, the Seven Steps ensure that we have a children-driven process and the themes are contextualised and spread across K-12 years. We need to identify the things that have worked, and not get distracted with the pressure of finding new and innovative projects. This is often a big distraction for education as the need is to scale up what is working, instead of spending the valuable resources thinly, often on reinventing the wheel. We have to liaise better with the Ministries of Education taking the driver seat instead of the agenda being driven by other various ministries. This will help in having real integration in the curriculum for broader literacy outcomes. As Daniel Schaffer, FEE CEO, highlights in his foreword, the long term strategy should include educational reform. We need to think about how we actually change the way educational systems perceive themselves and what is their role, vision and mission.

We are committed to reaching every child with ESD and this requires resources and collaboration. We invite all stakeholders to contribute to scaling up the programme. Eco-Schools is the largest global school network built with an investment of 25 years that can support education and the Agenda 2030 - the global agreement on the Sustainable Development Goals that provides us with an exciting opportunity to engage 20 million students being supported by 1.3 million teachers. The possibilities are immense and being part of this transformative process is exciting!

Pramod Kumar Sharma FEE Senior Director of Education



# The History of Eco-Schools

#### NICOLE ANDREOU, INTERNATIONAL ECO-SCHOOLS COORDINATOR

In 2019, Eco-Schools celebrates 25 years of excellence in the field of Environmental Education (EE) and Education for Sustainable Development (ESD). It is, to date, the largest school network globally, implemented in over 68 countries, involving over 59,000 schools that engage 20 million students and 1.3 million teachers.

The Eco-Schools programme is contributing to ensuring that the environment is recognised as a critical element – the most important public good on which 'Quality of Life' is dependent. Since 1994, we have, all together, strived to make the programme a globally well-established vehicle for EE and ESD through deep experiential learning to prepare generations of active citizens who take the public responsibility to not only conserve the environment but also through their handprint reverse the challenges before humanity. The 25th Anniversary Declaration of Eco-Schools pledges to reach every child with ESD as an important Human Right.

The Sustainable Development Goals (SDGs) provide us with a vision of our common future, a framework and a timeframe; they set before us an **a**genda to engage with sustainable living for everyone. With an engaged sustainability movement, quality teacher training and setting and improving our standards, we hope to contribute to combatting the most pressing challenges of our time.

#### **Our roots**

The Foundation for Environmental Education (FEE) is a non-profit NGO, founded in 1981 in Leiden, Netherlands. Starting with Blue Flag in 1987, an eco-label for beaches, marinas and sustainable boating tourism operators, FEE saw the need to address school-based EE. In 1994, Eco-Schools and Young Reporters for the Environment (YRE) were launched. While YRE focuses on youth solution-based research of environmental and social issues through investigative journalism, FEE's 1996 programme, Learning about Forests (LEAF) promotes instilling our connection with the outdoors through learning. Later, in 2003, FEE adopted its fifth programme, Green Key, an accommodation eco-label within sustainable tourism.

Eco-Schools was a concept developed in 1992 as a response to the UN Conference on Environment and Development in Rio de Janeiro. The document coming out of the Rio conference suggested that youth-led environmental protection and development were key (United Nations, 1992). Eco-Schools then became a necessity - a programme initially developed by the Danish collaboration of an NGO and a municipality and extended to the world to promote student and teacher engagement in environmental and sustainability education that is a result of mobilisation. The programme was first piloted in Denmark in 1992 and expanded to other countries in Europe in 1994 - Germany, Greece and the United Kingdom.

### When country member organisations joined Eco-Schools

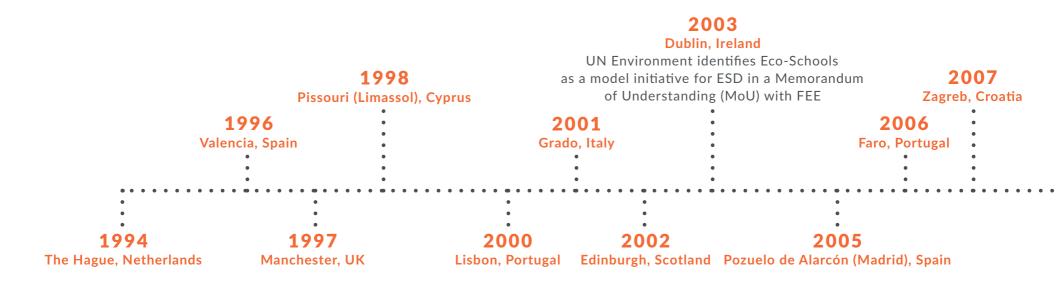
Launch Year	Country
1992	Denmark (pilot in 1992, launch in 1994)
1994	France, Germany, Northern Ireland, Scotland, Wales
1995	England, Greece, Turkey
1996	Bulgaria, Portugal, Slovenia, Spain, Sweden
1997	Ireland
1998	Croatia, Cyprus, Finland, Italy, Norway
1999	Romania
2001	Iceland
2002	Malta, Russia
2003	Kenya, Latvia, Netherlands, South Africa
2004	Lithuania, Slovakia
2005	Czech Republic
2006	Kazakhstan, Morocco
2007	North Macedonia
2008	Belgium, Brazil, Dominican Republic, Japan
2009	Bahamas, China, Jordan, Uganda, USA
2010	Iran
2011	Malaysia, Mongolia
2012	Serbia, UAE
2013	Singapore
2014	Australia, Bermuda, Ghana, India, Poland
2015	Tanzania
2016	Estonia, Montenegro, Switzerland, Thailand, Ukraine, US Virgin Islands
2017	Comoros, Madagascar, Mauritius, South Korea, Zanzibar
2018	Qatar, Chile
2019	Bosnia & Herzegovina, Canada

#### **National Operators Meetings**

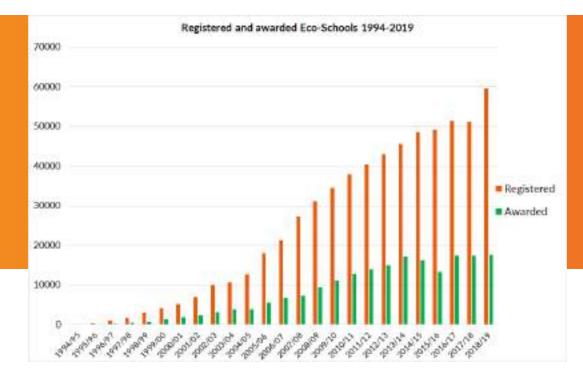
A National Operators Meeting (NOM), is a platform for all Eco-Schools operators globally to come together and discuss development, strategic planning, undergo professional development training and share their experiences with the implementation of their respective national Eco-Schools programmes.

Country member organisations take up the hosting and administrative coordination of each meeting, bringing together local partners, local authorities and participating schools to share their learning journey with their global colleagues.

### Year & Places NOMs where held:



### The growth of registered and awarded Eco-Schools



#### 2018

Cork, Ireland

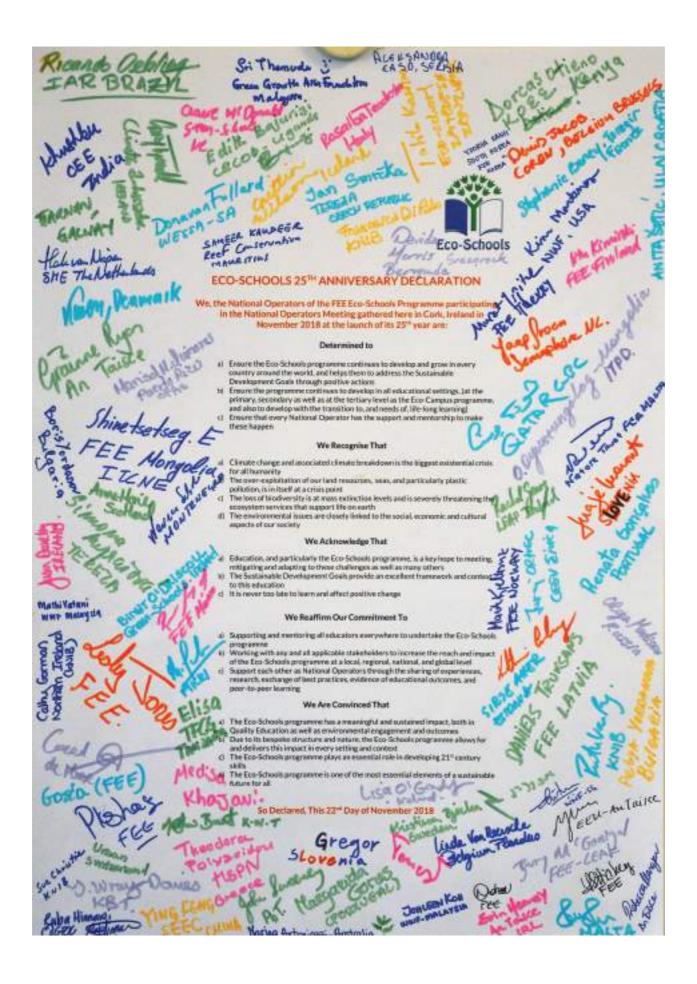
Eco-Schools National Operators and partners sign the 25th Anniversary Declaration



2010

**Edinburgh, Scotland** 

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#### The story of the Eco-Schools logo

(adapted from National Wildlife Federation, 2017)

"When the programme was launched in 1994, it ran a logo competition for Eco-Schools, for an image that would visualise environmental school education and student involvement. The winning entry formed today's logo with people as the centre of the programme, who are responsible for greening the future. This is symbolised by the flowers growing from the central person's arms. The flowers symbolise both the environment that shelters and protects humans, as well as the knowledge gained by students who participate in the programme and whose actions help develop values, attitudes and behaviour towards the environment.

The book in the logo represents schools and knowledge, with two different pages; the blue page represents the past, the history that one needs to familiarise with and the problems in society already created and need to be dealt with. The white page represents the future, a blank page to be filled with new knowledge and innovative experiences."

#### References

Andreou, N. (2019). Towards a Generation of Sustainability Leaders; Eco-Schools as a Global Green Schools Movement for Transformative Education, The Green Schools Movement Around The World: Stories of impact on Education for Sustainable Development, edited by Annette Gough, John Chi Kin Lee & Eric Po Keung Tsang. *Manuscript submitted for publication* 

National Wildlife Federation (2017). Eco-Schools USA Handbook

United Nations (1992). Agenda 21

# **The Evolution of Eco-Schools**

#### JAN ERIKSEN, FEE PRESIDENT 2004-2016

Jan Eriksen is a founding member of the Foundation for Environmental Education. He served as the **FEE** Vice President in 1996 – 2004, as the President of FEE in 2004 – 2016. To this day, he is an Honorary Member of FEE.

He is chairing his second term as head of the Council of Wildlife Management for which he was appointed by the Danish Minister of the Environment and he is the Deputy Chair of the Board of the Danish National Park 'Skjoldungernes Land'.

Jan Eriksen has more than 50 years of experience in the world of NGOs, where he has had both political and administrative positions. He was educated as a teacher in 1976 and his main subjects were biology and geography. He is field biologist and a birdwatcher and has participated in radio and television broadcasts and written educational materials and books concerning these fields.

Jan Eriksen's travel experiences have included contacts with NGOs and authorities around most of the world. During his presidency of FEE, Memorandums of Understanding have been established between the organisation and UNESCO, UN Environment, UNWTO and EAUC.

#### A conversation with Jan Eriksen

#### The origins of Environmental Education (EE) and Sustainable Development (SD)

The story of Eco-Schools is also the story about how the whole world works with the environment. If you look into history, I think we all have to realise that the environment has been on the agenda for a very very short time.

The first environmental summit took place in Stockholm in 1972, and it was defined in the final resolution of this same summit that there should be more Environmental Education (EE) - if we want the population of the globe to behave in a better way, education is key. To take that up, the Tbilisi conference of 1977 was organised with one headline: Environmental Education.

Out of the '72 and '77 conferences, a long debate started on what materials we use, resource scarcity and so on. It made a lot of people think about it and out of that process came the concept of sustainable development. This was actually a vision; yes, there are limits, but if we do things in an intelligent way building on the three pillars of sustainable development, we can actually still have growth and save a lot at the same time. Therefore, in 1986 we had the presentation on sustainable development, which in my opinion is the foundation also for today's Sustainable Development Goals (SDGs).

#### The origin of the Foundation for Environmental Education (FEE)

At the Tbilisi conference, the Council of Europe invited EE experts from Europe to create an EE taskforce under the Council of Europe. This group then decided to stay together after the Tbilisi conference and it later formed the Foundation for Environmental Education in 1981. So, the conferences were the starting point for FEE as well.

In 1986, FEE France, now called Teragir, came up with the idea of the Blue Flag programme. The French came with a programme that was focused a lot more on activism. The Blue Flag became a symbol of changing attitudes in environmental activism: from using the stick with polluters to using the carrot – the Blue Flag! That was a shift of paradigm in the environmental way of working.

At this point, I think we realised that we were much better as a programme organisation, but for the first seven years, there were no other programmes. We talked about it, but none, in fact, came to the table. In 1992, the Danish Outdoor Council (DOC) got two applications from two Danish organisations. One of the experts that were in Tbilisi was also a board member of the DOC and was also one of the founders of FEE. He had seen with some surprise how the Blue Flag developed successfully. He and his staff in the educational department of the Municipality of Copenhagen came up with the idea of making Copenhagen schools green. At the same time, a small activist organisation called Coast Watch, operating from a little island called Fanø on the West coast of Denmark had the same kind of idea. We could not support them both, as they wanted to do the same thing. So, we invited the two groups to my office and said: "We can support both of you for one project but then you have to cooperate, and we have one request: if this programme is successful we would like to coordinate it internationally through the DOC". In the end, they accepted it!

#### **The Evolution of FEE**

We developed things when there was a need for it. Some really good researchers have asked me, "why didn't you do this and that from a research point of view?" But it was never on our minds to do this or that because for us it was about survival in the best possible way. We used to have all the programmes organised in different countries. The three youngest programmes were organised in the countries where they originated. The Blue Flag was moved from France to the Netherlands and later to Denmark with the presidency. Because the Blue Flag was already in Denmark when Eco-Schools was taken on, the administration moved to Portugal.

We divided all the responsibility. Not only because it was clever politically, but this was also a question about getting things to run financially. As the responsibility was divided between multiple organisations they could all try and get financial support from their respective ministries and governments.

In 2009, Portugal decided to drop the international coordination of Eco-Schools. At that time, I was President in my second term and we did what we normally did then: we made a call for tender. But Eco-Schools had become quite a big success and it would be an enormous burden for any country to take it up. After getting a single application we had to ask ourselves: What do we do? Out of that then came the idea that the time had come to bring things together. We met in Turkey, where I shared my thoughts and, even though most of the board members were very sceptical, it did not take more than a few hours before the answer was clear: we had become an international organisation and we had to work towards a unification of the secretariat. I had to write a letter to the members and explain what we had decided in Turkey and that we at the General Assembly in China the following summer would come up with a new administrative structure. I also wrote that all those that were hesitant amongst the members should write to me so we could have an open discussion. I got about twenty emails and all those emails had to go out to everyone. This had to be a completely 100% open process.

In China six months later, it was a completely unanimous decision by all the members of FEE that within two years' time we should be working towards the unification of the secretariat. And we had a good General Assembly here in Copenhagen in 2014 and showed the new office.

We made the right move thanks to Portugal's withdrawal and that is again something we did when it was needed, and we found good solutions.

#### **Progression in the financial structure**

We introduced progression into our membership fees and our reimbursement of travel expenses, so that, depending on the GDP, wealthier countries pay more and less wealthy pay less. And, when it comes to reimbursement it works the other way around. The broadest shoulders have to carry the biggest burdens and that has been kept in the organisation as a way to think socially.

I know that we have countries in this world that are in such state that even with the reduced costs cannot afford to become a member. And if an organisation should get into severe financial problems we also have a helping hand due to the contingency fund, so that we can help them for a short period of time. This is also something that has contributed to the success of the organisation, an expression of solidarity within the organisation that goes hand in hand with democracy.

#### Voluntarism and engagement

Two words that go hand in hand are voluntarism and engagement. Because you do not become a volunteer unless you are somehow engaged. I think the engaged way that FEE works is a great part of the success. In my many years in the organisation, I have meet this engagement in a vast majority of the people no matter their position in FEE.

In a way, EE can be seen in two ways. On one hand, it is scientific work with the environment and on the other it is humanistic educational work with people. To work in an interdisciplinary way and bridge those two things that creates an engagement – that is extraordinary. You are together with people working for a better world.

### Looking back over the last 25 years, what do you see as the one greatest contribution of the Eco-Schools programme?

One could definitely mirror Eco-Schools into most of the SDGs. The most important to me is probably the equity between girl and boy, men and women. If I look at the future, I think that the equity part of it is probably the most important.

But, for me, there is also a big but here. On one hand, I love the 17 goals and I have to say that I love the design. 193 countries have now signed the SDGs - that is fantastic. I feel and I see that sometimes people like to be picky with the goals and that is probably good, but you have to keep in mind that the 17 goals are a holistic approach to the environment.

Here I get excited again because in this field we are in the middle. With the picking of the goals on one side and the holistic picture of them on the other. The middle point where they meet, that is where I see FEE, this is where I see Eco-Schools playing a fantastic role by getting these two sides to meet seeing it as a holistic picture but pick out whatever is relevant.

The biggest of all contributions is, of course, bringing to the world a programme like ours. The fact that it has become the success it has, shows that we have actually presented something that has a value. The way Eco-Schools is organised, the content, the Seven Steps, etc., shows on an international level, a national level, on the level of the schools and thereby on level of the students and the teachers that we are dealing with things around the world that aren't exactly the same, but which have the same topics. Realising that there are differences in culture and curricula and in many things, but that the stronghold of Eco-Schools is that wherever there is an Eco-School, students are dealing with the same topics.

#### **Diversity**

When I first took over we were about forty countries, and I promised to visit all of them including all the new ones we would get within my first term. That has of course given me a lot of friends and a lot of understanding about what each organisation and country is facing. The economic situation, the cultural, the political and the religious situation etc.

I am one out of seven billion. Even though I am proud to be able to say that I have met this and that princess or king during my presidency, they are also people and I have always met them as Jan from Denmark and without caring about their title. There is equality between all human beings. It is a matter of respecting what they actually represent, but also realising that the purpose was environmental education.

In the future of FEE, I see even more diversity. That is a challenge for the leadership of FEE both the administrative and the political. But diversity is the beautiful many colours of the world. Diversity is on one hand something that you have to deal with and on the other something that you have to adore. I believe that a lot of the power in FEE lies with the diversity of the organisation; the dialectic thinking and interpretation of the situation and the realisation of the fact that we are here for the common goal of environmental education. I love it and I think it has really been a driving force for me in my work in the organisation. I believe that diversity will become bigger and the possibilities from that even bigger.

#### Where do the Seven Steps come from?

The Municipality of Copenhagen and Coast Watch both told us that they took inspiration from Blue Flag and that they would like the schools awarded with some sort of a Green Flag. They tried to build up a set of criteria, but it was very rapidly realised that you couldn't build a purely educational programme in the same way as Blue Flag was built.

With the Green Flag, you are working much more with human beings and their behaviour where the Blue Flag is partly human beings but also, partly very strictly engineering. How can we actually award them with the Green Flag? Is it to be an intentional award or an award for a result? It was decided that they should go through a programme in the school and then they could get the Green Flag and not the other way around. Out of that came the discussion on how the procedure should be to become an Eco-School and that brought the Seven Steps methodology into the programme. The full set of steps was something that came out of the international networking and the first National Operators and at that time the Danish and later on the Portuguese coordination. The Eco Committee, I remember, was already the starting point. And, when we went internationally we realised quite interestingly the cultural differences even within Europe. Where we in Denmark had found it so natural to have an environmental committee with teachers, students, technical staff from the school, maybe parents, but not all felt the same way and some said, "no way!". And that's where I see FEE and why I'm so fond of FEE because we said that maybe there was no way, but they still had to do it! The Eco Committee was the key.

#### The key to Environmental Education

After the introduction and success of the Eco-Schools programme, some of the UN institutions started to recognise its impact. First UN Environment and later on UNESCO. The main topic of the summit in Rio in 1992 was 'Act Locally, Think Globally'. And Eco-Schools did exactly that. To me, it was not a surprise that we were invited to discuss environmental education with UNESCO. The Decade of Education for Sustainable Development introduced by UNESCO in 2004, was an area where we were very often invited by the national UNESCO committees to share our experiences with Eco-Schools. We were the practitioners who actually had the key to Education for Sustainable Development.

We also realised with the Seven Steps that this methodology could set up, not only a committee but also the curriculum. School curricula around Europe were so different and the room for environmental education varied. Therefore, there was, in fact, a need for the schools to have the framework of Eco-Schools but inside that framework to be independent and to have autonomous thinking on the national level as well. You couldn't say, like with the Blue Flag beaches that all schools have to be 100% the same. It doesn't matter whether you go to a beach in Spain or in Finland – Blue Flag is the same and that is how you can be trusted as an organisation. That was not needed with Eco-Schools; it was more about the methodology and the framework schools had to work with. Therefore, although the inspiration came from Blue Flag, it moved independently on its own way forward.

#### Democracy

One of the very important roles of Eco-Schools is that we are advocates of democracy. You could say that it starts in the very small things like an Eco Committee at a school. But one should not forget that for many students that is new - to actually be together and work on something that is not the normal way of doing schoolwork, to be able to think more holistically about the environment and discuss with people who they usually do not discuss with.

#### Jan Eriksen, FEE President 2004-2016

Bringing Blue Flag to Puerto Rico was a huge challenge. Not only because of the stringent criteria we had to meet with our beaches, but also because we had no culture of managing the resources in an environmental way, nor integrating Environmental Education (EE) within the process.

It was amazing just how much we learnt and enjoyed working precisely with EE. We immediately began designing and adapting activities from other countries for different target groups. Though it wasn't until we worked with students and the coastal communities, that we understood that if we wanted to see change in terms of how we treat our resources and truly embed sustainable development, we needed to do much more.

It was a natural progression, even though our main interest was in the tourism sector, for Eco-Schools to be our choice for the second programme. Through its Seven-Step methodology, it provides the opportunity to not only create environmental awareness but also to realise that we are all part of the problem and that we can also become part of the solution.

Throughout the years, because of the experiences Eco-Schools provide, our students have developed important skills such as research, analysis, problemsolving, critical thinking, that otherwise would have been very difficult to achieve. I have no doubt in my mind that these students as adults are becoming the sustainable citizens we need. Those becoming our next generation of leaders will be able to make better decisions, to assume responsibility and to take action. Citizens that, because of their experiences, will face life ensuring that the right economic development decisions are made without compromising our natural world. This is definitely what Eco-Schools is achieving in our school communities: true leadership, environmental awareness and a true love for their Island.

#### Lourdes Díaz Colón, FEE Board Member and OPAS President, Puerto Rico







#### **OLE LØVIG SIMONSEN, FEE BOARD OF DIRECTORS 1990-1994**

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#### My sincere thanks and congratulations on your 25-year anniversary!

There is a direct connection from the World Summit in Rio in 1992 and up til where the Eco-Schools programme is now. People back at the Rio Conference and in FEE were very convinced that it was important to find ways to get children and youth engaged in creating a more sustainable world. I remember very well when I delivered the first Green Flag to a school in my constituency - that was a fantastic event and day.

Today, Eco-Schools is a worldwide movement with a lot of different activities, where we learn and are inspired by each other. There will always be issues and areas to be developed - that is what symbolises and characterises a movement. In the years to come, Eco-Schools will be a significant and important actor in creating a more sustainable world as long as we stick to our values, based upon engagement and participation, our respect for our cultural diversity, based upon democracy and based upon the future.

With my deepest respect and thanks,

Ole Løvig Simonsen, FEE President 1990-1994

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#### **BRÍD CONNEELY, INTERNATIONAL ECO-SCHOOLS DIRECTOR 2013-2018**



Very quickly after I started work, I became caught up in the affairs of FEE and Eco-Schools, learning on the hop. In February 2013 I found myself speaking at an event in Northern Ireland, on a Green Flag panel for Trinity College Dublin, and on my way to India to speak at a conference - all in the same five days.

As nobody else could go, I jumped at the chance to speaking in India, as the 'hidden agenda' was to hold meetings with Kartikeya Sarabhai at Centre for Environment Education, which I did and eventually they came on board as a FEE member. A sweet success, as having the sub-continent join us really meant that sustainable development was going to happen on a large scale.

Another fond memory is coming up the stairs of FEE one Friday morning when my phone rang. I could see it was Daniel, so I continued up the stairs and was greeted by: "Can you go to Singapore on Tuesday?" Off I went to stand in for Jan Eriksen. Keenly aware that I was filling big boots. This also was deemed a success, as the Director of WWF Singapore suggested I go on TED talks with my Eco-Schools stories.

The Eco-Schools programme is worthwhile and far-reaching. It can and does contribute to Education for Sustainable Development at the very early stages of a child's life, as parents and kindergarten teachers in many countries can confirm. Teamwork, public speaking, ability to produce, sustain and carry out a plan – all these and many more skills are learnt as an integrated part of the programme. Eco-Schools is also turning out leaders in the sustainability campaigns all around the world. And I do hope that the Eco-Schools already on board are supporting #FridaysforFuture and the wonderful #GretaThunberg, and the Climate Strikes.

One of the very best things about the Eco-Schools programme is that each child, young adult, teacher and parent knows that they are not alone, that there are millions and millions of like-minded people all over the globe doing their bit to prevent climate breakdown. Imagine a future Environment Commissioner in the EU asking a fellow environmentalist politician from another country, "When did you first become interested in the environment?" And the answer ringing clear and loud, "At school, when our school joined the Eco-Schools programme and we received our first Green Flag."

Bríd Conneely, International Eco-Schools Director 2013-2018



### "One of the very best things about the Eco-Schools programme is that each child, young adult, teacher and parent knows that they are not alone..."

#### **BERNARD HOLLAND, INTERNATIONAL ECO-SCHOOLS DIRECTOR 2010-2012**



For me, Eco-Schools is represented by the quality, integrity and diversity of the National Operators and their relationship with their in-country network. Having been in social media contact with National Operators since I left FEE in 2012, it is evident that there are so many committed and dedicated operators and partners continuing to build and strengthen the network.

A number of key memories stand out to me in my time as Director of Eco-Schools. Firstly, my two 10-day visits to Tanzania to help develop the capacity of an NGO to deliver the Eco-Schools programme, and now seeing the Eco-Schools has spread to many surrounding island countries. Secondly, seeing the innovation of entities like Lund University and its Young Masters Programme, the European Union Energy Awards, and finally, Trinity College Dublin proudly professing how Eco-Schools has helped them become the green University in the green isle.

I think it is true to say from my background in educational leadership that true leaders will freely give their power away so that others can enact change, and take ownership for their initiatives and continue to grow the strength and integrity of positive actions in the pursuit of a common goal which I now understand to be 'Caring for our Common Home'. From an academic perspective, it is hard to determine the direct correlation of data between academic outcomes and engagement and sustainability topics. What I do know from engagement with such programmes on a global scale is that the future leaders are the ones who develop their change management skills in the safe meaningful settings of school committees, building confidence and developing lifelong skills that will underpin success as they become the people that created a better world for themselves.

What we know in a fragmented world of mixed messages is that young people innately believe in social justice and ecological justice and that these two concepts are now inextricably linked through an understanding of integral ecology. A world where the poorest will suffer the most from our anthropologically induced climate crisis.

What Eco-Schools does is create a common platform for a global discussion and coordinated action across multiple themes.

Bernard Holland, International Eco-Schools Director 2010-2012

"What Eco-Schools does is create a common platform for a global discussion and coordinated action across multiple themes."

## **//**

I started coordinating the Eco-Schools programme in 2000. We had 100 schools registered at the time. Today, over 1,600 Eco-Schools are awarded Green Flags, spread across 80% of the country's municipalities. However, my key concern as National Eco-Schools Coordinator has gone well beyond increasing the number of schools.

I wanted to provide accredited annual training to enhance the role of teachers as key stakeholders in the success of Eco-Schools; provide educational assets (including educational assets mainstreaming gamification principles) such as turnkey packaged school projects, exhibitions, and educational resources that encourage 21st-century skill development and learning; ensure effective central monitoring and evaluation throughout the process, by working directly with schools to develop and refine measurability instruments and indicators, and to collect year-round information on our Seven-Step methodology, allowing us to provide invaluable feedback about its implementation in each school.

The recognition schools get from the on-going monitoring and evaluation processes, progress reports, results measurement, the innovations that we keep introducing in the programme have all been contributing factors in keeping schools motivated and part of the Eco-Schools programme over the years.

I am personally grateful that this programme enabled me to work with an incredible number of enthusiastic and dedicated teachers, that I could always count on an outstanding team at ABAE/FEE Portugal and that I get to be part of this ever-growing, diverse, and inclusive FEE family.

In 2000, the Eco-Schools National Operators Meeting took place in Portugal, where, at the time, the international coordination of Eco-Schools was also based. Sérgio Santos was then at the helm, paving the path for Estela Gonçalves first, and later – when FEE's international programmes coordination was aggregated in Copenhagen – for Bernard Holland who, among other significant improvements, launched the Global Action Days. After Bernard, under the direction of Brid Connery, I could also see with great pleasure and enthusiasm that growing attention was put in keeping the essence of Eco-Schools alive by placing emphasis on the educational aspects of the programme, on the role of teachers, and the 'hand-print' concept.

It is a privilege to watch Eco-Schools grow internationally without losing sight of its essential mission of contributing to the formation of aware citizens, concerned about our collective impact on the planet and better able to embrace the change needed to ensure our planet is enough for all of us, forever.

#### Margarida Gomes, Eco-Schools National Operator, ABAE/FEE Portugal

"The recognition schools get from the on-going monitoring and evaluation processes, progress reports, results measurement, the innovations that we keep introducing in the programme have all been contributing factors in keeping schools motivated and part of the Eco-Schools programme over the years."



# **FEE EcoCampus**

#### **EMPOWERING STUDENTS TO BE LEADERS FOR SUSTAINABILITY**

The FEE EcoCampus programme is an educational award programme with the goal to help transform Higher Education Institutions (HEI) as a hub for Education for Sustainable Development. The goal is to empower students to become leaders and active citizens for sustainability by engaging teachers, staff and students as well as the wider community in positive actions.

The programme is the evolution of the Eco-Schools programme at tertiary level. Like Eco-Schools, it provides the means to foster environmental awareness in a tertiary level institutions in a way that links to everyday activities and study and ties in with the operational requirements of a complex multi-use facility. The programme is based on the EU EMAS (Eco-Management and Auditing System), and the Seven Steps align with the 'plan-do-check-act' management method used in ISO 14001:2000 Environmental Management System Standards. The FEE EcoCampus award takes into account both the action on operational elements (like water saving, energy saving, waste reducing actions), along with educational aspects that aim to equip students at Green Flag Campuses with critical competencies for sustainability, knowledge regarding critical issues of sustainability, and positive behavioural outcomes.



In 2019, the programme is being implemented in 125 campuses across 21 countries. Countries and campuses are different and there is no "one size fits all". FEE EcoCampus offers well-defined, controllable ways for educational campuses to take environmental issues, innovation and research from the academic departments and apply them to both greater societal challenges and the day-to-day management of the campus. As a holistic programme, it aims to make environmental awareness and action an intrinsic part of the life and ethos of an institution. The programme endeavours to extend learning beyond the lecture theatre to develop responsible attitudes and commitment, both at home and in the wider community. This means the entire campus community, students, academic staff, non-teaching staff, as well as media, local businesses, contractors and visitors must be included. The programme requires the active support of the top management of an institution, involvement of representatives from all sectors of the campus community in decision making and action at every stage, active involvement and support from the local community and a willingness to take action to instigate long-term change.

The FEE EcoCampus is both a programme and an award. A set of guidelines that keeps on evolving support the National Operator in adapting the programme. While the International Green Flag award is given to campuses that complete all the essential elements, the programme is flexible and encourages different countries and campuses to find different routes to achieving the award. As a long term programme, the emphasis is on incremental positive impact, the award requires progress reports to be submitted annually and a full reassessment every 2 years.

FEE EcoCampus does not only award those third-level institutions that are able to invest financially in large scale projects - instead, just like the Eco-Schools programme, it rewards long-term commitment to continuous improvement from the campus community. FEE EcoCampus acknowledges that a key role of universities is the production of knowledge, therefore the programme emphasises campus support for cross-disciplinary research that tackles, for instance, the SDGs. The programme incentivises institutions to work more closely with the relevant stakeholders of their surrounding locality; this could be the municipality, businesses working on similar issues, or other interested citizen organisations.



It is recommended that the programme operates through the four cross-cutting themes

- Climate Change & Carbon
- Health and Wellbeing
- Equity & Equality
- Global Citizenship

Each cross-cutting theme impacts or is impacted by the six main themes

- **Biodiversity**
- Waste & Resources
- Water and Sanitation
- Energy
- Food
- Transport

#### Strive to include ESD in research and curriculum by

- Increasing interdisciplinary research on SDG solutions
- Including ESD linkages in subjects across all disciplines
- Encouraging action-driven education
- Orienting incoming students and staff
- Creating opportunities for organisations and citizens outside the campus to learn from and interact with the campus

and the second second second

Working towards

- Promotion of healthy, sustainable consumption, engaging in Green Product Procurement
- Carbon net neutrality by calculating and incrementally reducing the carbon footprint
- Increasing the biodiversity on campus
- Only engaging in sustainably sound investments
- Minimising water consumption
- Reducing the production of waste on campus
- Ensuring fossil-free transport methods.

#### Implement the Seven

- With support from the President or
- Head of Campus
- Vitti Student guidance
- Write the goal to continuously impro Record for 1.5
- Embed the recommendation of the second second
  - and schools
- Betransparer
- With involvement and support from the local community

Once the first campus Sustainability Audit has been executed, the campus chooses which themes they wish to focus on in their action plan. Though all themes do not have to be present in every action plan, some institutions chose to create long and short-term goals and targets pertaining to elements under all themes.

Interdisciplinary curricular integration is the key practice for FEE EcoCampus. This has been achieved by encouraging schools and faculties to identify and assess their ability to promote research within the field of sustainability by creating a register of feasible projects, their objectives, and possible participants. This requires that the faculties agree to take responsibility and willingness to undertake joint guidance. Universities are auditing their curriculum to explore opportunities for adding the perspective of sustainability. This requires seminars and presentations on sustainability and environmental issues for teachers and staff to urge teachers to build their knowledge and skills in addressing issues related to sustainability and the environment. Some of the campuses have created 'open to all' elective course on environment and sustainability. The module is open to students, staff and the general public and can be taken for interest, additional university credit or Continuing Professional Development.

The campuses that have successfully implemented the programme have received strong support from the campus management including top management, active participation of the students' union and other student groups, such as clubs and societies. They have demonstrated willingness to involve the campus community in discussions and decision making. The other elements that have made the programme better include frequent events, meetings and activities facilitating incremental progress and student leadership initiatives.



# Learning with Eco-Schools

THE FRAMEWORK OF THE SEVEN STEPS – THEORY AND PRACTICE PROF. PAUL PACE & DR. PRAMOD KUMAR SHARMA

#### **Background of the Seven Steps**

The Seven Steps were introduced 25 years back, in a pilot project coordinated by Denmark. The Municipality of Copenhagen and Coast Watch took inspiration from the Blue Flag programme and proposed to award schools with a Green Flag as a quality label. They tried to build up a set of criteria, but it was very rapidly realised that they could not build a purely educational programme in the same way as Blue Flag was built. The Green Flag programme focuses more on human beings and their behaviour whereas Blue Flag, while partly dealing with human beings, also deals with issues related to engineering or technological solutions to environmental issues. It was decided that schools should go through a school-based programme to achieve a Green Flag award. The procedure or the framework defining the Eco-Schools programme was defined as the Seven-Step methodology. The full set of steps were developed through international networking by Denmark who assumed the first international coordination and Portugal which, later on, took over the responsibility.

From the very start, it was realised that the Seven-Step methodology did not just provide an institutional framework, but it also provided an opportunity for curriculum development. School curricula around Europe were so different and curriculum space for Environmental Education varied. Therefore, while providing schools with a framework, the Eco-Schools programme needed to be flexible enough to adapt to the different levels of curriculum autonomy of participating countries. Unlike Blue Flag that aimed at standardisation through a set of criteria, the emphasis of Eco-Schools would be more about the methodology and the framework schools had to work with.

The Seven-Step process is the basic framework that guides an Eco-School to plan and implement the learning journey. The steps are intended to be flexible enough to accommodate any school context and environmental theme. They are the 'means' to bring about change through active involvement of young people through a rigorous pedagogical process. The nature of each of the Seven Steps and the order in which they are implemented allows for the incremental change in sustainability literacy through active learning as the actions of students improve the environmental performance of the whole institutions starting first with their behaviour. This process empowers them with the confidence to continue to positively influence themselves to make the world a better place to live in.

#### **Environmental Literacy with the Seven Steps**

The Seven Steps (Figure 1) are learner-centred by design with teachers acting as facilitators. Teachers do not just provide instructions and assessment inputs, but are also co-learners as they co-create with their students the learning journey in a fast-changing world where information is available at the press of a button. The pedagogical approach, as an iterative process, requires the learners to be flexible, curious and optimistic as they learn that the world is far from ideal. This encourages metacognition or learning to learn which is an important skill for lifelong learning. The Seven Steps are aligned to the four pillars of learning, i.e. learning to know, learning to do, learning to be and learning to live together. Table 1 shows how the Seven Steps align with the objectives of Environmental Education (EE) and the features of Education for Sustainable Development (ESD).

The Seven-Step Framework	Categories of Environmental Education (EE) Objectives	Features of Education for Sustainable Development (ESD)
While conducting an <b>Environmental Review</b> , students identify the local or place-based context of global environmental problems.	Awareness: to help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems.	Locally relevant: addressing local as well as global issues, and using the language (s) which learners most commonly use.
The students develop an Action Plan to engage with environmental issues and realise the challenges they have to face to resolve them by Monitoring and Evaluating their actions. The entire learning process involves Linking to the Curriculum.	Knowledge: to help social groups and individuals gain a variety of experience in, and acquire a basic understanding of, the environment and its associated problems.	Applicability: the learning experiences offered are integrated in day to day personal and professional life. Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject.
The Eco Code presents the ethos of the school - a synthesis and reflection of the learners' attitudes and values developed during the programme.	Attitudes: to help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.	Value-driven: it is critical that the assumed norms – the shared values and principles underpinning sustainable development – are made explicit so that they can be examined, debated, tested and applied.
By adopting the plan - do/act - reflect cycle learners go through the problem- solving process. This builds the skillsets and confidence needed to engage with environmental issues as an individual and also as part of a social group.	Skills: to help social groups and individuals acquire the skills for identifying and solving environmental problems.	<b>Critical thinking and problem solving</b> : leading to confidence in addressing the dilemmas and challenges of sustainable development.
The Formation of an Eco-Committee ensures that the process is participatory and child- driven. Informing and Involving all stakeholder is a key step to get the larger school community involved in the environmental education journey.	<b>Participation</b> : to provide social groups and individuals with an opportunity to be actively involved at all levels in working toward resolution of environmental problems.	Participatory decision-making: learners participate in decisions on how they are to learn. Multi-method: using different pedagogies in which teachers and learners work together to acquire knowledge and play a role in shaping the environment of their educational institutions.

### Figure 1 - The Seven Steps



### **Step 1: The Eco Committee**

The first step of the Eco-Schools programme involves establishing a viable Eco Committee within the organisational structure of the institution. The Committee aims to direct and address all phases of the Eco-Schools programme. It is the driving force of the programme and ensures that students are at the centre of the process as other steps are carried out.

The Committee empowers the children for leadership and democratic values. It provides them with an experience of being aspirational and believe in their abilities to be change-agents. The most important aspect of learning they develop is taking responsibility with empathy and understanding the complexity of decision making in a multi-stakeholder environment. In the process, they learn to debate, negotiate, respect different viewpoints, take decisions through building consensus and work in a team. Achieving this step calls for controlling emotions, punctuality and regular participation and a sense of volunteerism for a larger societal good.

### Step 2: Sustainability Review

Issue identification is an important skill. The aim of the Sustainability Review is to identify the level of sustainability in the school and it also calls for skills to prioritise actions based on the results of the review used to develop the Action Plan.

The process of review or audit builds the awareness and sensitivity to the biophysical environment and its allied issues increasing the themespecific basic understanding or disciplinary knowledge. The experience of investigation develops the attitudes, values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection. These learning outcomes are reflected as they develop and implement the Action Plan. The step is not just limited to identifying the environmental challenges, but also to filling the gap in the students' behaviour and the school's policies and practices. In the process, students reflect on their own choices and lifestyles and relate to the change required at a personal level before they plan for a larger change in the institution. The process develops the skills of research, analysis, curiosity, etc. It is important that the process calls for the application of the skills of numeracy, language and science that they learn in different subjects. The step encourages students to develop the skills to collect and use relevant data, to argue the need for change and use criteria for prioritisation of actions. The conceptual clarity helps them identify the barriers in real life that limit our actions, this helps in setting realistic targets and monitoring implementation.

By including experts in the field, students are given an experience of future careers and an in-depth understanding of the subject. They learn to think and act like a practitioner. It shows the relevance and purpose in students' learning, helps deepen their understanding and, most importantly, the relevance of the actions in their own community.

### **Step 3: Action Plan**

This is one of the most important steps to develop active citizenship amongst students and help plan their activities. Developing action plans is an important transferrable skill that is required at both personal and professional levels. It also helps in developing the skill of anticipation and mapping scenarios by projecting the consequences and potential impact of different decisions.

The Action Plan calls for demonstrating skills for budgeting - estimation of time and money, using criteria for prioritisation and decision making, innovative thinking, divergent and convergent thinking and lots of patience.

The Action Plan is an opportunity for learners to practice transformative competencies by questioning the status quo, thinking of new ways of doing things, collaborating, resolving differences and dilemmas as they try to optimise the outcomes and, most importantly, have the courage to take responsibility to bring about change. The process of negotiating an action keeping all the stakeholders' interests calls for a demonstration of emotional quotient. The process of negotiating plausible actions gives students an opportunity to recognise values and clarify perceptions and perspectives that often stem from their cultures.

### Step 4: Implementation, Monitoring and Evaluation

Implementation, Monitoring and Evaluation is action research. As an exercise to assess progress made towards achieving targets identified in the Action Plan and to identify areas that require further corrective action, students learn to work together with dedication and determination. Effective problem solving requires the ability to investigate and evaluate against a set of agreed criteria.

The process makes students learn the importance of a review system and develop a growth mindset that drives motivation and achievement. The failures and success as they implement the Action Plan helps them develop strategies for being resilient and bounce back. Reflection is a key learning outcome for transformation and learning to take critical feedback simulates real-life situations.

### Step 5: Linking to Learning in the School

The role of education is to prepare young people for society and, therefore, the sustainability challenge is one of the most important issues that we all need to address. The biggest challenge is to consider the Eco-Schools programme not as an add-on activity to the schools' programmes, but as an integral part of the learning experience offered in educational institutions.

Mapping the actions based on the Sustainability Review with subjects and skills outlined in the curriculum is important. The students should be provided with an opportunity to enable them to set their targets for sustainability as they do for any subject or behaviour. To avoid curriculum overload it is important that the actions are embedded within the existing curriculum in a meaningful way so that all students benefit from both deeper learning experiences and quality learning in the core foundations of the issues they explore. The interdisciplinary nature of the subjects creates an opportunity for making a holistic and balanced perspective possible. This requires that the teachers identify key concepts over subjects, explore the connectedness of these subjects and integrate themes by encouraging project-based learning. The action orientation of the ESD curriculum helps in the development of critical thinking and problem-solving skills.

### Step 6: Informing and Involving the Whole School and Wider Community

The aim of the Informing and Involving step is to spread the Eco Committee's message throughout the school and the wider community through ongoing publicity. It is training to communicate using various tools and to celebrate success. Students learn to share and acknowledge the contributions of different actors – big and small – for the future. They learn important skills such as public speaking and influencing large community actions. It is a collaborative platform where students, teachers, parents and communities work together to help students progress towards their shared goals of collective wellbeing. Learning how to function and interact in a complex society is a 21st century skill whose development cannot be left to chance.

One of the important learning outcomes to solve the sustainability challenge we are facing is the realization that we are global citizens. Linking and/or twinning schools in different local and foreign contexts promote the understanding of local issues within global perspectives that are shaped by different cultures.

### Step 7: Eco Code

The Eco Code is a synthesis and reaffirmation of values that determine disposition – a very good predictor of behaviour. The Eco-Schools programme provides students with opportunities for decision-making based on and respectful of societal norms. This enables a process of self-formulation of a code of behaviour about issues that cement the transformation for life!

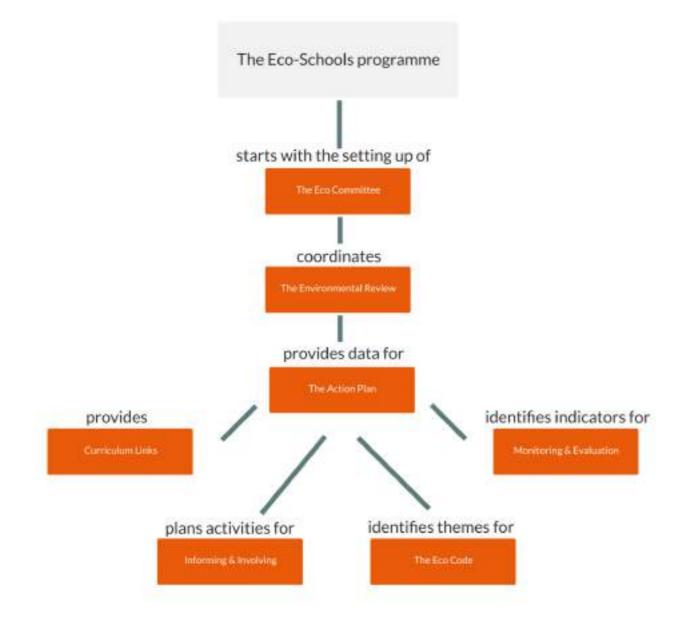
The Eco-Schools programme takes a holistic, participatory approach to learning for sustainability. Eco-Schools provide an integrated system for the environmental management of schools and involve all stakeholders in this process. Table 2 summarises how different stakeholders are involved in the implementation of the Seven Steps

Role of stakeholder Eco-Schools Steps	Students	Teachers	Non-Teaching Staff	School Leadership	Parents	Other Community Stakeholders: Municipality, Neighbourhood
1. Eco Committee	Key actors	Facilitators	Facilitators	Facilitate and sup- port the implemen- tation of decisions of the Eco-Com- mittee	Connect learning to homes. Professional ex- perts	Provide context to actions
2. Environmental Review	Key actors	Facilitators	Facilitators and Data providers	Facilitate and receive the review findings to prior- itise	Connect learning to homes. Professional ex- perts	Provide expertise and context to prioritise and take actions
3. Development of Action Plan	Key actors in the development of the plan and in its implementation	Facilitators, pro- vide expertise and are key actors	Provide expertise, facilitators and key actors	Facilitate and pro- vide commitment, support, resources and engagement for the proposed actions	Support the Action Plan through their participation and resource mobilisa- tion	Support the Ac- tion Plan through different resources and through wider community en- gagement
4. Monitoring and Evaluation	Lead the imple- mentations, collect and analyse data	Facilitators, key actors and provide the tools for data collection and analysis	Facilitators, key actors and data providers	Facilitators and key actors	Facilitators and key actors	Acknowledge and support/promote the actions
5. Curriculum Linkages	Contribute to the learning goals, re- flect on the learn- ing achievement based on indicators	Plan the connec- tions and synergies with the curricu- lum. Facilitate the cur- riculum implemen- tation.	Support the var- ious steps to achieve the curric- ulum objectives	Facilitate and inte- grate a whole insti- tution approach	Acknowledge and support their chil- dren's learning in everyday life	Acknowledge and provide flexibility
6. Inform and involve	Prepare, present and share the environmental and educational im- pacts to the whole school community	Facilitators	Facilitators	Facilitate and re- ceive suggestions, provide support for the next cycle of the programme	Learn, acknowl- edge and support their children's learning in every- day life. Facilitate wider dissemination	Learn, give feed- back and support for the next cycle of the programme
7. Eco Code	Summarise the learning in terms of the Eco Code (val- ues and attitudes) and follow it	Facilitate, follow and model the Eco Code	Facilitate, follow and model the Eco Code	Facilitate, follow and integrate the Eco Code in the whole institutional ethos	Facilitate and fol- low the Eco Code	Scale up the ethos in the Communities

### **Praxis of Seven Steps and educational context**

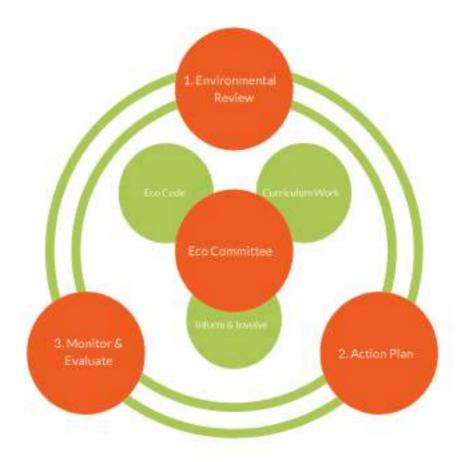
The Seven Steps are a guiding framework and the framework has evolved with adaptation by individual countries in response to the different contexts in which schools operate. Adapting to the educational context and rationale to facilitate seamless integration of the Eco-Schools programme is more important than adhering to a rigid order of implementation of the steps. What follows are experiences from different countries.

In Malta, experience has shown that because of different school realities, the process is not always cyclical, but rather a flow as depicted by Figure 2.



In the Czech Republic, Curricular Work, Informing and Involving, and the development of the Eco Code are seen more as an ongoing process through the academic cycle as depicted in Figure 3. The Eco Committee engages through these steps with the process defined by the outermost circle of the learning process that mirrors the Deming Cycle of Plan-Do-Check-Act. This also conforms with Kolb's Experiential Learning Cycle: (i) having a concrete experience, (ii) observation and reflection, (iii) forming abstract concepts for generalisation, and (iv) application to new situations.

### Figure 3 - Presentation of the Seven Steps in the Czech Republic



Curriculum linkages in most cases are done early in the cycle as teachers realise the importance of planning ahead for the scholastic year and the integration of EE content in the curriculum. Although the other steps are learner-led and implemented, curriculum linking is seen as the role of the educator although students are expected to know the learning goals achieved during this process. Eco-Schools USA emphasises on giving students the opportunity at most grade levels and across disciplines to integrate environmental issues into the classroom, on the school site or in the local community.

The assessment of the Seven Steps is an important criterion for the award of Green Flag. The Quality of the outcomes expected from each step determines the development of literacy and most countries have clear indicators that define the indicators to assess the implementation of the step.

### **Practice and Perspective of National Operators**

A survey was conducted amongst the National Operators (NOs) of the programme to further understand the practice and their perspective on the implementation of the Seven Steps. A total of 36 responses were received (out of a possible 67). 92 per cent of the NOs responded that Eco-Schools in their country follow the original order of Seven-Step methodology. Any deviation from the order is due to the embedding of curriculum linkages in all the steps, merging of Eco Code with the Green Flag assessment in Eco-Schools Sweden and to align with the 2-year award cycle that has an annual review change for Eco-Schools England. 65 per cent of the respondents reported that though they recommend that the steps are followed in the original sequence but are not rigid and ensure that the steps are covered. Table 3 reports the percentage of following the sequence.

#### Table 3 - Practice of following the sequence of Seven Steps

Order of Step	Order	Percentage following the order
1	Forming an Eco Committee	100
2	Carrying out an Environmental Review	96
3	Developing an Action Plan	86
4	Monitoring and Evaluating	70
5	Creating Curriculum Links	72
6	Informing and Involving	82
7	Developing an Eco Code	88

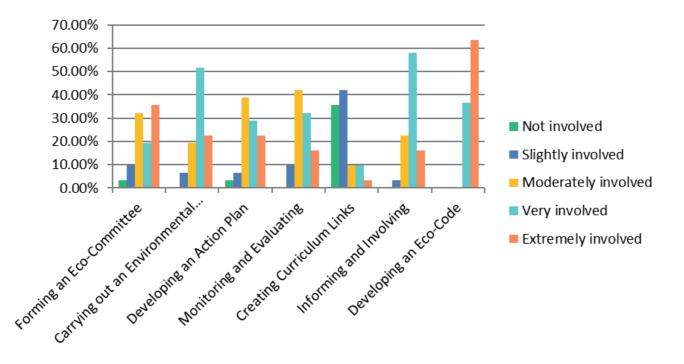
The NOs are divided on their perception of the importance of sequence, on a scale of 10, the average score was 5.8. The Seven-Step methodology has a rationale in its sequence and the schools are encouraged to follow the Seven Steps, but they also have the flexibility to change the order. It is a guideline, not a strict rule to follow the order of steps in a sequence. Also, following the steps limits the possibility of showing parallel processes. The need to have alignment with education systems is also an important reason to have flexibility. In Eco-Schools Italy and true for some other countries too, the monitoring and evaluating, creating Curriculum Links and Informing & Involving are taken as cross-cutting steps, and are reviewed with the implementation of each step. One of the important reasons that the steps are followed in a particular sequence is the branding of the programme. Some of the Eco-Schools start with the prescribed sequence in the first year of implementation and change it in year 2 to suit their context as they better understand the rationale of the Steps.

Table 4 reports the perception of difficulty level of the implementation of the Seven Steps. The list of challenges being faced by the schools include involving all stakeholders whole school engagement, including the support of administration, continuity after the teacher coordinator is transferred to another school, scope of curriculum integration especially in higher classes, developing an action plan after environmental review, having a func-tional Eco Committee due to younger age of children, cooperation of teacher and selection from different age levels, lack of tools to do environmental review in certain themes, time management, creating indicators and access to data from monitoring and evaluation, budget/funds, permissions to go beyond school boundaries, interest of all the students, tools for assessing the impact on learning, seeing the actions for long term change.

Eco-Schools Steps	Order	Percentage following the order
Forming an Eco Committee	90%	0%
Carrying out an Environmental Review	68%	0%
Developing an Action Plan	71%	7%
Monitoring and Evaluating	54%	18%
Creating Curriculum Links	57%	14%
Informing and Involving	64%	21%
Developing an Eco Code	93%	0%

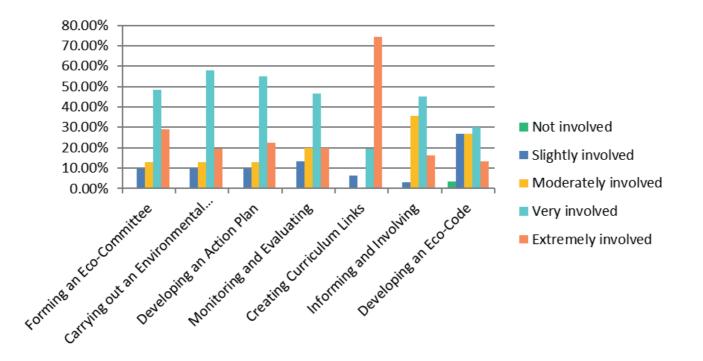
#### Table 4 – Perception of difficulty implementing the Seven Steps by schools

As seen in Figure 4, Students are active participants in all steps except in the step of curriculum linkages. The programme needs to invest in strengthening this aspect with teachers to help students understand the content and skills they need to master. Primary barriers to this identified by NOs are the age of children, particularly young who are more active in the Seven Steps compared to others and capacity of teachers.



### Figure 4 - Involvement of students in the Seven Steps

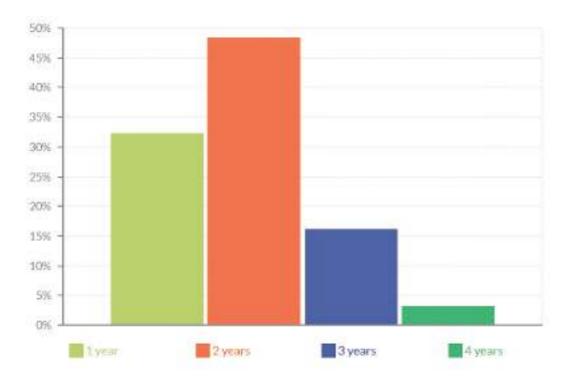
The teachers' involvement in each of the steps also varies a lot as we see in Figure 5. The role of teachers' would vary according to the age, aptitude and other developmental factors of students in a particular Eco-School. It is always stressed that Eco-Schools is first and foremost a student-centred initiative. Although there is an agreement that the teachers' facilitation is key to a good implementation of the Seven Steps and in achieving a bigger impact, some of the factors identified are very low numbers of teachers involved and the time they can spend with the process.



### Figure 5 - Involvement of teachers in Seven Steps

Usually, as shown in Figure 6, it takes two scholastic years for a school to effectively implement the seven steps. Year one is a learning phase for the teachers to facilitate the mechanics of the steps and match it with the school systems. Recognising this, at international level, it is recommended that the first Green Flag assessment is done after the second scholastic year. A prescriptive approach or sharing experiences of other schools help in mastering it faster.

### Figure 6 Number of academic years required to effectively implement the seven steps in a school



In Portugal, some municipalities celebrate their Eco-Schools by raising all the flags in the municipality's city centre for one week.



# Literature Review of Research Studies by LAURA HICKEY

A LITERATURE REVIEW OF RESEARCH STUDIES ON THE ECO-SCHOOLS PROGRAMME IMPLEMENTED IN NUMEROUS COUNTRIES OVER THE PAST 25 YEARS

### Introduction

As would be expected, the Eco-Schools programme has been heavily researched over the past twenty-five years since its inception. The type of research, however, varies country-to-country and by topicality. Some research has been conducted by third-parties; other research has been completed by the host organisation. Some research focuses on environmental footprint change; others on behaviour or attitudinal change, while still others focus on academic impact as well as student skills development.

In a recently drafted chapter for a publication, The Green Schools Movement Around The World: Stories of impact on Education for Sustainable Development, (Gough, 2019), Kevin J. Coyle, JD from the National Wildlife Federation in the USA wrote:

One of the logical outcomes of having school buildings and grounds that embody principles of environmental quality and sustainability is they would be better places to learn. Indeed, whether a green school is built around a new building or is just trying to improve upon its existing structure and operations, green schools can be highly supportive of many aspects of improved education around the environment, sustainability and skills for the 21st century. In simple terms, green schools can support:

- Environmental education and environmental literacy,
- Academic excellence including higher test scores, and
- Development of 21st Century skills such as team work, applied project-based learning, and problem-solving

For the purposes of this literature review, more than 68 research reports were analysed from multiple countries. The results have been synthesised and summarised into four major categories with select country case studies highlighted:

- Academic and Skills Development Changes
- Environmental Impact Changes
- Behaviour/Attitudinal Change
- Whole School Sustainability Programme Approach

### Academic and Skills Development Changes

There are literally hundreds of research reports that document how environment-based, hands-on learning program**me**s at schools improve academic performance in schools and by students. Environment-based education has a number of positive and measurable effects on a student's ability to learn and be academically successful. These effects include improvements in science performance, math and reading along with improvements in student motivation and behaviour. A research literature review was conducted by Kevin J. Coyle, JD, of the National Wildlife Federation (USA), which highlights many of these reports. (Kevin J. Coyle, 2016)

For the Eco-Schools programme, there is unfortunately a limited number of studies that focus specifically on academic achievement and student skills development changes.

# To highlight a few: **Global**

### HGSE Global Education Innovation Initiative Book 3: Case Studies from 50 Global Examples of Teaching and Learning in the 21st Century; Sowing the Seeds for an Ecologically Conscious Society: Foundation for Environmental Education (FEE)

In 2017, Ashim Shanker and Connie K. Chung from Harvard University developed fifty case studies of international organisations that promote teaching and learning in the 21st century. This publication, Case Studies from 50 Global Examples of Teaching and Learning in the 21st Century, (Shanker, 2017) included a chapter specifically about the three FEE education programmes – Eco-Schools, YRE, and LEAF. The findings of the report were arranged thusly:

### **Intrapersonal Competencies**

All three programmes develop in youth a sense of responsibility for the environment. Eco-Schools cultivate a mindset and a lifestyle that values sustainability.

### **Interpersonal Competencies**

Eco-Schools help participants develop leadership skills, public speaking, meeting, negotiation and communications skills.

### **Cognitive Competencies**

Students can develop the skills of critical analysis, problem solving, research, investigation and decision-making.

### **Attitudes and Values**

Eco-Schools seek to motivate young people to make a difference and to share their pro-environment mindset and proactive behaviour amongst family and friends, ultimately passing it on to future generations.

### Pedagogy

Eco-Schools place great emphasis on involving the local community from the very beginning. By doing so, the lessons the students pick up are transferred back into the community where they take hold and lead to more sustainable, environmentally responsible behaviour patterns all around.

## England +

### S3: Sustainable School Self-Evaluation Driving School Improvement through Sustainable Development

In 2008, England's Department for Children, Schools, and Families (DCSF), now called Department of Education, developed an S3: Sustainable School Self-Evaluation (Department for Children, May 2008) that was an outgrowth from the government's strategy for children and young people, entitled "The Children's Plan."

This Plan complemented another visionary strategy, the UK's 2005 Sustainable Development Strategy, which aims to "enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations." At that time, the government stated that it would like every school to be a sustainable school by 2020, and established a National Framework to guide schools towards that aim.

The development of the S3: Sustainable School Self-Evaluation contains a section that addresses achievement and standards. DCSF recommended that schools use sustainable development to motivate pupils, enhance their enjoyment of learning, and ultimately raise achievement and standards.

They went on to say that: "Sustainable development offers a real-life context that can make learning more meaningful and relevant. It can enhance pupils' enjoyment and progress, and build practical life skills."

The self-evaluation demonstrates the linkage between a sustainable school and achievement and standards in two ways. The first concerns improvements in pupil attentiveness and concentration through the use of natural light and ventilation, improvement of indoor air quality, availability of nutritious food, and higher levels of pupil fitness.

The second concerns how, through the context of real-world situations and issues, learning can be made more interesting and relevant for young people. Student engagement with and enjoyment of relevant, real-world subjects in and outside the classroom can enhance their achievement and behaviour, and lead to greater job satisfaction among school staff. All of these can contribute to improved standards.

DCSF stated that these benefits are supported by international research and a growing body of practitioner evidence in England and elsewhere.

The Benefits of Eco-Schools: Views from the Head Teachers of Green Flag Secondary Schools

In 2014, Keep Britain Tidy produced a paper (KBT, 2014) reviewing statements made by Head teachers of 124 secondary schools who currently held the Eco-Schools Green Flag Awards. Head teachers from 37% of the schools reviewed recognised that the Eco-Schools programme helps students to develop a variety of skills. Skills explicitly mentioned include:

- Leadership
- Collaborative Working
- Public Speaking
- Monitoring
- Team Work
- Understanding Wider Issues and Considerations
- Speaking and Listening
- Gardening and Horticulture
- Planning
- Problem Solving

Also reported, the Eco-Schools programme led to 79% of Head Teachers reporting that by taking part, the students and staff are more aware of environmental and sustainability issues. Most of the responses mention a general increase of knowledge or awareness of sustainability issues and the impact this has had. "Eco-Schools provides an overarching framework for pupils, helping them to understand how different issues are linked together...Eco-Schools encourages experiential learning in the outside classroom in 'real' situations and the diversity of tasks that can be carried out recognises that everyone has a unique learning, working, and thinking style."

## Flanders-Belgium

**Flemish Eco-Schools Improve Students' Environmental Knowledge** In 2011, Boeve-de Pauw and Van Petegem conducted a research study (Boeve-de Pauw & Van Petegem, 2011) on the effect of Flemish Eco-Schools on student environmental knowledge, attitudes, and affect.

The researchers compared the environmental knowledge and effect of students in Eco-Schools and non-Eco-Schools in the same area, utilising the Children's Environmental Attitudes and Knowledge Scale (CHEAKS) survey. Interestingly, the researchers found that students in the Eco-Schools and non-Eco-Schools were not randomly distributed in terms of their socio-economic backgrounds and language spoken at home. When controlling for these variables, the findings did demonstrate an increase in environmental knowledge among Eco-Schools students; however, there was no significant difference in effect among Eco-School and non-Eco-School students.

They concluded that more research is necessary to determine whether some of the Eco-Schools are better at influencing students' attitudes and values.

# Iceland

"Mig langar til að næsta kynslóð hafi Jörð til að lifa á": Könnun á þekkingu og viðhorfum nemenda í Grænfánaskólum til umhverfismála Rough translation:

"I want the Next Generation to have an Earth to Live On": Survey of Knowledge and Attitudes Towards Environmental Issues of Students in Eco-Schools

In 2015, research was conducted by Hungrun Geirsdottir (Geirsdottir, 2015) to survey the attitudes and knowledge of Eco-School students in environmental issues.

The method of convergent parallel design was applied by collecting data, using both qualitative and quantitative methods. A questionnaire, designed for students in grade 7 in compulsory schools, was sent to a sample of 40 Eco-Schools in Iceland. Only 13 schools responded, resulting in 326 answers. The results suggest that

participating schools proceed well to achieve the goals of the Eco-School programme which involved active environmental policy and improvements in the school surroundings.

The results indicate that participation in the programme increases school image and sense of community. The students proved to be aware of environmental issues and their positive behaviour towards the environment improved to some extent with education and by following the schools' environmental policy.

The results also showed a need to put further emphasis in training students to be competent in dealing with environmental issues in democratic ways. The program has an opportunity to connect with the school curriculum as sustainability is one of the fundamental concerns of the new national curriculum. The results also showed that more emphasis is placed on the programme in classes of younger students.

### South Africa 🔀



### Eco-Schools and the Quality of Education in South Africa: Realising the Potential

In 2008, Dr. Eureta Rosenberg from Rhodes University wrote a journal article, "Eco-Schools and the Quality of Education in South Africa: Realising the Potential" (Rosenberg, 2008) that shared the findings of an evaluation of the Eco-Schools South African programme in relation to the quality of education in South African schools. In summary, learner and teacher work in Eco-Schools showed signs of the problems with the quality of education as part of the current conditions in the system, and there are indications that the programme - at times - adds to the complexity to which some educators struggle to respond coherently. However, the evaluation also found that Eco-Schools has the potential to strengthen teaching and learning and that many teachers highly value the programme's contribution in this regard.

Interestingly, the researchers found that although programmes like Eco-Schools are perhaps not designed first and foremost to improve the quality of education, they can and must make a contribution. Eco-Schools, with its combination of practical environmental improvement projects, teacher support for better curriculum-based lessons, and attention to planning and management, does indeed address a number of facets described by these researchers as likely to improve the quality of teaching and learning. These include:

- Poverty and learner motivation
- Whole school management and planning
- Resources to support teaching and learning



### Maryland Green Schools (part of Eco-Schools USA)

Maryland's Green/Eco-Schools utilise the Environment as an Integrating Context (EIC) (Lieberman & Hoody 1998) approach for learning that has far-reaching benefits, including increased student achievement in science and social studies as measured by standardised tests, increased student attendance, and a decrease in the number of student disciplinary referrals.

This particular study, A Study of Green Schools & Student Academic Achievement" (Education, 2004) (conducted in 2004 and again in 2010) examined the relationship between Green/Eco-School designation and student academic achievement as measured by the Maryland Student Assessment (MSA). The studies used a hierarchical regression model to control for differences in schools socioeconomic status and percentage of students receiving special education services.

Four hierarchical regressions were performed examining the relationship between the design as a Green/Eco-School and achievement in grade 5 and 8 reading and mathematics. The results indicate that Maryland Green/Eco-School designation significantly correlates with higher reading achievement in fifth grade; higher reading achievement in eighth grade; and higher math achievement in grade 8. Designation as a Green/Eco-School did not correlate significantly with higher grade 5 mathematical scores.

The 2010 study examined the relationship between the comprehensive EE found in Green/Eco-Schools and student science achievement. Based on the analysis, students from Green/Eco-Schools have significantly higher percentages of students scoring excellent in the Maryland School Performance Assessment Program (MSPAP) science test than schools that are not Green/Eco-Schools.

### Academic Research Gaps:

Although many studies have been performed on the efficacy of environment-based education on academic achievement, few have been conducted based specifically on the Eco-Schools programme. This is a critical research gap that needs to be filled over time. Anecdotally, FEE receives information from National Operators and their participating schools that academic scores have been increased due to the programme. While helpful, it would be worthwhile to have several countries conduct an evaluation of academic achievement with a control group of Eco-Schools and non-Eco-Schools to demonstrate the difference.

### **Environmental Impact Changes**

The Eco-Schools programme is an ideal way for schools to embark on a meaningful path towards improving the environmental footprint of a school, a change which inevitably leads to a more sustainable, less costly, and more responsible school environment. Through the use of the Eco-Schools themes (environmental focus areas), students conduct audits and develop action plans that they set into motion and monitor over time. These actions often contribute positively to reducing the environmental impact of the school and surrounding community.

### Some examples of how this has been accomplished are shown below.

## Canada 🕨

### **Ontario (Canada) Eco-Schools Energy Performance Study 2017**

In 2017, a third-party analysis, "Ontario Eco-Schools Energy Performance Study 2017," (Inc, 2017) of the energy performance of certified Eco-Schools compared to non-certified schools in Ontario was funded by the Ontario Ministry of Energy. In the summary of findings, the overall energy performance of certified Eco-Schools (elementary and secondary) was better than overall energy performance of non-certified schools. Some interesting statistics from the report:

• On average, if a non-certified elementary school used energy as efficiently as a certified Eco-School, it could reduce its greenhouse gas emissions by 12 tonnes/year

• On average, if a non-certified secondary school used energy as efficiently as a certified Eco-School, it could reduce its greenhouse gas emissions by 52.1 tonnes/year

### **Ontario Eco-Schools Waste Comparison Study**

In 2016, the Ontario (Canada) Eco-Schools Waste Comparison Study (Technologies, 2016) was conducted by Immacutec Systems Technology, Inc., an independent waste audit consultant. Key findings include:

• Certification from Ontario Eco-Schools is associated with lower landfill and total waste generation per student

• The key factor to the success of waste reduction and diversion initiatives at the schools studied was consistent engagement and support from teachers, administrators and board level officials

• Principals, in particular, had a great degree of influence over the mentality associated with waste diversion programs at the schools

### Climate Change Learning & Action in Ontario's Certified Eco-Schools

In 2017, a report (Goodchild, 2017) was issued that summarised and evaluated the findings from the Climate Leadership project conducted by Ontario Eco-Schools during the 2016-17 academic year. The project was funded in part from the Government of Ontario's carbon market, as part of Ontario's Climate Change Action plan. The goals of the project were to provide baseline information on climate change learning and action currently practiced at certified Eco-Schools in Ontario, and increase climate awareness and leadership capacity among educators and students. The report found that the Ontario Eco-Schools programme is well-positioned to facilitate the integration of climate change learning and action throughout school communities. Results show that climate change education is happening at all grade levels and in a variety of subject areas at certified Eco-Schools. Moreover, Eco-Teams organised hundreds of school-wide campaigns and activities to increase climate change learning and action. Participating schools reported impacts on awareness, Eco-team participation, and school performance on energy and waste indicators. Surveyed teachers reported that Eco-Schools workshops and resources improved their capacity to understand and teach climate change material. They also identified barriers to accessing resources and increasing climate change knowledge and action at their schools, such as lack of time and the challenge of incorporating extra material into an already demanding curriculum.



### **Green Schools Travel Progress Report**

In 2009, An Taisce conducted a review (Purcell, 2009) of the first year of the national roll-out of Green Schools Travel programme which proved hugely successful in terms of reducing the number of pupils traveling to school by private car, while increasing the number of pupils traveling to school by sustainable modes of travel such as walking and "park n' stride." Some statistics from the report are:

• A 27% reduction in private car use to more sustainable modes of travel to school. This equates to a modal shift of 12.6% or over 9300 people/day from the private car to various sustainable methods of transport, i.e., walking, cycling, and park n' stride. This represents a reduction of almost 20,000 car-related trips to school per day, or nearly 100,000 trips per week

• The modal share for walking to school increased from 17.5% to 25% over the school year, indicating a 43% increase in walking to school

• The number of pupils traveling to school by bus decreased by 10% over the course of the school year

### The Diversion of Waste from Landfill Achieved by the Green-Schools Programme in Ireland

As part of a larger report in Year 4 of the Eco-Schools programme in Ireland, researcher Frances Fitzgerald explored the successes and challenges of diverting waste from landfill by the Green-Schools programme in 2001 (O'Mahony, 2001). At the time of the study, over 800 primary and secondary schools were participating in the programme. Results are as follows:

• The reduction of average waste to landfill by schools that completed the programme was 45%

• Urban schools typically generated slightly more waste to landfill than rural schools. This could be accounted for by the general larger size of urban schools

• 39 out of the 47 schools surveyed were being charged for waste disposal. The study indicates that schools that were paying a waste disposal levy were producing less waste for landfill than those that didn't have to pay

• 26 out of the 47 schools surveyed were monitoring their waste prior to the survey using a variety of methods: by weight, by volume, counting the number of bags or bins going to the landfill, etc. The study indicated that schools that monitored their waste typically generated less waste to landfill

• The number of recycling and reuse projects was higher within awarded Green Schools. The study indicated that the larger the number of projects, the lower the waste per capita value

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#### **Green Schools Travel Progress Report**

In 2013, an end-of-year project evaluation of Keep Northern Ireland Beautiful (KNIB, formerly Tidy Northern Ireland) and Bryson Charitable Group's Rethink Waste project was conducted (Maria Curran, 2012-2013).

The aim of the project was to raise awareness of waste issues among 32 Primary and 12 Post Primary schools across Northern Ireland, encouraging a move from recycling waste to waste prevention and reuse, in turn reducing associated greenhouse gas emissions. Some statistics from the report are:

- The submission of 6712 household addresses to the Mailing Preference Service which will reduce junk mail being sent to these homes (an estimated 112.76 tonnes/year)
- The distribution of 8250 water bottles will impact upon the daily reuse of these bottles rather than parents buying drinks for school (an estimated reduction in plastic waste of 39.18 tonnes/year)
- A result of reduction in plastic and paper waste will achieve a significant impact of reducing greenhouse gas emissions by 230 tonnes/year
- An estimated 22,432 people as a minimum were engaged to some extent with the Rethink Waste project



### A study of Energy Conservation Policies at (Primary) Eco-Schools in Istanbul

In 2013, researchers from the Department of Architecture, Gebze Institute of Technology, in Kocaeli, Turkey, conducted a study (Tonuk, 2013) that examined primary schools in Istanbul that are part of the Eco-Schools international programme. A questionnaire-based survey was administered on the theme of energy management within primary schools in Istanbul, and the findings of a field observation were examined. Questionnaire findings were categoriaed under three main themes: energy usage and conservation policies at the Eco-Schools' building envelope; energy usage and conservation policies in the indoor environment of Eco-Schools; and types of energy sources used at Eco-Schools. The questionnaire investigated the strengths and weaknesses of the energy conservation policies adopted by Eco-Schools in Istanbul (55 total, 37 survey respondents). The study findings show that there are some deficiencies in the awareness and economic use of energy in the indoor and outdoor environments of the Eco-Schools located in Istanbul that participated in the study. Based on the findings of the present study, the following recommendations can be made for the progression of Eco-Schools in Istanbul:

• Solar control elements should be applied on the facades, according to how much sunlight they receive

• The use of double-skin facades should be discussed when constructing new buildings and in comprehensive building renovations

• Preventive measures should be considered in all Eco-Schools to reduce heat loss from windows and double-skin and energy-effective woodwork applications (which are in limited use in the Eco-Schools) should be generalised to all Eco-Schools

• Methods aimed at energy conservation from windows (which are used in a small proportion of eco-schools) should be discussed and should be integrated in all eco-school buildings

• Self-closing mechanisms (which are in limited use on the entrance gates of some Eco-Schools) should be integrated to the entrance gates of all Eco-Schools

• Low-energy consumption bulbs and fluorescence lights, which are used widely in the indoor environments of the Eco-Schools, should be generalised to the indoor environments of all Eco-Schools. Independent control of energy systems, installed in a small proportion of the eco-schools- should be integrated to all Eco-Schools environments • The use of sensors mounted on illumination elements and other electrical elements should be generalised in the Eco-Schools

• It is seen that natural gas is used by 100% of survey respondents and that renewable energy resources are used only at low levels for testing purposes and/or to make small contributions to energy gain

The initial investment costs of advanced technologies - used for renewable energy gain purpose - remain at significantly high levels. Although this presents less of a problem for developed countries, these high costs are a real problem for developing countries. However, it is concluded that the study schools, which are labeled as Eco-Schools, should pioneer the use of such technologies and should create special budgets for the adoption of renewable energy resources. Considering the general results, it is recommended:

• To gradually apply the same or similar applications in all primary schools in Istanbul and Turkey

• To add educative seminaries and/or compulsory lessons on the topics of "environment", "environmental awareness", "energy conservation and management" to the curriculum in addition to basic education subjects

• To seek active support from professionals in the fields of "education" and "environment and renewable energy systems" (universities, those working in applied fields, non-governmental organizations, provincial governments etc.)



### **Eco-Schools USA: Reducing School Operating Costs Annually**

The Eco-Schools USA programme has a built-in online dashboard for every participating school. On this dashboard, schools are able to track their progress and report metrics towards their goals in addressing each of the twelve environmental themes offered.

In 2016, participating U.S. Eco-Schools saved more than \$75 million on school utility bills; in 2018 that number grew to more than \$100 million. Schools report kilowatt hours saved; gallons of water saved; amount of CO2 emissions avoided and more on the online dashboard. U.S. Eco-Schools report savings of up to 20% in energy usage and 30% in water consumption each year.

### **Behavioural/Attitudinal Changes**

Of all the research that has been conducted on the Eco-Schools programme, most of it has focused on behavioural and attitudinal changes of students and school faculty members.

## Czech Republic 🕨

### Eco-Schools in Kindergartens: The Effects, Interpretation, and Implementation of a Pilot Programme

In August 2015, researchers conducted an analysis (Jan Cincera) of a Czech pilot project in implementing the Eco-Schools program in kindergartens. The evaluation applied a mixed design that included pre/post testing of children using picture-based questionnaires, and interviews with the teachers responsible for conducting the programme. The findings revealed a significant increase in the proenvironmental attitudes of the children between the pre-test and the post-test. The results of the qualitative analysis illustrated a broad spectrum of the ways in which the programme was interpreted by the teachers. While some teachers interpreted the program in a highly instrumental way, others interpreted it as emancipator. Their different ways of interpreting the program led the teachers to different models of distribution of power between the adults and the children. Some of the teachers made the effort to establish a democratic participation of the children in setting the programme agenda, while others manipulated the children to obtain their agreement with pre-selected activities.

Although the study did not find any evidence that the instrumental implementation of the programme would be less effective in promoting children's attitude change, it showed differences in the interpretation of the merit of the program amongst the teachers.

## England +

#### **Children's Environmental Values in the Early School Years**

In 2005, Dr. Paula Owens, Deputy Head, Eastchurch CEP School in Kent, England conducted research (Owens, 2005) to investigate how children's environmental values developed during the early school years within school contexts. Her research was designed to discover what kinds of environmental experiences young children were having, how these had been laid down into memory, and how this affected the development of their values, skills, knowledge and capacity for action. The school setting was chosen for this research because of its common frame of reference for all children and potential for influence on their development. Some key findings include:

• Children valued rules that they had been given, and where they saw them being consistently applied, they derived positive connotations from them. For example, while the youngest children in Village School said that you mustn't put litter on the floor, older children at the same school said that bins were valued because you could put litter in them

• Children's environmental language acquisition reflected the degree of outdoor curricular learning they had experienced. For example, groups of Year 2 children at Edge School had mentioned mostly playtime activities at the start of the year but in July, after a successful topic investigating the school pond, their drawings reflected the learning and specialised vocabulary they had acquired

• Collaborations between children and adults were valued by children; for example the joint community building of a gazebo at Edge School was mentioned by a high proportion of pupils from all age groups at the school

• Overall, compared to non-Eco-Schools, the children appeared to have a higher degree of involvement in the running of their school through the democratic and participative structures in place. The children appeared to be more confident and have more critical skills, i.e., they were more willing to question environmental practices in their school and suggest alternatives



### Scottish Parliament's Education Committee Call for Evidence – Pupil Motivation Inquiry

In 2005, Kate Campbell, then Eco-Schools Manager for Keep Scotland Beautiful, submitted evidence (Campbell, 2005) to the Scottish Parliament how children and young people can be motivated and engaged as much as possible by their school experience. Kate detailed how in 2001, the Scottish Executive Department (SEED) adopted involvement in the Eco-Schools programme as a performance measure for one of the Government's National Priorities in Education, National Priority IV relating to values and citizenship. Local authorities must report on 'the number/percentage of primary and secondary schools within their area that are participating in the Eco-Schools award or similar accredited environmental award'.

Many local authorities and schools report that Eco Schools involvement also addresses many, if not all, of the other national priorities, especially NP I : attainment and achievement, NP III : inclusion and equality and NP V : learning for life.

Our experience in working with all 32 local authorities and numerous schools across Scotland is that involvement in the Eco Schools programme can have a positive effect on pupil motivation, particularly amongst disaffected young people, pupils with learning difficulties and the less academically able. We can highlight a number of excellent case studies from all over Scotland. At the moment, this evidence is largely anecdotal, but Eco-Schools Scotland is intending to undertake research during 2005 to see if this is, in fact, the case.



### Can Eco-Schools Improve Elementary School Students' Environmental Literacy Levels?

In 2012, three Turkish researchers (Ozsoy & Ertepinar, Dec 2012) conducted a study to investigate the effects on elementary school students' environmental literacy levels. Data of the study were gathered from 216 students enrolled in two elementary schools, one of which was determined as an experimental group receiving Eco-Schools application, and the other set as a control group receiving traditional school application.

The Environmental Literacy Questionnaire (ELQ) used had four subscales: environmental knowledge; attitudes, uses and concerns, and was used to determine students' environmental literacy levels. Results revealed that there were significant differences between control and experimental groups of different grade levels in terms of all subscales of the ELQ in favor of the experimental (Eco-Schools) group.

In addition to the study results, the researchers also provided recommendations for further research:

• That a similar study could be conducted with urban and rural schools having students with different backgrounds

- Replication of the ELQ study with students from different locations and cultures conducted internationally to look for similarities and variations
- Expanding the research to include other variables such as environmental values and beliefs

• Increasing the time frame for the study to determine the long-term retention of environmental literacy and the extent of its continued impact on environmental attitudes and behaviours, i.e., a longitudinal study

### Whole School Sustainability Programme Approach

The Eco-Schools programme employs a whole school approach to education for sustainability development (ESD). Students, faculty, school administration, community members, and more are all engaged and involved in the program to one degree or another. Research has been done by individuals and groups within several countries on the efficacy of the whole school approach that Eco-Schools utilizes.

### Germany 💳

### The Concept of the Whole School Approach – a Platform for School Development with Focus on Sustainable Development

In 2013, Reiner Mathar, the State coordinator for Education for Sustainable Development in the Hessian Ministry of Education and Ministry of Environment, Energy, Agriculture, and Consumer Protection, Germany, wrote a concept paper (Mathar, 2013) that draws upon reflections, discussions, and state-of-the-art evidence from practical implementation of an international network of experts from various ministries, universities, and NGOs in India, Germany, Mexico, and South Africa called the ESD Expert Network. In his concept paper, Mathar references the 2012 UNESCO Report, "Shaping the Education of Tomorrow," in which Eco-Schools are discussed as an example of a whole-school approach to sustainability:

'The key message that comes from the story of Eco-Schools success has to be that for change to happen, power must be disseminated to the point of implementation. Schools are dominated by students. They are the ones who act as the eyes and ears of behavioural change. Develop the schools processes and systems to support student led change. Eco-Schools highlight that ESD is not just about curriculum content, but a whole of school body, whole of school mind set and whole school action process. The case study also acknowledges that change is slow, incremental and is only sustainable if genuine models of participatory learning and decision making form the basis of the process.

The greatest gift a school head teacher can give to his/her students therefore, is the gift of freedom for self-directed and purposeful learning, supported by structures and processes that empower and engage with real life ecological issues.

The lessons of Eco-Schools also highlight that those who create the ecological footprint need to have opportunities to reflect and understand what it means to be part of the environment, the effects one has in all the different interconnected cycles and biomes of life and to be involved in and control of remedial action or proactive measures. Ultimately, Eco-Schools are a process that becomes a way of life. A cultural paradigm for school administrators to master through delegation and a belief in their teachers and students capacity to change the school from the ground up.' Interestingly, since 2009, the international ESD Expert Network (Germany, India, Mexico, and South Africa), has discussed the existence of a common understanding and a common concept of school development in the field of ESD focusing on three key aspects: education in general; school development in detail; and guidelines and directions of curriculum development.

They also looked at existing studies such as the British S3 and the Australian Research Institute in Education for Sustainability. Taking these into consideration, they identified different aspects of sustainable development and ESD that a school could focus on that mirror Eco-Schools themes as well:

- Food and Drink
- Water
- Purchasing and Waste
- School Grounds
- Local Well-Being
- Energy
- Travel and Traffic
- School Buildings
- Inclusion and Participation
- Global Dimension

## Ireland

### The Performance of the Irish Green-Schools Programme: Results of the Green-Schools Research Projects

In 2001, research was conducted by AnTaisce's Dr. Michael John O'Mahony and Frances Fitzgerald that outlined the performance of the Green-Schools programme in Ireland. (O'Mahony, 2001). The research took place during Year 4 of the programme in Ireland (September 2000-June 2001). The performance of the programme was assessed and evaluated in two main areas: 1) the quantification of the diversion of waste from landfill achieved by the programme; and 2) the impact of the programme on environmental awareness, behaviour, environmental leadership and a number of related topics. The main question that An Taisce wanted to answer was, *"Is the Green-Schools' programme having any success in improving the student's attitudes and behaviour towards the environment?"* 

The research comprised a nationwide comparative study of grade 5-6 primary school students (age range 10-13) from awarded Green-Schools and the same from non-Green-Schools. The survey method was a personally issued questionnaire.

The findings are as follows:

• Environmental knowledge/awareness levels are very similar for the two groups

• Regarding positive behaviour towards the environment, the Green-Schools students scored significantly higher. Overall, the Green-Schools students are less likely to drop litter and more likely to participate in local clean ups and environmental projects, conserve water and electricity and consider the environment when making a purchase

• Environmental opinion leadership among Green-Schools students are considerably higher than non-Green-School students

• Environmental problems are seen as more of an urgent problem among Green Schools students whereas non-Green Schools students feel environmental problems are more of a problem for the future

• The levels of recycling of paper, cardboard, aluminum, and glass are higher within the homes of Green Schools students. Home composting levels are also higher

• Interestingly, 90.8% of non-Green-Schools students felt that they could do something about the state of the environment. This number was even higher among Green-Schools students at 95.6%

## South Africa 🔀

### An Assessment of the Role of Eco-Schools in Achieving Whole School Development Through Sustainability Education

In 2009, as part of her Master's programme requirements, Waheeda Maria Carvello undertook an assessment (Carvello, 2009) of the role of Eco-Schools in achieving whole school development through sustainability education. Her research examined what impact the South African Eco-Schools programme, since 2003, has had on the implementation of sustainable education through whole school development. The qualitative evaluation research design was used and data was collected through interviews, questionnaires, and narratives that included all role players. It noted the strengths of the programmes already in place and identified the challenges that still need to be addressed. The outcome of the study proved that the Eco-Schools programme does achieve whole school development by implementing sustainability education and should be incorporated into the formal education system.

### Some key findings:

• The Eco-Schools programme incorporated both the criteria set by the 12 principles for Environmental Education and the learning contexts as set out in the sustainability education in European Primary Schools (SEEPS) framework for whole school development. These were successfully integrated within the South African context

• Schools demonstrated establsihed models of whole school development within their local contexts

- Learning activities promoted active and experiential learning. Learners enjoyed being actively involved in learning outside the classroom, thus taking ownership of their growth and development
- Parents, teachers, and Eco-School coordinators highlighted the importance of administrative skills and teamwork
- Learners' responses indicated gaps in the teachers' knowledge and skills
- Teachers noted the need for professional development

Some findings from Carvello's research were surprising: • A special school for the blind, the deaf, the physically disabled and learners with severe barriers to learning (Appendix B2 & D1) was extremely successful in implementing the Eco-Schools programme. Despite the usual challenges experienced by other mainstream schools within the Eco-Schools programme, this school has outperformed many of these mainstream schools to meet the performance criteria of Eco-Schools. For example, the school supports an orphanage from its food garden and uses the skills acquired from the Eco-Schools programme to help them become learners for life by developing entrepreneurial skills that would make them self-reliant and independent despite their disability. The learners interviewed were very knowledgeable about their environment and their role in sustainable development

• At an urban school (Appendix B1 & D1), the entire staff was part of the Eco-School programme. To ease the teachers' workload, the entire programme is managed by the parents' committee. This arrangement has had the admirable result of helping the school earn the prestigious "International Flag" award

• The Department of Basic Education's lack of support and inefficient, ineffective programme delivery were creatively overcome by the Free State Regional Coordinator of the Eco-Schools programme. This was done by working through the Free State Department of Tourism and Environmental Affairs to get all the disjointed environmental programmes streamlined and brought under the umbrella of the Eco-Schools programme

# Global

### Whole – School Approaches to Sustainability: An International Review of Whole-School Sustainability Programmes

In this report prepared by the Australian Research Institute in Education for Sustainability (ARIES) for the Department of the Environment and Heritage, Australian Government, several Eco-Schools National Operators provided significant contributions. These National Operators were from South Africa, Scotland, and Ireland. The study (Henderson, 2004) found that there is a lack of evaluation and research findings to address questions regarding implementation and effectiveness conclusively, but that there is some evidence which points to a number of critical success factors for whole school sustainability programmes. These include: alignment with national government priorities; access to expertise in EE and/or EFS during program design and implementation; significant and continuous funding; alignment with EFS approaches; investment in professional development of program teams as well as school partners; creating links with EE initiatives already in operation; and establishment of multi-stakeholder partnerships.

The researchers determined that the key features which characterise a Sustainable School are:

- Engaged school leadership that practices sustainability through democratic decision making
- Whole school participation with extensive school-community partnerships

• The school as a 'learning organisation' using participatory learning approaches for students, reflective practice for teachers, and regular professional development for all participants

- Transdisciplinary approaches to curriculum
- 'Greening' of school grounds and extensive use of 'outdoor classrooms'
- Reductions in a school's 'ecological footprint'

The critical success components in the formation of a Sustainable School were found to be:

• Effective multi-stakeholder partnerships

• Expertise in Environmental Education /education for sustainability focusing on socio-cultural dimensions of sustainability rather than a restricted focus on 'green' agendas • Political support - through national sustainability priorities - and programme autonomy and flexibility

- Continuous financial support over lengthy timeframes there are no 'quick fixes'
- Program support such as facilitators and coordinators, professional exchanges and networking opportunities
- Professional development of teachers and others involved in the process
- Curriculum practices that are seen as part of core commitments and professional priorities
- Accreditation and certification processes which offer recognition and accolades for schools' efforts and achievements
- Investments in monitoring and evaluation to inform development and effectiveness of initiatives

### The Whole-School Approach to Education for Sustainable Development: From Pilot Projects to Systemic Change

In 2008, Lucy Hargreaves developed a journal article (Hargreaves, 2008) for the Policy & Practice publication on the whole-school approach to ESD. Her article outlined a whole-school approach to ESD that includes examples where such an approach has been successfully implemented and highlights some of the key challenges that must be addressed to make the widespread adoption of the whole-school approach to ESD a reality. The international Eco-Schools programme was one of those highlighted, and even though it is noted that the programme is very successful, there are still significant challenges in transitioning the whole-school approach to ESD from pilot project to wide-spread systemic implementation in the formal education sector.

Hargreaves identifies these key challenges and opportunities:

• Time and resource constraints are identified by teachers and school administrators as common barriers to ESD implementation. Adopting a whole-school approach to teaching and learning is viewed by many as simply impractical given current constraints on teachers' time within already overcrowded curricula. ESD continues to be conceptualised by many practitioners as an 'add-on', rather than a holistic change in teaching and learning practices. To obtain support from school administrators, governments and teachers alike, it is necessary to highlight the importance of curricula integration, rather than the creation of new courses. It is also critical to underscore to decision makers the cost savings that can ensue from more sustainable operations within schools • Leadership challenges, both within schools and within their larger administrative communities, are prevalent in moving toward a more systemic approach to ESD in schools, a trend articulated in a recently released report (Jackson, 2007). Results of this study show that those leaders who develop sustainability within their schools are motivated by a personal passion for sustainability. The same study noted a lack of priority for sustainable development within many local government authorities and a consequent lack of institutional support for implementation of ESD in schools. It is critical that governments harness the energy and commitment of individual leaders, communities and NGOs who support the whole-school approach to ESD to drive a more systemic implementation of ESD for a greater impact. Enhanced leadership could create the governance structure necessary to ensure the longevity and sustainability of ESD.

• Studies show gaps in appropriate pedagogy and curriculum development in teacher training, the absence of a positive vision, and a general lack of conviction that individual teacher efforts will

really make a difference. Teachers also require greater capacity to undertake the immense and challenging task of implementing a whole-school approach to ESD (Sustainable Development Education Panel, 2003). Enhanced pre-service and in-service teacher training is urgently required for educators to be able to act as effective facilitators in the ESD process.

• A whole-school approach to ESD presents a significant opportunity for the formal education sector. Not only can it enhance the environmental performance of schools as institutions, but it can raise the quality of education and build a more sustainable future by imparting the values and tools that today's children and youth will need to build and maintain more sustainable societies. Commitment to change is required from all stakeholders, from grassroots activists to educators to policymakers. Only by working together at all levels can we ensure that ESD moves beyond the realm of pilot projects and individual case studies to a more system-wide catalyst for change.

### In closing

As evidenced by the various highlighted reports, articles, or evaluations that have been highlighted in this section on what research and evaluation has been undertaken to date on the Eco-Schools programme, that the programme works to a great extent in the four major categories identified: Academic and Skills Development; Environmental Impact; Behaviour/Attitudinal Change; and Whole-School Sustainability Approach. There are, however, still many gaps in the research on our programme, some of which are identified below:

### Something to Munch On - For our Next 25 Years!

Here are some proposed research ideas for the collective Eco-Schools family to "munch" on as we consider how best to enter our next 25 years! Please feel free to add to these as time goes on, or if research has already been done that fits the niche, please provide that information to the FEE Head Office.

### Noticing "Spots" in Environmental and Sustainability Education Research:

Alan Reid posed this interesting concept earlier this year in the Environmental Education Research publication (Volume 25, 2019 – Issue 2):

### NOTICING SPOTS IN ENVIRONMENTAL AND SUSTAINABILITY EDUCATION RESEARCH

'blank spots' - those topics about which 'we know enough to question, but not to answer'
'blind spots' - those topics that we 'don't know well enough to even ask about or care about'
'bald spots' - those topics that are repeatedly pursued in research'
'bright spots' - those topics that inspire and innovate research'

**Source:** Adapted from Reid, A., and W. Scott. (2013). "Identifying Needs in Environmental Education Research", Stevenson, R. B., Dillon, J., Wals, A. E. J., and Brody, M. "The Evolving Characteristics of Environmental Education Research" and Wals, A., Stevenson, R., Brody, M., and Dillon, J. "Tentative Directions for Environmental Education Research in Uncertain Times. In International Handbook of Research on Environmental Education, edited by R. B. Stevenson, M. Brody, J. Dillon, and A. E. J. Wals. London, UK: Routledge

### **RECOMMENDATIONS**

- More holistic approach and focus on societal changes.
- There is no agreement on the question of what is the correct/right/ best behaviour from an environmental or sustainable point of view.

• Beliefs, knowledge, values, experience and action are all connected, the focus has shifted from examining the above mentioned terms like beliefs and behaviour to examining how people make sense of their surroundings.

• EE has been depoliticised and, the role of politics has not been sufficiently reflected in EE research.

• EE researchers tend to operate with a more eco-philosophical worldview then the traditional rationalist worldview of science.

Another strategy for making such an identification is to consider;
"Blind spots" - that we don't know well enough to even ask about.
"Blank spots" - where we know the questions but not the answers.
"Bald spots" - where the areas have been worn down so to speak due to researchers continuously approaching them in the same way and

### IMPLICATIONS

- With large Eco-School network and possibility of longitudinal studies, we could support this research.
- Eco-Schools provide a frame for countries to work with their own issues and behaviours which will grant insight into more general behavioural structures.

• Large scale environmental literacy – how do we as a group define this?

- More research on global- and active citizenship as well as incorporation of general civics within the Eco-Schools themes and steps
- What are the blank-, blind- and bald spots in the Eco-Schools programme?

• Some of these might apply to Eco-Schools as well as EE research in general.

How does practice influence research?

How do we get people engage more as well as more people engaged?

therefore, not getting anywhere new.

• The attached appendix is categorized into three key ideas under which a lot of needs are identified:

1. EE research as connected across interest, preferences, approaches, time, and distance.

2. EE research foci that needed attention.

3. sustainable development as inherently a learning process that needs researching by/with those involved in the dynamics of such learning

• The field should also continue to encourage and support research in EE that can shed light on the intersection and relationship between race/power/culture and action/experience/technology

• Doxas means in this context presuppositions in the field, or "sets of inseparable cognitive and evaluative presuppositions whose acceptance is implied in membership itself". Such doxas are a part of what sets the boundaries of a field of inquiry and determine and govern priorities for everyone working in the field. Besides this, they are often tacit

• Gaps in EE research regarding the digital age and the connection of the technological changes to both environmental and cultural changes

• Challenge for EE researchers that misinformation and conflicting information become just as accessible as all other because confusion about what to think and do about e.g. climate change makes people unengaged

• "What might be some of the implications of living and learning in times of accelerating change, uncertainty, risk, complexity and contestation of knowledge for EE research?" - In connection with this question, three tentative directions for consideration by researchers are suggested:

- 1. Connecting biophilia and videophilia
- 2. Creating spaces for hybrid learning

The boundaries between formal and informal education are breaking down and therefore, EE researchers as well as environmental educators should investigate what spaces this hybridity opens up for.

•3. Strengthening engaged scholarship with a planetary conscience Engaged scholarship can be characterised as science as community and contrasted with science as commodity

- What are the critical points for success?
- What is success how should it be defined? How is it reached?
- How do you measure it? What are the common elements?

- All represented in Eco-Schools.
- Identify the doxas when Eco-Schools are being researched as well as the doxas within the Eco-Schools programme.
- Do Eco-Schools use the full potential of the technological age? Identify potential and gaps regarding technology in Eco-Schools.
- Eco-Schools seem to overcome this challenge. How?
- Research on changing roles of e.g. formal education institutions.

• Research how consumption of nature through digital or virtual media compared with real nature experiences impact children? Are one as valuable as the other in term of behavioural change and value forming?

• In what ways does Eco-Schools encourage the teachers in the programme to rethink their way of teaching? Curricular competitions etc. - Research in the future of learning due to technology advancement and artificial intelligence

• How does global citizenship change the way one thinks and acts?

Boeve-de Pauw, J., & Van Petegem, P. (2011). The effect of Flemish Eco-Schools on student environmental knowledge, attitudes, and effect. *International Journal of Science Education*, 33(11): 1513-1538.

Campbell, K. (2005). Call for Evidence - Pupil Motivation Inquiry. Stirling: Scottish Parliament's Education Committee.

Carvello, W. M. (2009). An Assessment of the Role of Eco-Schools in Achieving Whole School Development through Sustainability Education. University of South Africa.

Department for Children, S. a. (May 2008). S3: Sustainable School Self-Evaluation, Driving School Improvement Through Sustainable Development. Nottingham: Government.

Education, M. A. (2004). A Study of Green Schools & Studetn Academic Achievement. Maryland: MAEOE.

Geirsdottir, H. (2015). Mig langar til að næsta kynslóð hafi Jörð til að lifa á" : könnun á þekkingu og viðhorfum nemenda í Grænfánaskólum til umhverfismála. Iceland: Unknown.

Goodchild, H. P. (2017). Climate Change learning and action in Ontario's certified schools. Toronto: Eco-Schools Canada.

Gough, A. (2019). The Green Schools Movement Around the World: Stories of Impact on Education for Sustainable Development. Springer Series on International Explorations in Outdoor and Environmental Education.

Hargreaves, L. (2008). The Whole School Approach to Education for Sustainable Development: From Pilot Projects to Systemic Change. Policy & Practice: A Development Education Review, Vol 6, Spring, pp 69-74.

Henderson, K. a. (2004). Whole School Approaches to Sustainability: An International Review of Whole-School Sustainability Programs. ARIES.

Inc, E. C. (2017). Ontario EcoSchools Energy Performance Study. Toronto: Ontario EcoSchools.

Jan Cincera, R. K. (2015). Eco-School in Kindergartens: the effects, interpretation and implementation of a pilot program. 991-936.

Kevin J. Coyle, J. (2016). Green Schools and Environment-Based Education: The Academic and Developmental Benefits. Reston, VA USA: National Wildlife Federation.

Maria Curran, M. B. (2012-2013). Rethink Waste Independent Evaluation. Belfast: LOCUS.

Mathar, R. (2013). The Concept of the Whole School Approach - a platform for school development with a focus on sustainable development. ESD-EXPERT.NET.

O'Mahony, D. M. (2001). The Performance of the Irish Green-Schools Programme: Results of the Green-Schools Research Projects. Dublin: An Taisce.

Owens, D. P. (2005). Children's Environmental Values in the Early School Years. International Research in Geographical and Environmental Education, Vol 14 No 4.

Ozsoy, S., & Ertepinar, H. a. (Dec 2012). Can Eco-Schools Improve Elementary School Students' environmental literacy levels? Asia-Pacific Forum on Science Learning and Teaching, Volume 13, Issue 2, Artlcle 3, P. 1.

Purcell, A. (2009). Green Schools Travel Progress Report. Dublin: An Taisce.

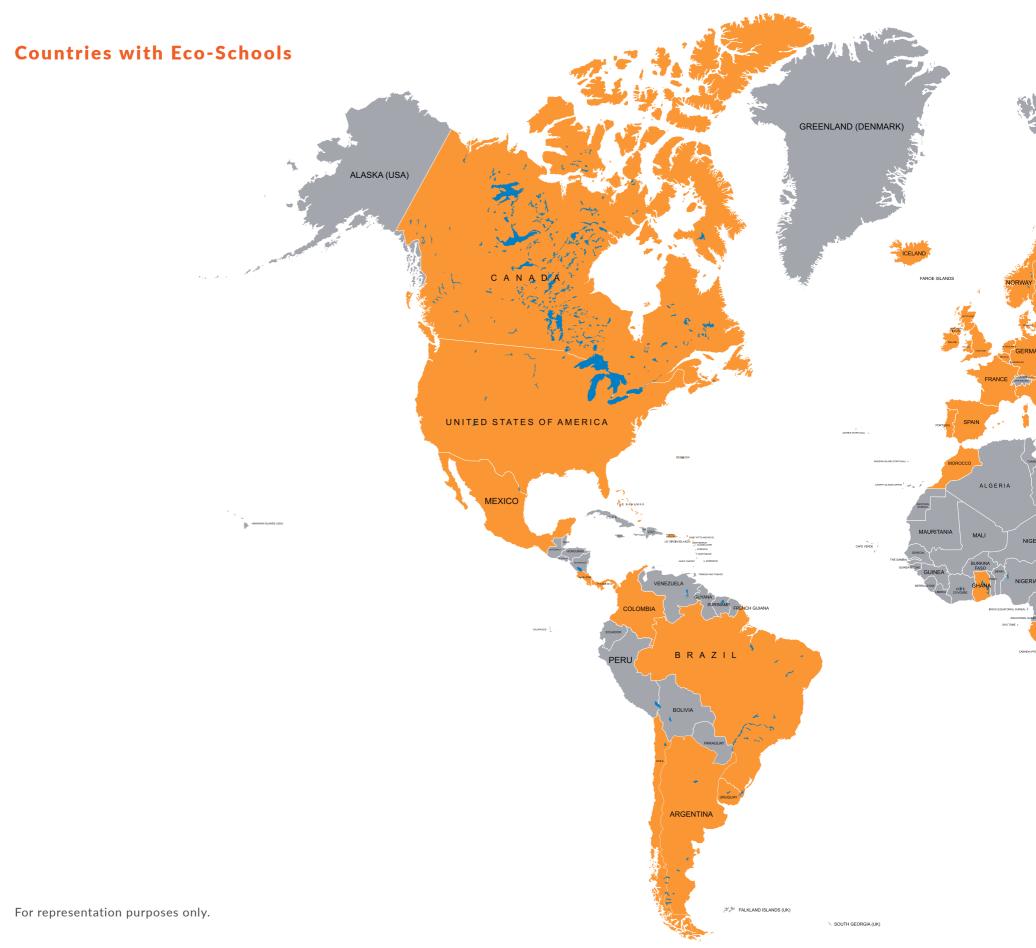
Rosenberg, E. (2008). Eco-Schools and the Quality of Education in South Africa: Realising the Potential. Southern African Journal of Environmental Education, Vol 25.

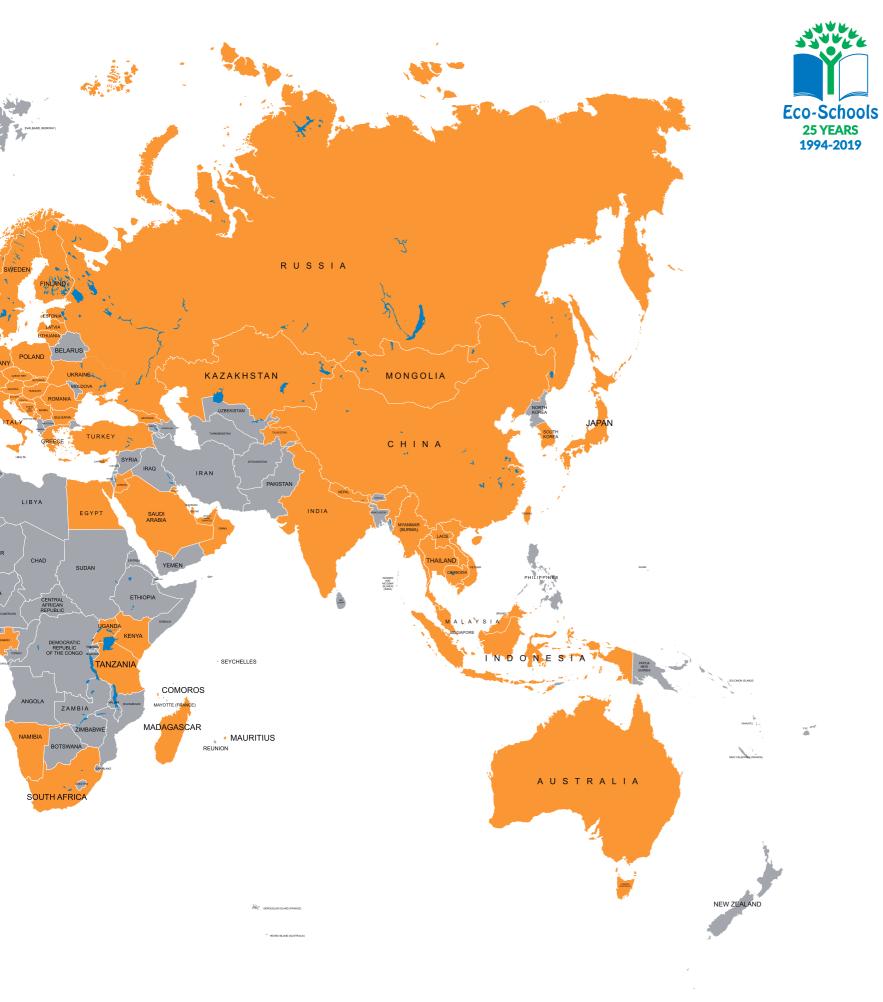
Shanker, A. a. (2017). HGSE Global Education Innovation Initiative Book 3: Case STudies from 50 Global Examples of Teaching and Learning in the 21st Century. Boston: Harvard University.

Technologies, I. S. (2016). The Ontario EcoSchools Waste Comparison Study. EcoSchools Ontario.

Tidy, K. B. (2014). The Benefits of Eco-Schools: Views from the Head Teachers of Green Flag Secondary Schools. London: Keep Britain Tidy.

Tonuk, K. S. (2013). A Study of Energy Conservation Policies at (Primary) Eco-Schools in Istanbul. Energy and Environment Research, Vol 3, No 2.







Students from Kariobangi South Primary showing toys made from bottletops and old wires (Kenya)

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free.

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# Africa

Comoros, Ghana, Kenya, Madagascar, Mauritius, Morocco, South Africa, Tanzania, Uganda & Zanzibar



# Comoros 🗨

Mouvement Associatif pour l'Education et l'Egalité de Chances (Maeecha) National Operator: Nasser Ali Assoumani

Country size: 2,235 km<sup>2</sup> Population: 758,000 Longest river: Tratinga river National animal: The coelacanth fish National flower: Ylang-ylang Joined Eco-Schools in 2015 Number of Eco-Schools: 17



### Highest mountain: Mount Karthala 2,361 m

Comoros is a group of four volcanic islands situated in the Mozambique Channel in the Western Indian Ocean, halfway between the east coast of the African continent and the northern extremity of Madagascar.

Three islands, Grande Comore (Ngazidja), Mohéli (Mwali) and Anjouan (Ndzuwani) have made up the independent Union of Comoros since 1975, while the fourth island, Mayotte (Maoré), falls under French administration. The four islands of the archipelago of Comoros are the resultant of an intense volcanic activity due to tectonic movements that began nearly 8 million years ago.

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### STATUS OF ENVIRONMENTAL EDUCATION

### **National Legislation**

Comoros has a national environmental strategy, the Manifesto of Itsandra on the green economy, the Strategy for Accelerated Growth and Sustainable Development (SCA2D), implements Action on Climate Change, the Millennium Development Goals Programme, the alignment of the NAP/LD and its integration into political processes, the National Action Plan for Adaptation to Climate Change (NAPA), the country programming framework 2014-2019, etc. From the legal point of view, the country has ratified the Convention on Biological Diversity in 1994, the Protocols of Mapgena (2000) and Nagoya (2001), the Convention on Desertification and other legal instruments related to the protection of the natural heritage. The country has adopted a Framework Law on the environment, implementing texts on impact studies; a decree on the classification of protected species of fauna and flora and a Decree on the exploitation of quarries have been signed. However, these laws and strategies are necessary. since Comoros faces grave environmental problems which threaten biodiversity and pose serious risks for the Comorian people whose livelihoods largely depend on natural resources and ecosystem services.

### **K-12 Education**

Although existing programmes may include environmental objectives, the fact remains that the programmes are not predominantly respected and the curricula do not facilitate the tasks required. The hope for a better change is based on a young age group that can carry a strong message for adults.

#### **Professional Development**

Another hope for change would be the setting up of a system of Environmental Education (EE) to professional staff which would allow everyone to gain the same level of information and knowledge for a common action to protect the planet. Teachers, from primary to university level, have a very important role to play.

#### ...

This is very recent on the geological time-scale; by way of comparison, Madagascar, which is a bigger and older island than Comoros, once belonged to the continental landmass between 70 and 120 million years ago.

By contrast, the youngest island of Comoros, Grande Comore (Ngazidja), formed a mere 10,000 years ago, is still being reshaped by the active volcano, Mount Karthala, reaching some 2,361 metres and being the highest in the islands.

The volcano also has the biggest crater of any volcano in the world. It last erupted in 2007.





### THE STORY OF ECO-SCHOOLS

Eco-Schools Comoros came to be in 2015, as a result of the Indian Ocean Commission's EU funded Islands Project. This was a common project involving all Indian Ocean islands. In Comoros, the Ministry of Education was the main institution involved, but later on, the local authorities have become progressively involved. To start up the programme, the Ministry of Education identified a National Operator and organised information workshops. Sensitisation meetings were held in each island with educational, political and community actors. To date, 17 schools are enrolled in the programme. The future challenge is to gradually include all Comorian schools in the programme, as well as training teachers. In the near future, Maeecha is striving towards bringing the programme into school textbooks.

### **KEY MILESTONES**

An important phase for the programme was informing and presenting the programme to the various political and community actors. The educational authorities then decided to identify pilot schools distributed in the 3 islands of Comoros. Finally, the training of teachers in the schools chosen could begin.



"The Eco-Schools programme is an activity that requires patience and courage because of its particular character requiring involvement and personal changes. An attitude that is preliminary before considering to influence the change in others. It is work throughout life. We have made giant steps in our countries, but the path that remains before us is still very long. We must, therefore, multiply our efforts to achieve this. We are together!"

Nasser Assoumani, Maeecha Director



### **NATIONAL OPERATOR - REFLECTIONS**

One of the highlights of this programme has been teacher training. Adults who realise that they are ignorant of climate issues and their own environment. As a trainer, I did not expect that the questions would lead to such long discussions. The openness of the teachers and their commitment convinced me that we can act together, provided that the means are available.



Mouvement Associatif pour l'Education et l'Egalité de Chances (Maeecha) Route de la Corniche, Moroni

# Ghana 📩

Center for Sustainable Transformation National Operator: Hilde Opoku

Tree planting at exchange visit to Trondheim in Norway, 201

Country size: 239,460 km<sup>2</sup> Population: 30.6 million Highest mountain: Mount Afadja 885 m National animal: Porcupine, also known as Kotoko National tree: Baobab Joined Eco-Schools in 2014 Number of Eco-Schools: 30



### Longest river: Volta River 1,600 km

Volta flows into Ghana from the highlands of Burkina Faso. The river has three main parts, called the Black Volta, the White Volta, and the Red Volta.

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### STATUS OF ENVIRONMENTAL EDUCATION

### **National Legislation**

There is no stand-alone national legislation on Environmental Education (EE) or Education for Sustainable Development (ESD) in Ghana. However, the Environmental Protection Agency Act of 1994 (Act 490) established the Environmental Protection Agency of Ghana to, among other functions, "initiate and pursue formal and non-formal education programmes for the creation of public awareness of the environment and its importance to the economic and social life of the country". As a result, there is an Environmental Education Department in the EPA, however, it is limited in terms of resources and capacity and the implementation has, therefore, not been sufficiently executed.





### **K-12 Education**

Ghana includes EE in the formal education system through the Integrated Science curriculum for primary school (1-6), junior high school (1-3), senior high school (1-3). The national curricula are prepared by the Ministry of Education through the Ghana Education Service.

### **Professional Development**

Professional development for EE is not widespread in Ghana. Environmental educators can undertake general environmental and natural resource management courses through higher education institutions.





# THE STORY OF ECO-SCHOOLS

In 2003, a cooperation between Byåsen Eco-School in Norway and Akosombo International School was initiated. About ten years later, Center for Sustainable Transformation became a member of FEE, and in July 2014, the Eco-Schools programme formally started and was implemented by the Opuku family. The same year, Akosombo International School became the first Green Flag awarded school in Ghana. From this school, the programme spread to other schools in the town Akosombo and later to other parts of the country. Even though the formal implementation did not occur until 2014, the methodology of the programme has been used in Ghana since 2010.

# **KEY MILESTONES**

After many years of hard work, hoisting the first flag was an important milestone. Later, exchange visits between Eco-Schools in Norway and Ghana have been very exciting. Exhibiting the work of the organisation and Eco-Schools to the Minister of Finance in Ghana and the head of UN Environment have also been important milestones.

Center for Sustainable Transformation P.O. Box AN 16641 Accra "It seems like we are now better understanding the future". Margaret Ayenor, Eco-Schools Coordinator, Akosombo







# **NATIONAL OPERATOR - REFLECTIONS**

It has been hard to ensure consistency in our programme, given the lack of technology to communicate with the individual schools. Once we got the programme up and running, however, we saw fantastic progress in the students' development and understanding of complex environmental issues.

# Kenya 🗮

Kenya Organization for Environmental Education (KOEE) National Operator: David Wandabi

Country size: 582,646 km<sup>2</sup> Population: 48.26 million Highest mountain: Mt. Kenya 5,200 m National animal: Lion Joined Eco-Schools in 2003 Number of Eco-Schools: 600





# Longest river: River Tana 800 km

Kenya's Tana River County takes its name from River Tana. The river is a lifeline to the Pokomo community, the major ethnic group in the county, and other neighbouring communities.

People often say that River Tana reminds them of the Nile in Egypt. The landscape in Tana River County is a mosaic of riparian forests, dry woodlands and savannah habitats within which there are eight sites that are considered to be sacred by the Pokomo community. These sites are called: Kimbu, Lalafitu, Mkomani/Maramba, Nkanu, Baguo, Bubwayo, Banatiro wetland and Lemu wetland. The sites have a cumulative area of about 12,000 ha. They hold great cultural and spiritual significance for the Pokomo community as they are believed to be the places where the spirits of their ancestors reside. Community members, particularly women, visit these sites to worship and pray.



#### **National Legislation**

The Kenya Constitution 2010 prioritises sustainable development as a national goal. The Government of Kenya has, therefore, an obligation to lead all citizens towards attaining this goal and it is committed to promoting Education for Sustainable Development (ESD) as a key factor in enabling sustainable development and quality education by implementing the Rio Conventions, UNESCO Global Action Programme (GAP) and the 2030 Agenda for Sustainable Development.

The country endorsed and adopted Agenda 21 that emerged from the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 (UN, 1992). Chapter 36 of Agenda 21 elaborated the need for ESD. The Environmental Management and Coordination Act, Cap 387 is a framework law that provides for effective coordination and regulation of all actions that have a direct influence on the environment. Section 42 (4) of the Basic Education Act stipulates that 'the Cabinet Secretary of Education shall upon the advice of the National Education Board advise the government on the promotion of environmental protection and Education for Sustainable Development'.

In addition, Kenya's Vision 2030 document aspires to revitalise the country's economic growth through the harnessing of its natural resources. Education is identified as a key driver under the social pillar. The inspiration was to have an ESD policy developed and all education interventions reoriented to address ESD. The 2013-2018 National Education Sector Plan (NESP) provides a strategy for education and training to promote ESD with reference to the Global Action Programme. This led to the development of ESD Policy for the Education Sector in 2017. Broadly, the following achievements have been realised with regard to the status of ESD in Kenya:

• Stakeholders for sustainable development are increasingly taking up education, public awareness and training to advance sustainable development

• The Government has incorporated education strategies, tools and targets into national sustainable development strategies, climate change plans and related economic frameworks such as the Green Economy

• Partnerships, collaborations and networks, for example, Regional Centres of Expertise (RCEs) have been formed to enhance the implementation of ESD

• ESD facilitates interactive, learner-driven pedagogies that equip learners with knowledge, values and skills for sustainability

• Several teachers and education officials have been trained and a number of schools are practicing ESD

#### **K-12 Education**

Sessional Paper No. 4 of 2012 on Reforming Education and Training in Kenya envisages a curriculum that is competency-based to foster quality education in the country (Republic of Kenya, 2015a). Through this policy, the Ministry of Education is committed to promoting ESD as a key element to enable sustainable development and quality education. To this effect, Kenya is currently rolling out a new Competency-Based Curriculum for primary and secondary schools. The new curriculum has sections that deliberately show how ESD can be integrated into the curricula of all levels of education from preschool to tertiary and in all subject as a pertinent and emerging issue.

#### **Professional Development**

Educators and trainers are powerful agents of change for implementing ESD (UNESCO, 2014). The education sector has increased financial support for capacity development activities and strengthened the Kenya Education Management Institute (KEMI), the agency for building capacities of education managers. The Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA) has been offering pedagogical leadership training to support teachers in implementing effective and innovative classroom practices. CEMASTEA has also been sensitising education and quality assurance officers and County Education Directors on effective management of sustainable and institutionalised in-service education and training of teachers (INSET).

Development partners have continued to complement government efforts towards capacity enhancement of education managers. Regional Centres of Expertise (RCEs) in Kenya have provided useful platforms for capacity building in the sector. As networks of formal, non-formal and informal education organisations, RCEs are catalysing and supporting the reorientation of education and training systems in their regions. The education sector is represented in each of the eight Regional Centres of Expertise (RCEs) that are operating in Kenya.

National plants: Maize, Pyrethrum, Tea & Coffee

# THE STORY OF ECO-SCHOOLS

Eco-Schools Kenya was developed in tandem with global development agendas including the Millennium Development Goals, the Decade for Education for Sustainable Development (DESD), the Global Action Programme on ESD, the Sustainable Development Goals and Green Economy. The Kenya Organisation for Environmental Education (KOEE) has been implementing the programme since 2003, growing it from a pilot in 12 schools to over 1,000 primary and secondary schools.

The Eco-Schools programme was first piloted in Kenya between October 2003 and September 2005 in 12 schools. The pilot phase was funded by DANIDA and was managed by KOEE and the Danish Outdoor Council (DOC). Other partners included: Ministry of Education, Ministry of Environment, Kenya Forest Service, National Environment Management Authority, Kenya Institute of Curriculum Development, WWF, Japanese Embassy in Kenya, UNESCO, UN Environment, UNDP and World Agroforestry Centre. The programme was titled "Eco-Schools in Kenya: Promoting Environmental Action-based Learning in Primary and Secondary Schools as a Tool for Development", and it was based on five key components of environmental action learning, namely environmental policy, crosscurriculum teaching and learning, micro-projects, school-community partnerships and networks. The main focus of the pilot phase was poverty alleviation with the focus themes being water, energy, health, agriculture, biodiversity and waste. Crosscutting themes including HIV/AIDS, entrepreneurship, and disaster preparedness and management were also addressed.

In 2010, the first Green Flag in Kenya was awarded to Goibei High School in Vihiga County.

#### **NATIONAL OPERATOR - REFLECTIONS**

The programme has been able to develop curriculum support materials to help teachers integrate ESD into the curriculum. The materials have been approved by the government to be used in all schools in Kenya. The programme was also presented at the UNESCO and DESD Conference in Japan in 2014 and recognised as a best practice in promoting the whole institutional approach and ESD in the education system.

Kenya Organization for Environmental Education (KOEE) 690 Glory Valley Road Runda, Nairobi

#### **KEY MILESTONES**

Over the years, more than 600 schools have achieved the Green Flag award, over 10,000 teachers have been trained on the implementation of the Eco-Schools programme and ESD, over 100,000 students have been reached with information on Eco-Schools and actionbased learning and more than 500 micro-projects addressing local sustainable development issues have been established in schools under the themes of sustainable agriculture, water, sanitation, hygiene, health, waste, energy, biodiversity, climate change.

In close cooperation with teachers and the key governmental institutions, the programme developed unique EE materials that comply with the curriculum requirements to treat the environment as a cross-curricular subject. Six environmental theme-packs for primary schools and six for secondary schools were developed and were widely acknowledged by relevant authorities in the Kenyan Educational sector as a best practice in mainstreaming ESD into the curriculum.

The Ministry of Environment and NEMA used the Eco-Schools programme as a best practice in environmental management and conservation in International Environmental conferences e.g. COP 7 at UN Environment Nairobi, October 2005. The programme was also used as a Regional Centre of Expertise (RCE) – Greater Nairobi flagship programme to implement ESD.

Through the programme, KOEE played a significant role in advocating for Environmental Education (EE) and mainstreaming ESD in the curriculum of schools, as well as in the integration of environmental concerns in national development educational action plans. The programme further enhanced policy support for promoting ESD across Kenya. This was evidenced by the inclusion of the Eco-Schools programme in Kenya's ESD Implementation Strategy as a best practice to be emulated by other sectors which were launched by NEMA in 2008. Eco-Schools has also been quoted in the Kenya ESD Policy for Education Sector 2017 as an effective whole institution approach in mainstreaming sustainability into all aspects of the learning environment (ESD Policy for Education Sector 2017, p.5).

Some of the challenges the programme has faced include insufficient sustainable funding sources to meet the needs of the ever-growing demand of schools interested in the programme. Funding has shrunk in recent years with some partners withdrawing due to effects from the global recession. Poor ICT infrastructure among some disadvantaged rural schools slowing implementation of projects also imposes a challenge along with the high cost of project implementation, particularly of teaching resource material production.

"The Eco-Schools programme is about sharing knowledge, experiences and challenges and finding a common solution to a certain problem. We work with the students because our idea is to inculcate in them good values to conserve the environment and the best way is to do by learning. Goibei is known as the green school because of its forest in the school compound. We moved into rainwater harvesting in collaboration with the local community. In 2009, we embraced biogas technology. Through the programme, our school has been able to realise great savings." **Tom Barasa, Former Eco-Schools Patron, Goibei High School**  "The Eco-Schools programme promotes Education for Sustainable Development. It focuses on the learners' understanding, attitudes and knowledge about their environment as well as skills. It comes down to appreciating what already exists."

Dr Ayub Macharia, Ministry of Environment and Forestry

"Eco-Schools was initiated as a programme to respond to sustainable development challenges, by building the capacity of schools and communities to respond adequately to the challenges. Eco-Schools became champions for Education for Sustainable Development by influencing positive attitudes and change of behaviour by entrenching strong value systems into the learners."

Dr. Dorcas Otieno, CEO, Kenya Organization for Environmental Education



# Madagascar

Madagascar National Parks (MNP) National Operator: Fanja Olga Randriamanantena

Country size: 587,047 km<sup>2</sup> **Population: 24 million** Longest river: Mangoky river 350 km Highest mountain: Maromokotra 2,876 m National animal: Lemur catta Joined Eco-Schools in 2015 Number of Eco-Schools: 39





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Madagascar is home to six species of baobab, **including** the famous Baobab Amoureux - two Adansonia za trees which are twisted together. Legend has it that centuries ago, a young man and a young woman from two nearby villages fell in love and wanted to be together forever. However, this could not be because, as was tradition, both had already been assigned a partner and had to marry separately in their respective villages. Despite this, the couple continued to dream of having a common life and a child together. They secretly asked their god to help them and so the two baobabs were born and grew together across the centuries together for eternity, as the couple always wished to be.

#### **National Legislation**

In 2014, Madagascar established an Environmental Education for Sustainable Development Policy. In 2016, a national action plan used the policy document as a reference to cross-cutting activities for all stakeholders at the national level. In addition, there are also national tools and resources, such as information and communication about the National Strategy for Sustainable Development, a National Strategy to face Climate Change and Terrestrial Desertification, a Biodiversity Conservation National Strategy, a Code of Protected areas, etc.

At the moment, a national project called PCCCD Rio is being implemented by the government, in collaboration with stakeholders with the aim of building national capacity on how the country could respect its environmental obligations. Environmental Education (EE) for sustainable development is one of the five big components of this national project.

#### **K-12 Education**

In 2017, an education programme was established in which Education for Sustainable Development (ESD) is the core theme. Environmental topics are included in curricula with specific resources and tools produced and initiated by non-profit organisations related to e.g. climate change. Teachers use these materials in different subjects. Government partners have developed materials, resources and training for the integration and teaching of environmental learning through all curricula subjects. The Eco-Schools programme is considered a good tool that helps and reinforces the government programme by integrating ESD in Madagascar.

#### **Professional Development**

Professional development programmes in EE have been carried out mostly in subjects like sociology, forestry, agronomy, etc. at the university level. Some initiatives such as conferences, training for trainers and teachers and EE tool exhibitions are developed by non-profit organisations and research programmes. In Madagascar, there is no university offering a degree in EE at the graduate level. The Cultural and Environmental Education Center (CCEE), however, facilitates professional development programmes to nonuniversity graduates through the subjects of environmental teaching, environmental project design and Environmental Education training.

# THE STORY OF ECO-SCHOOLS

Eco-Schools was developed through a collaboration of WWF and the Indian Ocean Commission EU funded Islands Project. The Eco-Schools programme in Madagascar started in 2015 when WWF invited stakeholders to a national meeting in order to share ideas on the Eco-Schools programme and create a national committee. Representatives from MNP, COM NAT UNESCO, the Ministry of Education, the Ministry of Environment and Forestry, ANEDD and WWF were present and all the organisations remain involved to date. Due to internal structural changes within WWF, Madagascar National Parks took over the role as National Operator in 2017.

#### **KEY MILESTONES**

In 2017, the Eco-Schools programme was promoted on a national level and members of the Eco-Schools national committee carried out a training-for-trainers and teachers on the Eco-Schools implementation in different parts of Madagascar. One year later, the number of Eco-Schools registrations increased to 37.

The big challenge is to sustain the Eco-Schools programme with limited resources.

#### **NATIONAL OPERATOR - REFLECTIONS**

In my experience as the National Operator, the highlight moment of the programme has been the exchange of experiences on renewable energy, traditional dance cultures and how to set up a plant nursery between students from Ranohira Highschool in Isalo National Park and students from Antananarivo French High School.

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Students' capacity demonstration on renewable energy knowledge and technical capacity to students from Antananarivo French Secondary School, June 2019. The project aims to sensitise young people on protecting the environment by using renewable energy, a capacity building and partnership.



"Our schoolyard is always clean and filled with happy students." Jean Philbert Ramanantsialonina, Director, Collège d'Enseignement Général (CEG), Alatsinainy Ambazaha







"The TELMA Foundation is set up to respond effectively to the need for development and to help the big island in its challenges e.g. social and environmental issues. For this, the TELMA Foundation puts all its energy and know-how at the service of Malagasy associations and social partners who need help in carrying out their project. In this context, the Telma Foundation wishes to make a commitment to improving the education of children in Madagascar and in particular, environmental education. The Foundation wishes to give schools access to services, such as those provided by the Eco-Schools programme and other relevant initiatives." Jay Ralitera, TELMA Foundation "Madagascar National Parks has a big challenge to preserve the national biodiversity of Madagascar in national parks and natural Reserves and continuously educate young people to become leaders on sustainable development and conservation ambassadors. I think that the Eco-Schools programme could help institutions accomplish their mission." Dr Mamy Rakotoarijaona, Madagascar National Parks General

Director

# Mauritius

Reef Conservation National Operator: Sameer Kaudeer

Third Eco-schools Award Ceremony in Mauritius November 2017 Schools receiving their Green Flags

Country size: 2,040 km<sup>2</sup> Population: 1.2 million Longest river: Grand River South East 34 km Highest mountain: Piton de Petite Rivière Noire 827 m Joined Eco-Schools in 2015 Number of Eco-Schools: 139 National Animal: The Dodo bird

FEE



#### National plant: Trochetia Boutoniana

Trochetia Boutoniana (Boucle d'Oreille) was declared the national flower of Mauritius on the 12th of March 1992, when Mauritius achieved the status of Republic. The flower is named after the famous French botanist, Louis Bouton, it is endemic to Mauritius and is found in the wild only on Le Morne Mountain.

Thanks to the efforts of botanist Joseph Gueho seeds were successfully germinated and grown in cultivation for the first time in 1973.



#### **National Legislation**

The Ministry of Social Security, National Solidarity, and Environment and Sustainable Development among its other responsibilities with respect to the environment is responsible for awareness-raising and sensitisation. Its role is to promote informal Environmental Education (EE) to change attitudes and behaviours of people for a greener, cleaner and more sustainable Mauritius.

Broad-based sensitisation programmes are developed for different target groups, namely: children, youth, women, senior citizens, trade unions, private sector, NGOs and the public in general, among others. Various communication tools are regularly adopted and information is disseminated through media, talks and exhibitions. Resource materials such as pamphlets, posters, roller banners, short clips/films and TV/radio spots are also developed. Each year, major international environmental events such as Earth Day on 22nd April, World Environment Day on 5th June and Clean up the world during the 3rd weekend of September are organised.

Various NGOs are involved in the implementation of EE programmes both regrading terrestrial and marine environments.

#### **K-12 Education**

Education in Mauritius is managed by the Ministry of Education and Human Resources, Tertiary Education and Scientific Research. The Ministry oversees the development and administration of state schools funded by the government, but it also has an advisory and supervisory role in respect to private schools. The government of Mauritius provides free education to its citizens from pre-primary to tertiary levels.

Based on 6 distinct pillars, the current reform in education is geared towards the holistic development of the learner throughout the education cycle. The compulsory nine years of basic education comprises of six years of primary schooling and three years of lower secondary education. The new curriculum frameworks (NCF) prepared by the Mauritius Institute of Education, make way for core and noncore learning areas through which the learners have the opportunities to acquire and develop skills that make them become lifelong learners.

In Mauritius, the secondary education system runs up to K13. Education for Sustainable Development (ESD) is infused into the curriculum through a subject called General Paper for students of K12 and K13. By the end of K13, students have been exposed to more than 80 hours of topics that are directly related to ESD.

The Tertiary Education Commission, falling under the Ministry of Education and Human Resources, Tertiary Education and Scientific

Research, has as an objective to promote, plan, develop and coordinate post-secondary education in Mauritius and to implement an overarching regulatory framework to achieve high international quality. It also has the responsibility to allocate government funds to the Tertiary Education Institutions under its purview and to ensure accountability and optimum use of resources.

Mauritius have both public and private universities in place, where various courses, diplomas, degrees and post-doc programmes are offered. Mauritius is becoming a regional platform for welcoming students from the African continent on their various campuses. More and more collaborations and partnerships are being developed between foreign universities and local ones.

#### **Professional Development**

The Mauritius Institute of Education (MIE) Teacher Education programmes offer modules on Environmental Education (EE) or Education for Sustainable Development (ESD), such as a full-time course called Teachers' Diploma Primary (pre-service) with the module, Environmental Education. The institute also addresses a range of concepts related to EE through non-award seminars (6-12 hrs) under this programme. For example, the bachelor in education (Primary) includes a part-time course in ESD and the bachelor in education (Secondary) includes a module in education for sustainability which can be attended either full or part-time. Another opportunity is a Postgraduate Certificate in Education course, which also includes a module in ESD and both public and private universities have masters in sustainable development.

It is noteworthy that MIE often organises other activities related to EE and ESD for their trainees on the MIE campus.

**Reef Conservation** Morcellement Pereyescape, Le Flammant Branch Road, Pereybere



# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was introduced by the Indian Ocean Commission (IOC) Islands project, funded by the European Union from 2015-2017, to support the integration of ESD, in line with UNESCO's Global Action Programme on ESD and the Sustainable Development Goals. The Eco-Schools programme was introduced regionally for Indian Ocean countries, whereby Madagascar, Comoros, Zanzibar, Seychelles and Mauritius have established a regional Eco-Schools network.

Eco-Schools Indian Ocean was officially launched in Mauritius on 16 April 2015, under the aegis of the Ministry of Education and Human Resources, Tertiary Education and Scientific Research and IOC, in cooperation with the Mauritius National Eco-Schools Committee, a cross-disciplinary committee led by Aneeta Ghoorah, Director of Curriculum Development at the Ministry of Education. Reef Conservation joined the programme in May 2015 as National Operator to support its implementation in the Republic of Mauritius. A close partnership has been established with the Ministry of Education to provide follow-up visits and support to the selected pilot schools as they implement the Eco-Schools programme and also to carry out stakeholder information workshops for schools and educators.

Reef Conservation has been an Associate member of the Foundation for Environmental Education since September 2017 and the National Operator for Eco-Schools and YRE in the Republic of Mauritius.

### **KEY MILESTONES**

After the end of the IOC Islands project, funding was a real issue during the beginning of 2018. However, through efforts in showcasing the results of the programme, Reef Conservation managed to find strong partners who are still involved today.

The rapid expansion of the programme from 28 pilot schools in 2015 to more than 130 schools in 2019 was quite a milestone. In 2017, the first Green Flags were awarded to schools after only two years of implementation. In 2019, the first Green Flags were awarded to schools in Rodrigues and the same year Vatel Mauritius joined the programme as the first tertiary education institution. There are, to date, 16 Green Flag awarded schools in Mauritius and Eco-Schools is recognised as the main ESD programme in primary and secondary schools. Another milestone has been the strong partnership which has been established with the Ministry of Education.

#### **NATIONAL OPERATOR - REFLECTIONS**

Eco-Schools provides the methodological tools for schools to evaluate their own challenges, assess risks and develop the solutions within a structure of ongoing improvement. The schools are guided to re-orientate existing curricula around sustainable development themes and develop practical projects which draw upon local knowledge and skills from their own communities as well as resources from national NGOs, and regional and international expert organisations.





"It has been a golden opportunity to be part of the Eco-Schools programme and path for our girls to care for others rather than them self. Caring for the present and future generation in realising feasible and long term actions that would safeguard our environment and our planet have been our priorities. Having a Green Flag award is a great responsibility and at Loreto College Curepipe we say "together we can make a difference". So we will continue in our endeavour to promote sustainable practices among our young girls, our future mothers so as to give them a better world. Let's be The change."

#### Loreto College Curepipe Go Green team - Eco Committee

"The schools have gone through an in-depth reorientation process of both formal and informal structures around the main themes of sustainable development. Putting in place an Eco Committee, carrying out a review of environmental standards to identify their main challenges and developing an Eco-Code and an Action Plan aimed at tackling their challenges which are shared with the whole school. The Eco-Schools programme has brought tangible changes which can be seen clearly in the school grounds and in the local communities, as students are developing new local partnerships and activities which improve their neighbourhoods. Schools are also reporting improvements to the quality of learning itself as the Eco-Schools themes and projects bring curriculum subjects to life, and encourage a deeper connection and understanding with the learning taking place. We are privileged to have been involved in the Eco-Schools programme which has provided opportunities to bring fresh and dynamic initiatives to complement the traditional pedagogical approaches in schools." Aneeta Ghoorah, Chairperson of the National Eco-Schools Committee Mauritius, Director Primary, Curriculum Development and Evaluation, Ministry of Education and Human Resources, Tertiary Education and Scientific Research

"There has been a great deal of work done previously on ESD in Mauritius coordinated by the Ministries of Education and Environment. The Eco-Schools programme has enabled schools to further coordinate and build upon these activities and gain external recognition through achieving the International Green Flag standard of the Foundation for Environmental Education.

Examples of school activities include projects for rainwater harvesting, soil stabilisation, food production, sanitation, and waste management amongst many others .The Eco-Schools programme is acting as a powerful force of change towards the implementation of sustainable development projects in schools. The most successful schools are those that have built strong partnerships between governmental institutions, NGOs and the private sector."

Kathy Young, Reef Conservation Managing Director



# Morocco \*

6

Mohammed VI Foundation for Environmental Protection National Operator: Kenza Khallafi

Country size: 446,550 km<sup>2</sup> Population: 35.74 million Longest river: Draa River 1,100 km Highest mountain: Djebel Toubkal 4,167 m National animal: Barbary lion National tree: Argania Spinosa Joined Eco-Schools in 2006

# Number of Eco-Schools: 2,172



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# Atlas Cedar

In 2016, UNESCO listed Atlas Cedar as a 'Biosphere Reserve', an area that includes terrestrial, marine and coastal ecosystems. Each reserve not only promotes biodiversity conservation solutions but is also considered as an observatory of climate change and a laboratory for sustainable development.

Middle Atlas Cedar is located in the Ifrane region and is a biosphere, a UNESCO World Heritage Site, and home of more than sixty primary schools enrolled in the Eco-Schools programme.

#### **National Legislation**

The environmental programmes of the Government of Morocco include the National Municipal Solid Waste Management, National Sanitation and Wastewater Treatment, Collection and Disposal of Plastic Bags, Environmental Upgrading of Rural Schools, and Prevention of and Fight against Industrial Pollution.

The national legislation regarding Environmental Education (EE) in Morroco is a promulgation of a Framework Law on the National Charter of Environment and Sustainable Development, Article 17: to "reaffirm that environment preservation should be a permanent concern for all Moroccans." It aims to introduce principles and guidelines that strengthen the legal protection of resources and ecosystems and defines the responsibilities and the commitments that all the concerned parties – state, regions, public, private enterprises, associations of the civil society and citizens - have to respect regarding the environment and sustainable development.

The Sustainable Development Goals (SDGs) will play a leading role in Morocco's development policies in the next 15 years, and Morocco has honoured its commitments to the Millennium Development Goals (MDGs), achieving almost all of them. In 2013 and 2014, national consultations on the post-2015 perspectives were carried out at the initiative of the Ministry of Foreign affairs of Morocco in collaboration with UNDP and UNESCO. Morocco is also listed as a partner or lead entity in various partnership initiatives and voluntary commitments the Partnerships for the SDGs online platform.

The Mohammed VI Foundation for Environmental Protection was established in June 2001, at the initiative of His Majesty the King Mohammed VI. Her Royal Highness Princess Lalla Hasnaa has been entrusted with its Presidency. As committed leader in sustainable development and as a mother, Her Royal Highness Princess Lalla Hasnaa has promoted, for several decades, EE through a range of programmes related to coastal preservation, sustainable tourism, air quality and climate change awareness, restoration of historical parks and gardens, and the safeguarding of palm groves.

Since its creation, the Mohammed VI Foundation for Environmental Protection has aimed to build environmental awareness, starting with the younger generation to expand this awareness into the wilder community. The added value of the Foundation is to go beyond bringing expertise and the right pedagogical tools, as important as these are, it is in mobilising and facilitating a network of resources and stakeholders linking together communities of action for the same purpose: implement the philosophy of the SDGs.

In June 2019, Her Royal Highness inaugurated the Hassan II International Center for Environmental Training, a new venue to empower students, teachers, academics, civil society representatives, and economic actors from Morocco and the rest of Africa to fully commit to sustainable development.

#### **K-12 Education**

Training and vocational training programmes are adapted with the aim of introducing the principles and guidelines set out in the Framework Law on the National Charter of Environment and Sustainable Development and in particular creating specialised disciplines in the field of education and training on the environment and sustainable development. The culture of environmental protection and sustainable development must be an integral part of the knowledge, know-how courses provided under these systems and programmes.

#### **Professional Development**

Under the Presidency of Her Royal Highness Princess Lalla Hasnaa, President of the Mohammed VI foundation for Environmental Protection a convention establishing the basis of a strategic partnership between the Mohammed VI Foundation for Environmental Protection and UNESCO was signed at the UNESCO Headquarters in Paris on 5 April 2016. The agreement covers 2016-2021.

The Foundation is a key partner of the Global Action Programme and a member of the partner network N°3 on "building the capacity of educators and trainers". The Foundation annually trains teachers, school directors, administration workers from the Ministry of Education of Morocco in cooperation with the Ministry itself, on developing the framework for the implementation of Eco-Schools within all educational institutions in Morocco. It supports the development of environmental awareness among learners and enables them to acquire knowledge and competencies that qualify them to improve their educational competencies.



# THE STORY OF ECO-SCHOOLS

Attracted by the Eco-Schools' potential as well as the learningby-doing and whole institutional approach, The Mohammed VI Foundation for Environmental Protection launched a large-scale pilot phase in 2006 in partnership with the Ministry of National Education, Vocational Training, Higher Education and Scientific Research, including 8,471 students in 17 elementary schools, teachers, local elected representatives, parents of students, school administration, and local associations.

The success of the programme implementation was due to the partnership with the Ministry of Education and the provision of local relays that are in charge of implementing the programme all over Morroco within 9 regions. In 2009, 9 Eco-Schools were awarded their first Green Flags in Morocco.

The Mohammed VI Foundation for Environmental protection has, since its creation in 2001, put young people at the centre of its concerns and has raised awareness of the importance of preserving natural resources, to support 21st-century citizens who are active. Through the Eco-Schools programme, the Foundation prepares future generations to take charge of preserving their living environment through gradual behavioural change. In order to achieve the implementation of Eco-Schools and the progressive integration of the programme in the primary schools, a partnership agreement was signed between the Mohammed VI Foundation for Environmental Protection and the Ministry of National Education, Vocational Training, Higher Education and Scientific Research.



### **KEY MILESTONES**

In 2006, the Eco-Schools programme was launched in Morocco by the Mohammed VI Foundation for the Protection of the Environment in partnership with the Ministry of National Education, while in 2010-2013, the foundation rolled out the first phase of the progressive implementation of the Eco-Schools programme in Morocco in 675 primary schools in 16 regions. 81 schools joined the programme, out of which 79 schools were awarded Green Flags. In 2016, during the COP22 in Marrakech on 7-18 November 2016. HRH Princess Lalla Hasnaa visited the Eco-School Oum Al Fadl, accompanied by the Director-General of the UN Food and Agriculture Organization (FAO), José Graziano Da Silva. In the same year, under UNESCO Green Citizens, the foundation participated in the international exhibition of UNESCO on the project on the development and safeguarding of the palm grove of Marrakech. In 2017, the foundation proposed the launch of the Eco-Schools programme at the preschool level and introduced the age category 4-6. A year later, the foundation presented its flagship programmes for ESD, Eco-Schools for Preschools and Primary Schools and Young Reporters for the Environment for Colleges and High Schools.

Today, the Eco-Schools programme in Morocco has reached 12 academies and 82 provincial directorates and 2,172 registered schools, out of which 44.06% are rural and 55.94% are urban schools. In total, it reaches 20% of Moroccan schools nationally, with over 989,100 schoolchildren and 33,193 trained coordinators connected to the programme.

#### **NATIONAL OPERATOR - REFLECTIONS**

Morocco's hosting of COP22 demonstrated both its global leadership on the issue of climate change and its commitment to climate justice in Africa. The conference brought together leaders from around the world to work towards the implementation of the Paris Climate Change Agreement. During the COP22, multiple activities were organised with Eco-Schools: a recycling exhibition developed by students was installed on a bus converted for the occasion. Eco-Schools good practices were projected and the Foundation and the Regional Academy for Education and Training of Marrakech-Safi mobilised four facilitators to lead the exhibition and explain to students the techniques used to make the recycled objects. This exhibition was located at the entrance of Arsat Moulay Abdessalam throughout COP22 and over 1,500 pupils from Marrakech schools, accompanied by 138 supervisors, visited this exhibition. Also presented at Arsat Moulay Abdessalam was a six-metre tall dinosaur made from recycled materials by students from Igraa Eco-Schools in Ben Ahmed-Settat. The giant installation was made of 15 kg of paper and 400 plastic bottles and received a label by the COP22 Steering Committee!

"My name is Malak and I'm in the 3rd grade at the primary school 'Green Belt' located in Rabat, the capital of Morocco. My school is aware of the importance of developing Education for Sustainable Development among students in terms of action and behavioural change. Therefore, we have enrolled in the Eco-schools programme. This involvement not only encouraged us to take care of our environmental issues within and around the school but also, changed our behaviour and our understanding of sustainable development issues from a global citizenship perspective.

The location of our school near the forest is strategic. We benefit from this situation by doing onsite visits to raise awareness about the importance of protecting our immediate environment. As an example, we collect dead leaves, branches, and twigs and re-use them in composting. We have worked enthusiastically on the axes of the Eco-Schools programme: learnt how to sort and re-use our waste, how to reduce our consumption of water and electricity through the installation of faucets and economic lamps, how we take care of plant diversity by creating green areas and irrigating them with a drip system, as well as animal diversity through geese breeding.

My school is aware that the Sustainable Development Goals are not achievable without inclusive quality education, integrating the right and duty, an education characterised by gender equity and equal opportunities. An education that brings the necessary skills and knowledge to students, for a permanent adaptation to rapid changes in our society."

Malak, Grade 3 Student, Green Belt Eco-School, Rabat, 2018

"Our students have played an important role as agents of change, participating actively in discussions that affect their future, advocating for a transformation in their learning environments and bringing the messages of sustainability and global citizenship home to parents and communities."

Kenza Khallafi, in charge of Environmental Education Programmes, Mohammed VI Foundation for Environmental Protection

**Mohammed VI Foundation for The Protection of the Environment** km 3.2 Rte de Zaers Angle Ave Imam BP 5679, Rabat, Morocco



"The core objective of the Mohammed VI Foundation for Environmental Protection, which was set up by His Majesty King Mohammed VI in June 2001, and which I am honoured to chair, is to educate and sensitize citizens about the environment. Without this educational component, the Foundation's mission would simply not be possible.

From day one, the younger generations have been the Foundation's prime target. Working jointly with the Ministry of National Education, we introduced two environmental education programmes in Morocco, namely Eco-Schools and Young Reporters for the Environment.

In 2017, the Eco-Schools programme has been revamped through the introduction of a new theme specifically dedicated to climate change. Rather than receiving a diffuse type of education, schoolchildren are now gaining a deeper understanding of the impacts of global warming; they get involved and look for local solutions to cope with the phenomenon and seek to adapt to it. Gradually, their behaviour is changing.

Significantly, in an inspirational turn of events, the Eco-Schools located near solar and wind power plants have developed projects centred on renewable energy. In Ouarzazate, students developed a solar-powered domestic cooker; and in Tangiers, an educational wind turbine is being installed."

Speech by Her Royal Highness Princess Lalla Hasnaa at the High-Level Session dedicated to Education Day, COP23, Bonn, 16 November 2017.



# South Africa 🔀

Wildlife and Environment Society of South Africa (WESSA) National Operator: Donavan Fullard / Cindy-Lee Cloete

Country size: 1.22 million km<sup>2</sup> Population: 56.7 million Longest river: Orange River 2,200 km Highest mountain: Mafadi, part of the magnificent Drakensberg Mountain range 3,450 m Joined Eco-Schools in 2003 Number of Eco-Schools: 618



National tree: Yellowwood National plant: King Protea National animal: Springbok, Galjoen and Blue Crane

South Africa's national symbols (animal, fish, bird, plant and tree) tell the story of the rich abundance of the country's natural and cultural diversity. The national rugby team is called the Springboks and the national cricket team is called the Proteas, after the national animal and plant respectively.

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#### **National Legislation**

The Constitution of the Republic of South Africa 1996 states the following about the environment in Section 24: Everyone has the right (a) to an environment that is not harmful to their health or wellbeing; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development (The Constitution of the Republic of South Africa, 1996).

The fifth chapter in the National Development Plan 2030 is on 'Ensuring Environmental Sustainability and an Equitable Transition to a Low-Carbon Economy'. In order to achieve high-quality Environmental Education (EE), one of the key outcomes stated is to create consumer awareness initiatives and sufficient recycling infrastructure (National Development Plan 2030: Our Future-make it works).

#### **K-12 Education**

The National Education Policy describes EE as a "vital element" for all educational levels and programmes with the purpose of creating "environmentally literate and active citizens" (DOE, 1995). Environmental justice is one of the principles of the National





Curriculum Statement and infuses the curriculum statements of all subject areas (DOE, 2003). Thus, EE moved into the formal school curriculum, not as a subject, but rather as a theme to be included across all subjects. This makes EE the responsibility of every teacher (Peden, M. Review of EE: some South African perspectives. Pretoria. 194pp, Journal of Education, no 39. 2006). Teachers are guided to achieve this by the fact that over 60% of the content of all the subjects are environmentally related. So even when teachers teach mathematics, the environment is always at the foundation of the learning of South African children.

There are many EE organisations that work in schools across the country at the NGO and government level and a lot of environmental days are celebrated with schools by NGOs, government departments and corporate entities.

#### **Professional Development**

Environmental Education Association of Southern Africa (EEASA) holds an annual EE conference, which WESSA regularly participates in as a professional development opportunity for staff. WESSA is a partner of the national Fundisa for Change programme which aims to upskill teachers to have the confidence and knowledge to engage with the environmental curriculum links. WESSA Schools team holds an annual strategic planning meeting with all staff across the country; this gathering is also used as an opportunity to strengthen areas of further development of staff.

# THE STORY OF ECO-SCHOOLS

It is important to emphasise that the implementation of Eco-Schools in South Africa was always research-based. In 1999, Kim le Roux, who was the first person employed by WESSA to manage Eco-Schools, conducted a Masters research on "Getting environmentally organised with a School Environmental Policy Initiative (SEPI)" through Rhodes University, Prior to this, she had developed the 'School Environment Policy' concept and developed the first 'Policy Pack' for schools to complete. Each school developed and implemented a School Environment Policy and then reported against it at the end of each year. Following a research process, it was decided to develop Eco-Schools out of the 'Policy' work. This resulted in WESSA identifying the Eco-Schools programme as a solution. In 2002, Jim Taylor, the Director of EE for WESSA from 1992 till 2017, who had developed his PhD thesis to outline the most effective methods for developing EE processes for WESSA (Taylor, 2017) was invited by the South African Department of Environment Affairs to investigate FEE programmes, commencing with 'Blue Flag' and later focusing on Eco-Schools, WESSA continued to implement the Schools Environmental Policy Initiative between 1999 and 2003. There was a fundamental difference between WESSA and FEE around the criteria reference evaluation approach, but the FEE Committee accepted the changebased approach/curriculum which was the fundamental philosophical underpinning of the SEPI implementation in South Africa. The SEPI changed to the Eco-Schools programme in 2003. When Kim left WESSA, Bridget Ringdahl took over the implementation of Eco-Schools. Also a Lund Masters graduate, Bridget sustained the high standards of Eco-Schools. Under her leadership, the programme grew from 200 to 750 schools in an eight-year period.

The first study has since been followed up by further localised studies. 8 Masters studies, related to Eco-Schools, were conducted in various parts of South Africa and the SADC region at once, where low-cost, copy-right free (known as copy-left), adaptable resource materials to support Eco-Schools were developed and localised in various parts of South Africa. By affiliating the WESSA programmes to the Rhodes University Education faculty, a long-term research partnership developed and Prof O'Donoghue, along with Prof Sisitka, have always provided insightful research support and practical insights and inspiration for the programme.

Dr Timmermans completed her PhD thesis on the roles and best approaches to teacher capacity-building and has also played a major role in supporting the South African teacher capacity, building the programme "Fundisa for Change" along with Prof Sisitka. Kate Davies has done much applied-research in the best methods for supporting teacher capacity building. She undertook a Gold Fields capacity building course under Jim Taylor and adapted the School Environment Policy for Faith-Based applications. Many spiritual movements across South Africa now undertake faith-based environment management through their various congregations.

#### **KEY MILESTONES**

Some of the most important moments in the history of Eco-Schools in South Africa has been hosting the Eco-Schools NOM in 2016 as well as receiving the Award for Environmental Sustainability at the 2017 Education Week Awards and the Impumelelo Community Chest Social Innovations Thought Leader Award in 2018.

In 2007, the first fourteen International Green Flags were awarded, and four of the awarded schools, Kings School, Epworth Prep School for Girls, Anton van Wouw Primary School and Scottville Primary School progressed in their status each year. Another milestone was when the number of registered Eco-Schools peaked in 2013 and reached 1300 across South Africa.

The annual award system has seen many schools along the education pipeline – from early childhood development centres, primary and high schools - engaging creatively in activities like food production, recycling, biodiversity stewardship, wise water-and energy-use and many more. WESSA has witnessed many great innovations at schools as they become change agents in their local communities. In South Africa, the programme has also witnessed the impact on teacher development at both personal and professional levels with many teachers inspired to complete their master's degree in EE. Anecdotal evidence suggests that learners' involvement in the Eco-Schools programme stimulated their interest and the pursuance of studies and a career in the environmental sector.

Other achievements of the programme were the deliberate attempt to align the programme with UNESCO's Sustainable Development Goals and in so doing creating awareness and contributing to a global policy framework. Although much research has emanated from the Eco-Schools programme, we would like to see more research and a stronger monitoring and evaluation focus on the impact of the programme on for example learner achievement being done. Eco-Schools South Africa has been recognised locally through various awards characterised by rigorous evaluation processes, which is indicative of our successful implementation.



"For the past 16 years, Kings School's involvement in the Eco-Schools programme has infused our curriculum with a meaningful purpose for the wellbeing of our planet."

Tanya Mitchell, Principal, Kings School

"After 25 years of democratic change, South Africa has progressed well in providing access to schooling but is still experiencing considerable challenges with quality education and numerous socio-economic and environmental issues. In this context, the Eco-Schools environmental management, certification, and sustainable development education programme managed in South Africa by WESSA, with support from partners has made a strong initial contribution to introduce and implement the programme in over 1300 schools since inception.

The strongest features of the programme are its holistic, participatory approach and that it combines learning and action, which makes it an ideal way for schools to embark on a meaningful path for improving the environment in both the school and local community, and to influence the lives of young people, school staff, families, local authorities and NGOs. The effect in most schools who have participated is whole-school development and improvement, which is the need in the majority of historically disadvantaged communities.

The work done so far suggests that the Eco-Schools programme has the potential to improve school performance in a rounded way. The whole school audit and planning framework encourages teachers to think about the year in advance, and tools like the Year of Special Days calendar assist with placing a particular environmental focus. However, care has to be taken in managing donors' involvement in schools so as not to distract from the core teaching and learning business of the schools.

The evaluation and monitoring work done on the project so far indicates that schools benefit from participation in many ways. The strongest participants report dramatic improvements while the others, even those few that have dropped out, report learning gains. Given the South African reality to accelerate holistic school improvement and the opportunities created by the educational change in the context of the fourth industrial revolution, there are opportunities to grow the Eco-Schools programme and its effectiveness."

Haroon Mahomed, Chief Director, Curriculum Management and Teacher Development, Western Cape Department of Education

"It is said that a small group of thoughtful, committed citizens can change the world and if I look at the enthusiasm of teachers and learners involved in the Eco-Schools programme in Limpopo, the foundation is being laid for just such a change."

Theo van Rooyen, Capricorn Municipal District - funder since 2010

"In 2018, there were 34 schools who achieved their Diamond Decade award (10 years of continuous and award-winning service to the environment, the school and community) or above up to International Decade award (year 15). One of these schools, Shea 'O' Connor Combined school (Gold Decade) rehabilitated the wetland on the school ground within 3 years which became an outdoor teaching tool. Four students from Shea 'O' Connor studied Environmental degrees (BA, Honours and Masters) because of their involvement in the WESSA Eco-Schools programme. The students shared that it was because of their involvement in the Eco-School programme that they are now studying in Environmental Science and Management. The Eco-Schools programme ignited their interest and passion for the environment." Antonia Makhubela, Deputy Principal, Shea O'Connor Combined \_ \_ \_

Antonia Makhubela, Deputy Principal, Shea O'Connor Combined School

#### **NATIONAL OPERATOR - REFLECTIONS**

WESSA has been the proud implementer of the biggest global education for sustainable development and transformation programme in South Africa since 2003. The last 16 years have seen many changes in the national education system with many curriculum changes as well as in WESSA as we have moved from a strong conservation and membership organisation to one with a strong focus on our Schools and Education centres going forward. We have successfully contributed in assisting the national education department with whole school development, teacher training as well as enhancing 21st-century skills and competence within our learners, necessary as we prepare for the fourth industrial revolution globally. This exciting and amazing international programme has helped us to mobilise future-oriented action at a local level through the establishment of Eco Committees, the audit and implementation plans.

Our vision at WESSA is to reach every school and child in our vast country with its many challenges and we are far from that target of almost 25,500 schools in South Africa, but the commitment and vision is there from an implementing staff and executive management perspective as well as the support of the education department and our funders for which we are profoundly grateful.

> Wildlife and Environment Society of South Africa (WESSA) 18 Blackwood Street, Bryanston x3, 2191 PO Box 435, 2160 Ferndale

# lanzania

Tanzania Forest Conservation Group (TFCG) National Operator: Elisa Pallangyo

Size: 947,300 km<sup>2</sup> Population: 55.7 million Longest river: Ruvuma river 800 km Highest mountain: Kilimanjaro 5,895 m National tree: African blackwood Joined Eco-Schools in 2015 Number of Eco-Schools: 44





# National animal: Giraffe

The story goes that the giraffe's neck became long because it could not appreciate the way it was made. He was dying from envy, seeing other animals like the zebra with such beautiful features.

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One day, a rabbit advised him to seek miracles from the lioness Mama Simba who was very wise. Mama Simba then gave the giraffe an assignment, which was to pick a flower from the tallest tree in the jungle. He went and picked the flower from the tallest tree. Since that day, the giraffe's neck was long and it lived happily ever after.



#### **National Legislation**

Environmental Education (EE) is recognised as an interdisciplinary issue in the national education policy document from 2014. The policy states that "at all levels of education students will obtain knowledge, skills and a culture of protecting the environment". As a result of this policy, the government established the Education for Sustainable Development (ESD) strategy to integrate environmental and conservation education content at all grade levels. So far, it has been a success. However, there is now a need for networking and coalition formation to further enhance ESD nationally. Tanzania is now working on ESD with a strong adherence to rights-based principles, environmental protection, gender equality and the use of active-based learning to improve students' competencies.

#### **K-12 Education**

EE is intended to be integrated into the curriculum as an interdisciplinary theme across all grade levels. TFCG has created a teacher resource manual for EE which has been approved by Tanzania Institute of Education to be used in all schools for leveraging EE. Teachers training in colleges are trained to develop competencybased lesson plans with an environmental message addressed in each lesson. The use of the students' natural environment has been emphasised at all levels of education.

#### **Professional Development**

TFCG has trained 325 teachers in the Eco-Schools approach and ward-education officers and district staff. The government recognises the efforts which are made to improve teachers' competencies as they relate to student-centred methodologies and EE in schools. The establishment of environmental clubs in schools and facilitating schools' greening activities are also being developed.





# **KEY MILESTONES**

In the years the Eco-Schools programme has been running in Tanzania, academic performance has improved in the participating schools. Dropout rates have decreased and Eco-Schools microprojects have improved the income of both schools and communities. This has resulted in a replication of the Eco-Schools approach.

# THE STORY OF ECO-SCHOOLS

TFCG learnt about the Eco-Schools programme from the Danish Outdoor Council (DOC) in 2015 and commenced establishing the programme the same year. The Eco-Schools programme in Tanzania is funded by the government of Denmark but developed in cooperation with the Ministry of Education in Tanzania, several primary schools, district staff, ward-education officers and village leaders. In 2019, Digalama, Lusanga, Komtonga, Hembeti and Makuyu primary schools became the first schools to be awarded the Green Flag in Tanzania.

"I am so happy to have the programme in our school. I am inspired by the teaching and learning methodology because I have always been engaged and learning is now easy".

**Eco-Schools Student** 

"The government is supporting the Eco-Schools programme and as it is a worthy approach in Tanzania, we would like to see the programme spreading to the whole country."

**Robert Lwikolela, Environmental Education Coordinator** 

"The Eco-Schools programme has been engaging the young generation of Tanzania in action-oriented learning, which has resulted in a significant improvement of well-being in society."

**Charles Meshack, Tanzania Forest Conservation Chief** 

**Tanzania Forest Conservation Group (TFCG)** P.O Box 23410 Dar es Salaam

### **NATIONAL OPERATOR - REFLECTIONS**

As a National Operator, I have seen excellent work done by the Eco-Schools programme in Tanzania. I have been so inspired by the Eco-Schools programme operations. The programme has motivated students, teachers, ministries, leaders and the Tanzanians at large. 44 schools and 4 colleges are implementing the Eco-Schools programme in Tanzania and more schools would like to join the programme after learning about the importance of it. This is due to the fact that the programme is so inspiring. I have been involved in ensuring the sustainability of the programme by supporting the member organisations in raising funds for programme implementation and maintenance of activities at the national level. The programme has ensured that training and quality service is provided to programme participants. The Eco-Schools programme has produced material that supports the implementation of the programme, as well as providing participants with guidance on how to meet FEE criteria. The integration of the programme nationally was done in cooperation with stakeholders, especially in developing the programme to complement national curricula. This has improved the quality of education. The programme facilitates the exchange of experiences and information between participants as well as the dissemination of the programme information to the public. Sincerely, the programme has brought so many positive changes to my country and the globe at large.



# Úganda 💌

Conservation Efforts for Community Development (CECOD) National Operator: Robert Isingoma

am

Country size: 241,037 km<sup>2</sup> Population: 44.4 million Longest river: River Katonga 220 km in Uganda Highest mountain: Mt. Rwenzori 5,109 m National animal: Crested crane Joined Eco-Schools in 2009 Number of Eco-Schools: 373



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Free



# National tree: Fig tree

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The fig tree (Omutuba in Luganda and Omutoma in Rumnyakore) is one of the national and traditional plants in Uganda. It is well known and associated with all traditional monarchs and healers in Uganda.

Always

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The tree is the main source of raw materials used in making barkcloth, which is one of the ancient fabrics that has survived wars, colonisation and global trade.



#### **National Legislation**

Environmental Education (EE) in Uganda has been institutionalised at the national and local government levels. The National Environmental Management Policy (NEMP) includes support for EE at all levels of government. In 1995, Parliament approved the National Environment Statute which, among other things, created the National Environment Management Authority (NEMA) as the apex body to manage Uganda's environment. Over the years, NEMA has spearheaded the development and implementation of EE strategies in Uganda. However, EE in Uganda has not been comprehensive enough to support the development of sustainability values, principles and action competencies among citizens. There has been more awarenessraising than education for environmental sustainability.

#### **K-12 Education**

The Ministry of Education and Sports in Uganda has incorporated EE in the national curriculum for primary and secondary schools through the National Curriculum Development Centre (NCDC). NCDC has developed materials, resources and training for the integration and teaching of environmental issues. Despite the integration of EE in the curriculum, teaching and learning in class are largely academic and examination-oriented with less action-based learning to enhance practical skills, values and action competences among learners to address real-life environmental issues affecting their livelihood. As a result, the government, in partnership with key development partners, has supported the development and implementation of competencebased teaching and learning interventions in schools including validation of the National Education for Sustainable Development Policy draft in 2018 by the Ministry of Education and Sports, pending Cabinet approval.

#### **Professional Development**

Continuing Professional Development (CPD) programmes in EE have been carried out mainly by Kyambogo University and Teacher Training Colleges in partnership with development partner organisations in Uganda.

#### THE STORY OF ECO-SCHOOLS

The launch of Education for Sustainable Development (ESD) in 2005 initiated by Uganda National Commission for UNESCO (UNATCOM), kindled the introduction of the Eco-Schools approach to ESD in Uganda in 2006. The Eco-Schools programme in Uganda started as an Eco-Community School project developed by CECOD in partnership with the Danish Outdoor Council (DOC).

The project evolved into a fully-fledged Eco-Schools programme in 2009, as CECOD became a Full member of FEE and the first Green Flag was awarded to St. Kagwa Primary School. With the launch of the Global Action Programme (GAP) on ESD in 2014, CECOD signed a partnership MoU with UNATCOM in 2016 to jointly support the implementation of the National Action Plan (NAP) of Eco-Schools on ESD in Uganda 2017-2019.

#### **KEY MILESTONES**

In 2012, a bottom-up Eco-Schools Community Network was established at the local government level, which later developed into a National ESD Network for advocacy and replication of Eco-Schools best practices countrywide. In 2018, the CECOD-UNATCOM partnership on Eco-Schools and ESD in Uganda gave birth to the development of the National draft ESD policy, which was validated by the Ministry of Education and Sports and is now pending Cabinet approval.

The Eco-Pupils Parliament in primary school structures was developed as a platform for learners participating in decision-making processes by 6 district local governments; Mbarara, Bushenyi, Isingiro and Shema in 2012; Busia and Wakiso in 2018.

In 2019-2020, CECOD is working on the adaption of the Eco-Schools National Green Flag Award assessment-tool by the National Environment Management Authority (NEMA) into the National ESD Compliance Tool for the National Search of Sustainable Schools.

In 2008, CECOD received the European Union Civil Society Capacity Building Programme Best Practice Award and in 2012 the UNCCD Land for Life Award. In 2017, CECOD received government recognition as the best exhibitors of environmental sustainability actions through school education.

**Conservation Efforts for Community Development (CECOD)** Plot 1305 Busibante Road Najjera 2 P.O.Box 26177 -Kampala



"I appreciate the impact the Eco-Schools programme has had in our school. Because of the programme, we can easily access water with the construction of the rainwater harvesting tank. This has greatly reduced the amount of time and energy used walking miles to fetch water. If I was a president, I would make sure that the whole of Uganda was green" Asiimwe Davis, Student, St. Alosoius Primary School

"The Eco-Schools programme has proven to uphold the key pillars of Education for Sustainable Development at the school and community level, emphasising social transformation, environmental sustainability and economic development. Efforts should be made to roll out the Eco-Schools programme in all Ugandan schools."

Rosie Agoi, Secretary-General, Uganda National Commission for UNESCO

"The Eco-Schools approach has the capacity to unlock learners' potential to take action on issues affecting their quality of life through hands-on and engagement of duty bearers for quality service delivery." Robert M. Isingoma, CECOD Director



# **NATIONAL OPERATOR - REFLECTIONS**

The education system has continued to focus on theoretical assessment for academic grades at the primary school level and thus, teachers in schools participating in the programme find themselves focusing more on the end of term academic assessments to award grades than a continuous assessment of the learners' competences to enhance skills, values and sustainability principles. However, programme best practices were among the benchmarks that informed the drafting of the National ESD Policy.



# Zanzibar (Tanzania) 🧲

Zayedesa National Operator: Talib Kassim Abdi

Country size: 2,654 km<sup>2</sup> Population: 1.3 million Longest river: Mwera river 15 km Highest mountain: Masingini 129 m Joined Eco-Schools in 2015 Number of Eco-Schools: 30 National tree: Cloves tree and coconut tree

# ZAYEDESA

# National animal: Red colobus monkey

Red colobus monkey is one of Africa's rarest primates, with approximately only 1,500 still existing.



#### **National Legislation**

The Zanzibar Environmental Policy of 2013 has been developed as a legal structure to address sustainable development challenges. This document introduces a national environmental response framework and strategies and addresses fundamental environmental issues which include environmental and climate change governance, terrestrial and marine resources and biodiversity, forest conservation, renewable and efficient energy, environmental pollution, waste management, integrated water resources management, development of environmental quality standards, environmental and social impact assessment, environmental information systems and awareness, climate change adaptation and mitigation.

The Zanzibar Climate Change Strategy, an act for the environmental management for the provisions relating to the conservation, protection, enforcement and management of the environment has been adapted in Zanzibar ACT NO. 3 of 2015. It responds to the negative effects resulting from the changes in our natural environment and guides towards building a climate-resilient green economy and society in Zanzibar.

#### **K-12 Education**

Environmental Education (EE) is taught in primary schools in science, geography and social science. In secondary schools, it is taught in geography, biology, civic studies, chemistry, and in higher education at both the bachelor's and master's level.

#### **Professional Development**

Professional development programmes in EE have been offered in university programmes in Zanzibar Universities (the University of Zanzibar, the State University of Zanzibar and Summet University). All three institutions are offering degrees in EE at the bachelor's level and master's level, including a Bachelor's Degree of Arts in Geography and Environmental Studies. Environmental Science is offered as teacher training and the Degree of Science in Environmental Health is offered for professional staff.

# THE STORY OF ECO-SCHOOLS

Furthering the activities commissioned by the EU funded Islands project in the Indian Ocean States to involve and engage multistakeholder groups in the development and implementation of pilot projects focused on innovative funding mechanisms and/or sustainable development education initiatives, the introduction, development and implementation of a shared Eco-Schools programme for the Western Indian Ocean islands (Madagascar, Comoros, Mauritius, Seychelles and Zanzibar) started in 2011. The programme supported two of the three innovative pillars of the Islands project: regional cooperation and integration, and SIDS-SIDS knowledge exchange. Through Eco-Schools Indian Ocean, schools across the region were able to work together on the unique challenges facing Small Island Developing States (SIDS), take action in their schools and communities, and gain international support and awards.

In 2015, the Department of Environment selected Zanzibar Youth Education Environment Development Support Association (ZAYEDESA) to be the coordinating mechanism to run the Eco-Schools programme in Zanzibar in collaboration with the Ministry of Education and Vocational Training (MoEVT). 30 schools were selected to be a part of the pilot phase, 9 in Pemba and 21 in Unguja, both private and public kindergartens, primary and secondary schools in all districts of Zanzibar. The Zanzibar National Eco-Schools Committee (ZNESC) was formed specifically to ensure a more inclusive and effective implementation of the Eco-Schools programme and consisted of the Department of Environment, MoEVT, Zanzibar Association for Private Schools (ZAPS), relevant stakeholder representatives from NGOs and hotels interested in the environment, Government ministries, municipalities and journalists.

ZAYEDESA is a non-profit organisation founded in 2001, working with thematic areas on the environment, health, entrepreneurship and community support. It has supported the Indian Ocean Commission Islands project and in particular, ZNESC in implementing the Eco-Schools Indian Ocean programme in Zanzibar. On the 14 March 2019, the public Benbella Girls' Secondary School and the private Stone Town International School became the first two schools in Zanzibar to receive the Green Flag.





# **KEY MILESTONES**

The launch of the Eco-Schools programme in Zanzibar, both on the island Unguja and Pemba, as well as hosting the 3rd Regional Meeting of Eco-Schools Indian Ocean from 29 September to 1 October 2016 in Stone Town were important parts of the history of the programme in the country. The meeting was organised in partnership with the Zanzibar National Eco-Schools Committee and funded by the European Union. Another important moment was the visit of Daniel Shaffer, FEE CEO, and Nikos Petrou, FEE Board Member and mentor for Zanzibar.



"The Eco-Schools programme is an inheritance we can leave for our children so we can protect and love our mother Earth and their future." Hon. Shadya A. Karume, Former First Lady of Zanzibar and ZAYEDESA Chairperson

"This is an opportunity for children in the entire region, sharing a common ocean and similar challenges to take collective action in their schools and communities."

Hon. Riziki P. Juma, Minister of Education and Vocational Training

"It is an important milestone to sensitise students about the need to know about environmental issues. When they become adults they will become advocates for environmental protection and conservation." Said Shaaban Said, ZAYEDESA CEO

"The school has improved and the student behaviours have changed in a sustainable manner in terms of environmental protection and conservation."

Jamilla Jaffer, Director, Stone Town International School

# **NATIONAL OPERATOR - REFLECTIONS**

The schools in Zanzibar are not technologically advanced with e.g. computers or social media to communicate with other Eco-Schools. In addition, there is no recycling, but only reduction and reuse to support waste management. This poses a challenge when changing the mindset of community members and leaders to protect and conserve the surrounding environment. Therefore, the first Green Flag received attention from both Zanzibarian schools, the government and stakeholders on environmental protection, conservation and sustainability. Today, the government contributes with tools and materials such as gloves, shovels, wheelbarrows and trash bags on environment days for clean-ups in schools and communities. It also supports Zayedesa's initiatives and different environmental campaigns on Uguja and Pemba islands. It provides technical support and expertise in conducting Eco-Schools assessments and reviews. The government plans is to incorporate the Eco-Schools programme and the support for environmental clubs in future national budgets.

> Zayedesa P.O.Box 4642





# Asia & Pacific

Australia, China, India, Japan, Malaysia, Mongolia, Singapore, South Korea & Thailand



# Australia

Keep Australia Beautiful (KAB) National Operator: Marina Antoniozz

Country size: 7,692 million km<sup>2</sup> Population: 24.6 million Longest river: Murray River 2,508 km Highest mountain: Mt. Kosciusko 2,228 m National tree: Golden Wattle Joined Eco-Schools in 2014 Number of Eco-Schools: 91



# National animal: Red Kangaroo

The kangaroo and emu are both bearers on the Australian Coat of Arms. It has been claimed these animals were chosen to signify a country moving 'forward' because of a common belief that neither can move backwards.

**Eco-Schools** 

**AUSTRALIA** 

7 steps

Eco-Committee Eco-Code Action Plan

Environmental

Review

Curriculur

Monitoring

& Evaluation

Community

Australia Beautifu





#### **National Legislation**

In 2005, the Australian Government Department of the Environment and Heritage developed a document entitled Educating for a Sustainable Future: A National Environmental Education Statement for Australian Schools. This statement provides a description of the nature and purpose of Environmental Education (EE) for sustainability through all years of schooling, including a vision and a framework for its implementation. It is intended for teachers, schools and their communities, education systems and developers of curriculum materials. It is also intended as a companion to existing State and Territory policies and programmes and does not replace them.

In 2009, Living Sustainably: The Australian Government's National Action Plan for Education for Sustainability was launched. Its aim is to equip all Australians with the knowledge and skills required to live sustainably. The plan has been prepared in conjunction with the National Council on Education for Sustainability by the Australian Government Department of the Environment, Water, Heritage and the Arts.

#### **K-12 Education**

In 2010, the Sustainability Curriculum Framework was published. It describes what students need to learn to live sustainably and considers the most appropriate times and environments in which these learnings should occur. EE initiatives also exist at the regional level. For example, the Queensland Environmentally Sustainable Schools Initiative establishes a network of environmentally sustainable schools that demonstrate curricula connections and environmental action based on ecological, sustainable development principles. A website supports schools, their partners and the community in realising a positive environmental vision for their schools.

#### **Professional Development**

The Australian Association for Environmental Education (AAEE) runs annual EE conferences. Their members work in government agencies, schools, businesses and community organisations. As an organisation, they advocate for EE and promote the effective use of education to help people live more sustainably.

Keep Australia Beautiful Level 1, 268 King Street NSW 2042 Newtown



# THE STORY OF ECO-SCHOOLS

The concept was brought back and implemented by Keep Australia Beautiful NSW Board Member, Andy Best in 2014 after he studied the Eco-Schools programme in the UK in 2008 as part of a Churchill Fellowship. He came back hoping that it would become accessible to Australian Schools. A trial ran in the Macarthur Sustainable Schools Network in conjunction with Camden Park Environmental Education Centre in 2013.

In 2010, Andy Best met with Bernard Holland, International Eco-Schools Director at the time, who was on holiday back in Australia. He was looking for a sponsor and an organisation to host the programme in Australia. Keep Australia Beautiful (KAB) agreed to host the programme in 2014 and the same year, Andy Best was asked if he would like his school, Harrington Park, where he worked as principal from 2009-2015, to become the first Australian school in which the programme would be launched. He agreed and the launch took place on 21 May 2014. More schools followed in the years after and in December 2017, Tinana State School received Australia's first Green Flag.

#### **KEY MILESTONES**

The programme is still relatively young in Australia and the applications for Green Flags are only just starting to come in since it takes at least three years, for a school to become Green Flag accredited in Australia. The first Green Flag was definitely a milestone. To celebrate the event, the CEO of KAB, the Chair, Andy Best and National Operator Marina Antoniozzi went to Queensland in December 2017, when Tinana State School received Australia's first Green Flag, to share the moment with the school and community.

One problem we face is to do with the different legislation in each state and territory, which makes it very difficult to have the programme endorsed by the government on a national level.

"The students at Narellan Vale Public school and the surrounding community have benefitted greatly from this eco-project. Not only has it produced a cleaner school environment, but it has empowered students to take more responsibility in taking care of their own learning place. Children are also now beginning to think how they can have a positive effect on the environment outside the school and what possible actions need to be taken."

Beverley O'Meara and Trish Austen, Teachers/Eco-Coordinators, Narellan Vale

"Eco-Schools membership has significantly increased the authenticity of learning experiences for the students at our school. Children have been engaged in real-life learning. Their ability to work in groups and creatively problem-solve real-life challenges has been greatly enhanced. The new Australian Curriculum delivery can be supported greatly by joining up to Eco-Schools and I urge all schools to give it serious consideration. Benefits to the school also include great savings to the budget. In one year our school reduced its utility bill by \$10,000 with student-led initiatives. Teachers and students also report higher levels of student engagement across all key learning areas as a result of being involved in the programme."

Andrew Best, Principal, Harrington Park Public School NSW

"It's wonderful to see the students take sustainability matters in their own hands and proactively contribute to the betterment of their school and community. I wish a programme like Eco-Schools had been around when I was younger. It truly empowers students and has a ripple effect on their family and the local community." Val Southam, KAB CEO

# I wish a programme like Eco-Schools had been around when I was younger!



## **NATIONAL OPERATOR - REFLECTIONS**

What sets Eco-Schools apart from other EE programmes in Australia is the framework and the fact that it is international, allowing Eco-Schools from different countries to collaborate. We often come across teachers who would like to get involved but do not know how and/or do not have the time.

The framework allows entry-level teachers to dive into the programme and make good progress from year one, as well as taking some load off the teachers' time, which they always seem to be struggling with.

# Center for Environm

Natior

Environmental Education and Communications (CEEC) perator: Wang Yu

Country size: 9.6 million km<sup>2</sup> Population: 1.39 billion National animal: Panda Joined Eco-Schools in 2009 Number of Eco-Schools: 580

# Longest river: Yangtze River 6,300 km

As one of the birthplaces of Chinese civilisation, the Yangtze River benefited both its sides since ancient times. Today, it is one of the main arteries of China's economy and culture.



#### **National Legislation**

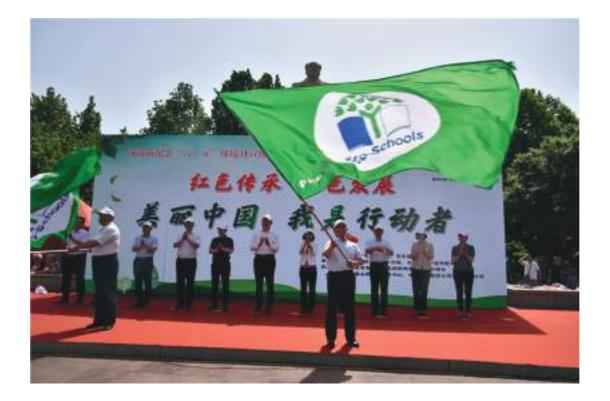
Environmental Education (EE) is not part of the national legislation in China. However, in Ningxia, Tianjin, and Guangdong, local EE laws or regulations have been enforced. For example, the regulation on EE of Tianjin stipulates that at least 95% of the state staff should receive EE training at least once a year, primary and middle schools should arrange at least four hours of EE class per year, person-incharge and relevant staff of heavy-polluted enterprises should receive at least eight hours of EE per year, etc. At present, the Center for Environmental Education and Communications (CEEC) is actively promoting national EE legislation.

#### **K-12 Education**

In 2003, in order to effectively implement EE, the Ministry of Education of China promulgated the Guidelines for the Implementation of Environmental Education in primary and middle schools. EE was permeated into all relevant disciplines of basic education. At the same time, EE was integrated into the curriculum of comprehensive practical activities as an interdisciplinary theme.

#### **Professional Development**

In China, most universities set up environmental-related majors, such as Environmental Engineering, Environmental Monitoring, Environmental Science, Ecology, Environmental Management, etc. Other students can also receive EE through elective courses. In 2016, CEEC launched the environmental protection training programme for primary and middle school teachers, aiming at improving the professional quality of EE teachers and promoting EE activities nationwide.





#### THE STORY OF ECO-SCHOOLS

In 2009, in order to explore an advanced international experience and effectively promote the development of EE in China, CEEC joined FEE on behalf of China and implemented the Eco-Schools programme and Young Reporters for the Environment. At the time, the Director of the Educational Sector of CEEC was Song Xuhong. The Eco-Schools programme was vigorously supported by the Ministry of Environmental Protection and the Ministry of Education in China. In 2010, one year after the implementation, 47 schools were awarded the Green Flag.

#### **KEY MILESTONES**

To host the FEE General Assembly 2010, held in Shenzhen, China, was a milestone early in the history of the Chinese programme. Furthermore, 500 schools have achieved the Green Flag status in China. In order to encourage awarded schools to continue with the programme, CEEC introduced a required three-year review. In this time, schools need to work further on their chosen themes, or add more to their cycle.



"After being awarded the Green Flag in 2010, teachers and students pay more attention to Environmental Education and environmental protection practice. In recent years, classification of rubbish, as well as organic treatment of kitchen waste has been implemented in the school to reduce emissions. The school has used environmental protection facilities such as solar energy, airpower source and reclaimed water treatment to save energy. In addition, teachers and students also actively participate in community environmental protection activities, such as tree planting, water source protection, etc." YanHua, Principal, Beijing Yuying School, 2010

"We need more reflections on what we have achieved and where we will go in the future, such as strategic thinking and management, the domestic network development and international coordination." **Zhu Zhenxu, Center for Environmental Education and Communications Deputy Director of Education Section** 

### **NATIONAL OPERATOR - REFLECTIONS**

Many Eco-Schools in China are located in rural areas with very limited resources, but they do not give up. Instead, they perform EE within the local conditions and build the Eco-Schools programme with the local socio-cultural features. For example, Bagan Primary School in the Qinghai Province is a rural primary school. They adopted the Seven Steps to protect the environment of the Qinghai-Tibet Plateau and incorporated the traditional Tibetan culture.



Center for Environmental Education and Communications (CEEC) A304, #1 Yuhuinanlu, Chaoyang District 100029 Beijing

#### Highest mountain: Mount Qomolangma 8,848 m

As early as 2 billion years ago, the area of the Himalayas was an ocean, called the Ancient Mediterranean.

Over a long period of time, the area gradually rose up, forming the world's most magnificent mountains. Mount Qomolangma, also known as Mount Everest, is the highest peak of the Himalayas. Geological investigations have proven that the Himalayan tectonic movement is still rising slowly.

# India 🔍

Centre for Environment Education (CEE) National Operator: Khushbu Shah

YRE India

Country size: 3.3 million km<sup>2</sup> Population: 1.37 billion Highest mountain: Kangchenjunga 8,586 m National animal: Bengal tiger National tree: Banyan tree National plant: Lotus flower Joined Eco-Schools in 2015 Number of Eco-Schools: 67



### Longest river: Ganges 2,900 km

In India, the river Ganges is considered sacred and is personified as the goddess Gaṅgā.

She is worshipped by Hindus who believe that bathing in the river brings the remission of sins and facilitates Moksha (liberation from the cycle of life and death).

The water of Ganges is considered very pure. Pilgrims immerse the ashes of their kin in the river, which is believed to bring the spirits closer to Moksha.



#### **National Legislation**

The Ministry of Environment, Forests and Climate Change, India established Centres of Excellence in Environment Education in 1984 recognising the need for Environmental Education (EE) in the country. The Centre for Environment Education (CEE) was one of two organisations. The initial work was in the form of the National Environmental Awareness Campaign anchored by CEE for the MoEF, and the Environmental Orientation to School Education programme with the Ministry of Human Resources Development. In 2003, in a landmark judgement, the Supreme Court of India directed all education boards to include EE as part of the formal education system at all levels. The National Council for Education Research and Training (NCERT) had in 1986 launched a New Education Policy which stressed an activity based approach to education. A decade later, the New Curriculum Framework 2005 emphasised the need to relate the curriculum and classroom teaching with the outside world and reinforced activity-based learning. CEE was a key member of the 'Habitat and Learning' group for the NCF.

#### **K-12 Education**

The MoEF through CEE, Bharti Vidyapith Environmental Education and Research Institute (BVEERI) and other institutions undertook to analyse science, social studies and languages text books across the country. The study identified gaps and opportunities to introduce environmental issues in the curriculum. This was followed up by State level engagement by CEE and other organisations to revise textbooks. CEE over the years has done pioneering work in EE and Education for Sustainable Development (ESD) in schools which has an influence on the way EE has shaped in India. The school education system has introduced EE in the following way: grades 1-2 through activities, grades 3-5 through Environmental Studies (EVS), grade 6-10 through an infusion Model and grades 11-12 through project-based study.

The University Grants Commission which oversees all higher education in the country formed a committee to study and reconstitute the introduction of environmental issues into the curriculum at all levels. After the Supreme Court judgement on making EE compulsory, another committee looked into what would constitute 'essential learnings' at the college level. Today, all higher education institutions are expected to conduct programmes in EE. CEE developed a Resource book on EE for higher education, and has worked with various colleges to offer the compulsory course.

#### **Professional Development**

EE in India encompasses developmental concerns, and therefore India played a substantial role in fostering ESD during the Decade of ESD (DESD - 2005-14). CEE was the nodal agency for DESD in India and took lead in the ESD work internationally. CEE is a partner to the Global Action Programme of UNESCO, and has also taken leadership in focusing attention on Education for the Sustainable Development Goals. The Handprint as a concept that focuses on positive action for sustainability was launched at the 2007 UNESCO Conference organised by CEE. This concept that emerged from one of CEE's school programmes has received global acceptance.

One of the key areas that have been a concern for EE and ESD has been capacity building of teachers. In India, CEE developed for the National Council of Teacher Education, EE training materials for pre-service and in-service teachers. CEE and other environmental organisations has been conducting several training programmes in collaboration with the National and State Education departments. CEE in collaboration with the Common wealth of Learning (COL), Canada 2005 launched the Green Teacher initiative as a distance education course in EE for practicing teachers and educators.

# THE STORY OF ECO-SCHOOLS

CEE became an associate member of FEE in 2014. The MoU was formally signed on 8 June 2014, and on 25 February 2015, the programme was launched in Ahmedabad with the attendance of Lesley Jones, President of FEE and mentor for Eco-Schools India, and Shri. Kartikeya Sarabhai, Director of CEE. One year later, on 18 September 2016, Delhi Public School, East Banglore, Karnataka became India's first school to be awarded a Green Flag.

The programme in India is offered to students from the primary school level, for classes 1-5 (6-11 years old). It is open to a wide diversity of schools following different curricula in India. These include state board schools, schools following the national curriculum (CBSE and ICSE) and International schools.

30 schools situated in seven different cities enrolled in the programme in 2014-15. At the moment, a total of 67+ schools are part of the Eco-Schools programme. The programme has five thematic areas – biodiversity, waste, water, energy and healthy living. Private schools pay the registration amount prior to joining the programme, whereas some select government schools have joined the programme with funding support available under the Litter Less Campaign.

The provision of awarding schools with Handprint Flags for each thematic area has also been built into the Indian programme. A school that has progressed to the level of three Handprint Flags becomes eligible for a Green Flag. The Handprint Flags are awarded to schools for positive and tangible actions and projects towards sustainability as well as for the commitment shown by the schools to the undertaken action.

### **KEY MILESTONES**

In the academic year 2015-16, five schools were awarded Green Flags and ten schools were awarded Handprint Flags. In 2016-17, eight schools were awarded Green Flags and another ten schools were awarded Handprint Flags. In 2017-18, three schools were awarded Green Flags and three were awarded Handprint Flags.

In India, the students from grade 1-5 have been 100% engaged in classroom-based hands-on activities. The schools are doing well in the programme and are investing 2-2.5 hours per week in the programme. They have also built in an evaluation system and linked it to the CEE rubrics prescribed by CBSE.

The Eco-Schools programme in India is running a twinning programme in cooperation with Malaysian Eco-Schools. Through this programme, an Indian school is partnered with a Malaysian school and the students from each school. The schools can then choose any theme, yet are currently primarily focusing on waste management systems. Many schools have already been twinned and others are eager to get started.

#### **NATIONAL OPERATOR - REFLECTIONS**

Eco-Schools has helped bring about a systemic change in many of the schools. The students have started taking ownership of their school and are developing invaluable skills such as leadership and critical thinking through very simple activities.

As the National Operator, I was impressed by the dedication of students towards a sustainable environment. I saw students showing lots of imagination and creativity to improve the environment through this programme. Moreover, the opportunity of connecting to other countries through the twinning programme is actually helping the students gain different experiences beyond the classroom experience. I have seen how students from grade 1 or 2 have been involved in cleaning campaigns for a green school campus, how students explore environmental issues surrounding the schools, engage in problemsolving, and take action to improve the environment.

> Centre for Environment Education (CEE) Thaltej Tekra, 380054 Ahmedabad





"As a teacher involved, I guide my children to work on their given projects. The adequate help was given and the activities were monitored and evaluated to encourage the children. The children enjoyed all the activities. In almost two months, they built a kitchen garden and the children enjoyed it while thoroughly and actively participating. The Eco-Schools programme was a big success and was easily integrated into our school curriculum."

#### Sanjeeta Thakur, PRT, Army Public School, Bangalore

"The changes we have seen in the school after the Eco-Schools programme: We don't see a lot of spilled water after the children are done washing their hands. They have learnt to wash their hands without spilling water on the floor. They have also developed good toilet use habits so it takes us less time to clean the toilets. The passages are much cleaner with little or no litter. In the classrooms, children put waste like pencil shavings, plastic, paper, fruit peels, bread and leftover vegetables in different bins for wet and dry waste. All these practices save us a lot of time cleaning up."

S.S.Sonawane, Non-Teaching Staff, Vidya Niketan English Medium School, Pune

"I am very impressed by the Eco-Schools programme. It helps the child move away from the bookish knowledge and apply what they have learnt. The environment has become a cause of grave concern in the present scenario. This programme sensitises children to the importance of preserving and conserving it. Please keep up the good work!" **Neeta Roy, Parent, Army Public School, Bangalore** 

"CEE since its inception as a Centre of Excellence in Environmental Education of the MoEF has developed approaches, activities and material for EE in schools. These include working through eco-clubs, a project-based learning approach and a whole school approach to involve students in environmental action in their schools and the community. The Eco-Schools programme in India benefits from CEE's work with schools in terms of its network such as the Paryavaran Mitra, its pedagogy and the resources available for EE in schools. The programme is offered in a synergistic manner with other school programmes that CEE undertakes in India. The Eco-Schools programme is entering its 5th year in India, engaging young people across various schools to take positive action and to create a brighter, greener future for all."

Kartikeya V. Sarabhai, CEE Director



# Japan

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水市立相川中学

FEE Japan National Operator: Shoko Itoh

Country size: 378,000 km<sup>2</sup> Population: 126.8 million Longest river: Shinano River 367 km Highest mountain: Mt Fuji 3,776 m National animal: Pheasant Joined Eco-Schools in 2008 Number of Eco-Schools: 17



Green Flag awarding ceremony, Shonan-Gakuen Primary School

## National tree: Sakura (Cherry tree)

The cherry tree is not only the national tree of Japan the cherry blossom is also considered the countries national flower. The total time period in with a tree is in full blossom is **usually no longer than a week**.



FEE

#### **National Legislation**

In 2011, the principles of ESD were embedded in The Act for Enhancing Motivation on Environmental Conservation and Promoting of Environmental Education of 2003. The amended act came into force in October 2012 as the Act on the Promotion of Environmental Conservation Activities through Environmental Education (EE). The purpose of the legislation at the local/grassroots level is to promote EE through voluntary efforts within the public and private sectors and civil society and stimulate the promotion of EE in formal and non-formal setting geared towards the improvement of citizens' understanding of environmental conservation, the enrichment of training programmes for teachers and the development of teaching materials and information service (MoEJ, 2013).

#### **K-12 Education**

The Junior Eco Club was launched in 1995 by the Ministry of the Environment. The aim was to raise awareness of elementary and junior high school students, supporting their environmental conservation activities and promoting various extracurricular 'green' activities. The Japan Environment Association serves as the national secretariat, with a working group that includes the Ministry of the Environment personnel, environmental educators and officials from local government.

#### **Professional Development**

The Environmental Counselor Project is a national registry of individuals to provide advice, counselling and instruction for environmental conservation activities, to civilians and entrepreneurs who wish to undertake environmental preservation activities.

### **KEY MILESTONES**

The Eco-Schools programme started in Japan as an HSBC project by FEE Global and FEE Japan in 2009. In March 2011, Minamata High School and Santo Nursery School became the first two schools to be awarded a Green Flag. Over the years, the programme has expanded.

The Green Flag arrived on 15 March. All 23 Eco Committee members gathered at my office to open it. We immediately made an announcement to the school over the air, and we heard cheering coming from all over the place. It was such a wonderful moment for me as principal, and some people were crying with happiness at finally receiving the Green Flag. On 18 March, the students were interviewed for a newspaper article, and they spoke proudly about their activities and opinions. Later that day we visited the Mayor and, again, I was so impressed by the children's confidence and their lack of hesitation in giving their opinion about climate change, etc. The whole process of acquiring the Green Flag has been a fantastic opportunity to see the children's motivation to work and act together. I could feel the whole school became one team towards the same goal – the Green Flag. We are very proud!

Principal Yuko Hasumi, Toda Elementary School, on the day they received their Green Flag, March 2013





**FEE Japan** 4 Chome-4-8 Iidabashi, Chiyoda-ku 102-0072 Tokyo

\*In 2019, FEE Japan's FEE membership was terminated.

# Malaysia

WWF-Malaysia

National Operator: Nor Shidawati, Jessie Chew Pei Jing, Mathi Vatani A/P R. Gunasegaran

Eco-Schools

# Country size: 329,847 km<sup>2</sup>

Population: 32 million Longest river: Rajang River 563 km Highest Mountain: Mt Kinabalu 4,100 m National plant: Hibiscus Joined Eco-Schools in 2011 Number of Eco-Schools: 188



# National animal: The Malayan Tiger

The Malayan Tiger is a tiger subspecies and is mostly found in southern and central parts of Malaysia. The Malayan tiger is associated with bravery, strength and grandeur. It is also depicted on the country's coat-of-arms.



#### **National Legislation**

Malaysia is increasingly committed to bringing Environmental Education (EE) to teachers and students across all levels of formal and informal education efforts. The 11th Malaysia Plan (2016-2020) emphasises sustainable development and environmental conservation, while the Ministry of Education has provided resources for integrating EE into the existing K-12 curriculum. Although laws and policies are not always implemented effectively, there have been many changes after the general election in 2018. For instance, the newly restructured Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC) has shown to be leading many sustainability initiatives, and one of the missions is to preserve the environment through education, awareness and enforcement towards a pollution-free environment as well as leading climate change adaptation and mitigation measures.





#### **K-12 Education**

Since 1998, the Curriculum Development Centre, a division of the Ministry of Education, has established a set of guidelines for teachers by producing a book entitled 'KBSR Teacher's Handbook: Environmental Education Across the Curriculum'. EE is integrated into all subjects taught in schools, such as science, mathematics, music, english and islamic education. It is embedded with environmental knowledge, proficiency, skills and nurturing positive values and attitudes. Although the previous government announced the introduction of a new subject for EE, the restructuring in the Ministry of Education after the 2018 General Election has put the project on hold.

#### **Professional Development**

Partnerships, such as WWF-Malaysia's collaborations with UNESCO, provide support for EE professional development opportunities, the development of EE resources, and the organisation of events for EE capacity building. Most recently in 2015, the National Education for Sustainable Development Workgroup (NESDW) was created to support EE across all levels of formal and nonformal educational initiatives.

## THE STORY OF ECO-SCHOOLS

WWF-Malaysia started the Eco-Schools programme in 2011 as the National Operator with the support from the National Eco-Schools Committee (NESC) which included the Ministry of Education, the Department of Environment, and a number of other government agencies, NGOs, and academic institutions. On the 21 August 2013, the International School of Kuala Lumpur became the first school in Malaysia to be awarded a Green Flag.

#### **KEY MILESTONES**

The International School of Kuala Lumpur received the first Green Flag within the first year of the programme being implemented in Malaysia, an outstanding achievement. In addition, the International Eco-Schools Conference series has been held for the past seven years with participating Eco-Schools from Malaysia, Thailand, Singapore and the Philippines.

Malaysian Eco-Schools alumni have recently initiated the establishment of social enterprises and a new business model for urban farming, and in May 2019, a Malaysian Eco-Schools student was featured in the WWF-UK newspaper.

#### **NATIONAL OPERATOR - REFLECTIONS**

Receiving news from several Eco-Schools alumni in tertiary education, currently involved in sustainability projects such as urban farming and some who are pursuing courses related to environmental sustainability, is fantastic. It really warms my heart seeing the students grow into young adults who will become future leaders of sustainability.

The aim of the Eco-Schools programme is to be implemented in all schools with endorsement and support of the Ministry of Education Malaysia. The Ministry of Education supports the running of the Eco-Schools programme, although funding is not provided. There are over 10,000 schools in Malaysia, and it is a challenge reaching out to all school. I aspire to see the Eco-Schools programme acknowledged as one of the major programmes which contributes to the increased level of environmental literacy among students in Malaysia.



"Students are more aware and open to recycling programmes, which reflects the good impact of the Eco-Schools programme. Waste segregation is now more organised and pupils are showing a positive attitude towards keeping the school compound clean. It also serves as a good learning experience reflecting the implication of cross-curricular activities. Thus, it reflects sustainable development into classroom teaching."

#### Pn Norilyani, Teacher, SMK Tun Mutahir

"It changed my perspectives on things that I once turned a blind eye to and it widened my view, enabling me to think outside of the box rather than just staying in my comfort zone. The Eco-Schools programme taught me that despite having different beliefs, different dreams, different races and just being different in general, we humans are still living on ONE planet with ONE mother nature. Throughout my four years of being in this programme, I also realised that changes are possible and it is up to us to help make our world a better place so that our future generations could have a chance to live in a world filled with wonders of mother nature." **Nojuel JC Soluku, Student, SM St Michael Penampang**  "Our journey throughout these years with the Eco-Schools programme has repeatedly prompted familiar questions about effective approaches of Environmental Education on younger generations. The experience and knowledge we gained throughout these years helped us develop better Environmental Education programmes. One of our major events, in collaboration with WWF-Malaysia, was the International Eco-Schools Conference which has been held 7 times. The conference helps students and teachers identify the environmental impacts associated with their own schools, making sure that they take actions to eliminate or reduce those impacts. We have seen the positive effects of a structured, but flexible school programme on the students and we hope to see more schools involved in sustainable schools programmes like the Eco-Schools, to involve more people in the journey towards a sustainable future." Mohd Fikri bin Mohd Bakri, EIJAU Millennium Explorer, long term partner of Eco-Schools Programme and Chairperson of National Eco-Schools Committee (NESC) 2018-2019

"WWF-Malaysia has been a strong advocate in educating students and the public on sustainability and environmental conservation. As the National Operator for the Eco-Schools programme since 2011, we have seen increasing support and recognition from schools, teachers, students, partners and corporate sponsors over the last eight years. We are honoured to coordinate this platform for schools to learn and share about environmental sustainability, working together with communities, and empowering youth to exercise leadership skills and boost their confidence through the programme. We are committed to building a community of young people who care for the environment and we aim to empower them with the knowledge and skills needed to take action towards the sustainability of our earth's resources." Sophia Lim, WWF-Malaysia CEO

WWF-Malaysia 1, Jln PJS 5/28 A, Pusat Dagangan Petaling Jaya Selatan 46150 Petaling Jaya, Selangor



# Mongolia

Information and Training Center for Nature and Environment (ITCNE) National Operator: Shinetsetseg Erdenebayar

Country size: 1,564,116 km<sup>2</sup> Population: 3.2 million National animal: Saker falcon National plant/tree: Scabiosa Butterfly Blue Joined Eco-Schools in 2007 Number of Eco-Schools: 205



# Longest river: The Orkhon River 1,124 km

The Orkhon River flows through Kharkhorin in central Mongolia. It is one of Mongolia's principal rivers and the region is considered the cradle of Mongolian civilisation.

Both Kharkhorin and the river valley form part of the Orkhon Valley Cultural Landscapes UNESCO World Heritage Site.



#### **National Legislation**

Mongolia has initiated a good process of integrating Education for Sustainable Development (ESD) into the curricula of Secondary Education. Integration of Environmental Education (EE) commenced with the government's adoption of the National Programme for Public Ecological Education (1997 Government Resolution No. 255). Since then, a number of policies have followed, such as the National Programme on Non-formal Education Development, National Programme for Distance Education, and State Education Policy for the period 2014–2024 (2015 Resolution of the State Great Khural No. 12).

The 2016 Mongolia Sustainable Development Vision 2030 includes several objectives and actions to improve the education system. The 2014 Green Development Policy encourages education, science, and technology to serve as a catalyst for green development. The 2016 Action Plan for the Implementation of the Green Development Policy for the period 2016-2030 includes one specific measure under strategic objective 5: to ingrain a resource-efficient and effective consumption culture, environmentally friendly lifestyle, traditional customs of nature/environmental conservation and patriotism through ESD. Seven activities are foreseen to implement this measure, mostly under the leadership of the Ministry of Environment and Tourism in cooperation with the Ministry of Education, Culture, Science, and Sports. The sole funding sources expected for six of the seven planned activities come from international organisations.

#### **K-12 Education**

The Ministry of Education, Culture, Science and Sport developed a new core curriculum for lower secondary education and approved it in July 2015. EE and ESD are integrated into the new core curriculum. For instance, the aim of education in natural science is to prepare citizens who develop cognitive skills and continued learning, act in an environmentally friendly manner and contribute to environmental preservation. Subjects such as physics contain issues related to energy use, energy efficiency and renewable energy sources for students of grade 8. Biology contains the study of issues related to the impact of human activity on the food chain. Chemistry includes studies of pollution, such as chemical pollution of water and dust pollution of air, as well as pollution prevention methods. Geography covers issues related to demographic changes, climate change, water use and consumption, water and mineral reserves, environmental protection and environmental and social dimensions of sustainable development. Design technology strives to teach pupils how to use traditional materials and the reuse of waste materials. Consistent implementation of the new curriculum supported by adequate teacher training is expected to contribute to a greater number of citizens working towards life choices underpinning sustainable development.

The new curriculum is just starting to be implemented and the results of its impact are not yet available. The challenges to ensuring adequate implementation are the lack of teacher knowledge and expertise in ESD, the limitations of current school infrastructure and the financial resources allocated to the education sector for both its maintenance and further development.

#### **Professional Development**

The in-service training of teachers by the Institute of Teachers Professional Development (ITPD) targets teachers of secondary school, preschool, lifelong education centres, and vocational school, administrators such as school principals, and school staff including school librarians and social workers, dormitory teachers, and preschool pedagogy specialists. The ITPD does not have specific subjects on the environment or sustainable development; rather, these issues are embedded in all subjects. Since 2014, the ITPD has participated in the ESD Project. This has enabled it to conduct training for teachers and school staff to introduce the ESD concept. Participation in the project also allowed the ITPD to develop a training module and guidelines and strengthening the capacity of its staff.

With the support of the ESD Project, nationwide training sessions were organised for more than 24,000 teachers on the ESD principles and implementation of the core curriculum. In addition, training sessions were organised to develop the capacity of educational institutions, as well as for the staff of the Ministry of Environment and Tourism and the Ministry of Education, Culture, Science and Sports and their subordinated institutions. A recent example of such training sessions includes a series to raise awareness and develop the capacity of the school staff. Three staff members from each school – the school administrator/principal, the social worker and the teacher of natural science – underwent three days of training. In total, 850 staff attended. As a follow-up to the workshops, action plans on the activities required in each province were developed.

> Information and Training Center for Nature and Environment Room no. 503, Midtown office, Olympic Street, Peace Avenue Ulaanbaatar

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme has been running successfully and sustainably in its twelve consecutive years in the country. This success record is deeply rooted in initiatives and support by the Swiss Agency for Development and Cooperation (SDC) for financial and technical assistance. Since the founding of the programme in Mongolia, SDC has been its main donor agency. Starting in 2007, activities to establish and operate Eco-Schools were supported through the SDC's Coping with Desertification Project. SDC has worked in close cooperation with the Information and Training Centre for Nature and Environment (ITCNE) on creating the framework of programme implementation and as a result, literature, handbooks, and teaching modules were published and seminars were conducted in several phases.

ITCNE, which has been representing FEE as a National Operator since 2011, is in charge of implementing and managing the programme nationally and is in collaboration with the Ministry of Education, Culture, Science and Sport as well as the Ministry of Environment, Green Development and Tourism. In addition, the SDC is supporting the programme financially, the Institute for Teachers Professional Development is providing technical assistance and the Municipal Governor's Office is providing policy support to improve the number of Eco-Schools in Mongolia.

#### **KEY MILESTONES**

ITCNE contributes to the transformation of the ESD concept into practice. Under the Eco-Schools programme, altogether 293 schools (almost 37% of all Mongolian schools), 21 kindergartens and one vocational school are registered nationwide. These schools are trained by ITCNE in the diversification of networking and knowledge sharing techniques and tools.

ITCNE has delivered nearly 80 training sessions, setting the stage for both basic and advanced level application of the whole school approach. Each training session has had 3 phases between 2016 and 2019 for over 3,949 participants. These trainees have been school teachers, students, staff, management staff, and community members. Some 80% of these training sessions have been conducted at the request of school management.

Achievements of the Eco-Schools programme can be measured by the number of Green Flags endorsed by FEE; as well as Gold, Silver and Bronze awards, the certification process designed by the FEE National Operator for Mongolia, along with endorsements from both the Ministry of Education, Culture, Science and Sport and the Ministry of Environment and Tourism. On 8-9 October 2017, the 3rd National Forum of the Eco-Schools programme was successfully organised and the first Mongolian Green Flag was awarded to the first school of Selenge province's Mandal Soum, a school in Gobi-Altai province, Delger Soum, and Erdmiin-Hotoch Complex School of Ulaanbaatar city's Sukhbaatar district. Boris Susmak, FEE Board Member, attended the forum with greetings to participants, organisers, and guests on behalf of FEE Global. During the forum in 2017, 3 secondary schools were awarded with the Green Flag, 25 secondary schools with the Silver award and 4 schools with the Bronze award. As of 2019, there are 9 schools awarded with Green Flags, whereas 70 schools certified under the Gold, Silver and Bronze award categories.

ITCNE Executive Director, Shinetsetseg Erdenbayar, has been awarded as Best Employee from the Ministry of Environment and Tourism in 2014, for distinguished labour from the Ministry of Population Development and Social Protection in 2015 and as Best Employee from the Ministry of Education, Culture, Science and Sport in 2018. On 18 March 2019, the head of the ITCNE, Temuujin Lundaajantsan, was awarded the "Labour Honour" medal from the Government of Mongolia. This prize was issued by the order of the Mongolian President for the highest contribution that was invaluable to a specific sector.

### **NATIONAL OPERATOR - REFLECTIONS**

For the programme to be successful, it needs not only cooperation on the policy level but also engagement and commitment at all levels. In order to have coherency of work at all levels, including the national, the local, and the school level, as well as the interrelation between them, it is required to have mutual understanding improved for all level government policymakers, decision-makers, experts, civil society groups, youth and the public concerning information and knowledge on ESD core values, concepts, and methodology.

The ITCNE is recognised as one of the resource pools in the field of ESD by the national government and its agencies. As one of the achievements, the ITCNE collaborated in conceptualising and developing the National Programme on Education for Sustainable Development which was approved by the national government in 2018. The ITCNE participated in the working group of the development of the programme. It represents civil society organisations in the National Sub Council and takes responsibility for implementation of the Objective 1.3 which mandates application of the Eco-Schools programme to all secondary schools nationwide.

"Be creative, be positive - Let's create an eco-environment together." Shinesaran. T and Namuunaa. M, Students, Bayangol Eco-School, Selenge province

"The purpose of support is to successfully implement the Eco-Schools programme into general education: schools, preschools and the vocational school system of Mongolia (based on ISO 14001 Environmental Management Standard aimed at raising awareness of children, youth and local communities through their increased participation in Green Development Policies and Sustainable Development Education, and providing concrete contribution to the Sustainable Development of Mongolia).

The State Great Khural (Parliament) of Mongolia has adopted Green Development Policies by its Decree No. 43 on 13 June 2014, and the Government of Mongolia has adopted the 'Action Programme to Implement Green Development Policies' by its Ordinance No.25 on 11 January 2016. Provision No.5.1.4 of this 'Action Programme to Implement Green Development Policies' stipulates to "provide support to Eco-Schools activities to educate children and youth with nature and environmental protection traditions and lead nature-friendly lifestyle and behaviour".

The stipulations of the Provision No.5.2 of the aforementioned Plan "to promote introduction of MNS ISO 14000 Package of Environmental Management Standards by economic entities and organisations and cultivate comprehensive yet efficient production and consumption attitudes and behaviour among people", and on the methodology and approaches of the Seven Steps, based on ISO 14001, 2004 standard to implement the international Eco-Schools programme, are both solutions that complement and support each other. Also, the Education for Sustainable Development national programme states that the country intends to increase the number of Eco-Schools, involving 50% of the total number of schools by 2022."

Director, Clean Technology, Investment and Production Division

"The Eco-Schools programme resulted in the improvement of the schools' physical environment with nearly 65% of them raising funding sources internally. The environmental benefits include reduced CO2 emissions by 10% and saving resources like energy and water. The economic implications of these initiatives were enormous: with local resource mobilisation raising 4 billion tugriks (1.5 million USD) in support of Eco-Schools initiatives demonstrating again the local community interest in and support for sustainability. The schools and communities were trained in various participatory assessment methods as part of the process encouraging inclusiveness and social equity."

Shinetsetseg Erdenebayar, ITCNE Executive Director



# Highest mountain: Mongol Altai Range, Altai Tavan Bogd mountain, "Khuiten" peak 4374 m

The Altai Mountains have been inhabited for around 12,000 years and contain several petroglyphs with the oldest being from 11,000 to 6,000 BC. Around 4,000 years ago, the use of horses and the domestication of animals led to the rise of the Blue Turks, whose language is the root of Kazakh and Turkish.

These successful warriors left upright carved stone statues known as Turkic Stone Men spread over the Altai Mountains.

# Singapo

WWF-Singapore National Operator: Chitra Vonkatesh / Shu Hui Lee

Country size: 724.8 km<sup>2</sup> Population: 5.6 million Longest river: Kallang River 10 km National flower: Vanda Miss Joaquim Joined Eco-Schools in 2013 Number of Eco-Schools: 84



Green Living Exhibition 2016

### Singapore and the lion:

Although the lion is not the national animal of Singapore, a lion head is a national symbol. Singapore's name is itself derived from "Singa Pura" which means 'Lion City'. According to the Malay Annals, Sang Nila Utama, a prince from Palembang, gave this name to the island after he came ashore and saw a creature he believed to be a lion. The lion is, therefore, a powerful and historic symbol of Singapore's status as the Lion City and symbolises three national values: courage, excellence and strength.



#### **National Legislation**

While there is no specific national legislation regarding Environmental Education (EE), the Singapore government launched the Singapore Sustainable Blueprint (SSB) in 2014 with a vision for a Liveable and Endearing Home, a Vibrant and Sustainable City, and an Active and Gracious Community. The 2030 targets laid out in SSB show Singapore's ambition in practising sustainable development. The focus areas are 1. an Active and Gracious Community, 2. Towards Zero Waste Nation, 3. Eco Smart Endearing Towns, 4. a Leading Green Community and 5. a Car-Lite Singapore. All five focus areas are centred around instilling personal ownership of clean spaces in the community, ensuring an integrated waste management infrastructure, incorporating innovative design and technology in estates to promote environmental sustainability, adopt green practices for business and encourage residents to utilise the public transport system in Singapore.

#### K-12 Education

EE is integrated into multiple subjects taught at various levels, mainly in science, geography and social studies, values-in-action, character and citizenship education and cross-curricular activities. Through these subjects, students have opportunities to examine and weigh various solutions to achieve environmental sustainability. They also appreciate the inter-dependence of different species in biological ecosystems, understand the importance of conservation and examine the roles of different stakeholders (e.g. local communities and business operators) in environmental conservation.

Teachers are required to engage students in the learning of these topics through inquiry-based learning, and the use of real-world examples and case studies. This is done through lesson planning and engaging various stakeholders and partners.

#### **Professional Development**

In Singapore, there are a number of early childhood teacher training courses available that include environmental aspects. Out of the six publicly funded autonomous universities in Singapore, there are five universities that either offer a university degree or module on Environmental Studies or Environmental Science.



# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was first introduced in Singapore in 2013, as an EE programme for WWF-Singapore to address local conservation needs. WWF-Singapore was supported by WWF-Malaysia in introducing the programme and funded by IKEA, as well as The Silent Foundation in the beginning. IKEA made cost savings from eliminating disposable plastic bags and these savings were then used to kick start the Eco-Schools programme in Singapore. The Eco-Schools programme has been steadily developing since it was introduced and with a growing number from the initial seven memberschools in 2013 to 83 member schools today, the Eco-Schools community has developed significantly. On 6 November 2015, Ang Mo Kio Secondary School & Nan Hua High School became the first two schools in Singapore to receive a Green Flag.

#### **KEY MILESTONES**

A few of the Eco-Schools and Eco-Schools Coordinators have received different awards from local government agencies and ministries, such as the President's Award for the Environment (PAE), which is the highest environmental accolade for individuals, educational institutions and organisations that have made outstanding contributions towards environmental and water resource sustainability in Singapore. It is a biennial award organised by the Ministry of the Environment and Water Resources (MEWR) that recognises and honours the sustained environment and water-related contributions by environmental champions from the People, Public and Private (3P) sectors.

The EcoFriend Awards has also been received. It recognises the efforts and achievements of people in Singapore who have made a difference to the environment. Whether school teachers, students, volunteers, or individuals from both the public and private sectors, these individuals have dedicated personal time and effort to protect, promote, and improve our environment.

A challenge has been adapting while not losing the central focus of the programme to suit the needs of the schools in Singapore. This end has been met by the creation of new programmes which support the Eco-Schools programme as an extension of the Seven-Step methodology. Programmes such as the Leadership Programme and Schools for Climate Action were also developed to meet the needs of the schools. These programmes are offered under the umbrella of the Eco-Schools programme and have resulted in a positive response from community partners. Just like the Eco-Schools programme, they focus on equipping students with the necessary skills and knowledge to take action for the environment.

#### **NATIONAL OPERATOR - REFLECTIONS**

It is a challenge getting the Ministry of Education to support the programme while keeping its international status. But during the last four years of running the Eco-Schools programme as a National Operator, the programme has developed other engagements and leadership programmes that are student-centric and serve the increasingly diverse needs of Eco-Schools. It has resulted in incredible impact and results such as Eco Committees initiating and following through a use-less-plastic campaign that has successfully eliminated the use of plastic straws in the schools. They were able to convince and influence the school community and include school leaders in their campaign. It has also resulted in leadership opportunities for students to take action in the community, which has led to very positive feedback from community partners and members of the public. It has created a better integration of EE into the school's curriculum with more opportunities for student-centred learning, as well as increased the development of confident student leaders who are connected to environmental issues and have the ability to express their views on sustainability.



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"Being an Eco-School has provided students with opportunities to be trained as future stewards of the environment. WWF-Singapore workshops and the presentations conducted at various platforms have made the students become confident speakers and deepened their understanding of the environmental issues. This exposure has inspired and encouraged them to initiate a straw-free environment in the school in 2018 and this project was completed in 2019 with support from the school leaders, staff, students and canteen vendors. The students are now working towards a zero plastic environment. Indeed, a commendable effort by a group of passionate 15-year old environmentalists. A few of them have also volunteered at community clubs." Habibah Ismail, Subject Head of Environmental Education, Ang Mo Kio Secondary School



# South Korea

FEE Korea

National operator: Yoorha Kang

Country size: 100,363 km<sup>2</sup> Population: 51.8 million Longest river: Han river 494 km Highest mountain: Hallasan 1,950 m National animal: Tiger Joined Eco-Schools in 2016 Number of Eco-Schools: 2



Green Flag ceremony at Chadwick International School

### National plant: Rose of Sharon

The flower known as Rose of Sharon is, in fact, called Hibiscus syriacus. It acquired its species name because it was long believed to have originated in Syria, and so it was believed possible that it was the very shrub alluded to in Solomon's erotic Song. However, the flower is actually an Asiatic species but has been gardened in Europe for so long that its origin was forgotten for a while.

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#### **National Legislation**

Unfortunately, there is no Environmental Education (EE) enforcement in Korean law. However, in by-laws, there are several articles which recommend EE.

#### **K-12 Education**

EE is not required nor enforced throughout K-12 education. However, there has been an increasing number of schools adopting sustainability education independently.

#### **Professional Development**

There are some colleges or post-secondary institutes offering courses or majors related to the environment. However, most of them are based on an engineering approach and does not have an educational aspect.

### THE STORY OF ECO-SCHOOLS

Peter DaeYoung Kang, CEO of Lifesaving Society Korea, applied for FEE membership in 2014. FEE Korea was founded when the Blue Flag programme was brought to South Korea later that year. It started with the intention to protect beaches and create a sustainable environment around the coastal areas. Peter picked up the importance of sustainability education and FEE Korea gradually expanded its eco-labels from Blue Flag to Eco-Schools, YRE and Green Key in 2016.

#### **KEY MILESTONES**

As a result of membership and the implementation of Eco-Schools nationally, in 2017, FEE Korea took over the coordination of international schools that were previously registered with Eco-Schools Global. In February 2019, the first Green Flag was awarded to Chadwick International in Songdo, Incheon by FEE Korea. As Chadwick has been implementing the programme for some time, since before FEE Korea took over the coordination, the handover has been very smooth and the school was already performing at a high level.

FEE Korea is at the moment working on the dissemination and launch of the programme to local schools. As EE is still a relatively new concept in Korea, which has to be absorbed into the pre-existing education system, FEE Korea is working on the development and adaptation of the Seven-Step framework to reflect the cultural and educational background.

### **NATIONAL OPERATOR - REFLECTIONS**

In 2019, South Korea finally had the first Green-Flag awarded school. Other schools involved in the Eco-Schools programme were inspired and endeavoured to comply with the Seven Steps and be awarded.





# Chadwick International's Eco-Code 2018-19

# 'No Plastic Is Fantastic'

The following artworks were created by students at Chadwick International to launch our sustainability Eco-Code for 2018-19, 'No Plastic is Fantastic'.



Plastic 1s Fanlastict

Holde Trank







"It is amazing. The Eco-Schools programme is practical, and we can apply it in everyday life." Student, Chadwick International School

"Four years ago, Chadwick International launched its first-ever sustainability committee, pioneered by former teacher, Chris Brodie. Over the past four years the sustainability committee, which is comprised of faculty, staff, students, parents, as well as the partnerships we have formed with companies such as Our Home and TerraCycle, have worked together to take action to make our school healthier and more sustainable. We are thankful that the sustainability committee continues to be comprised of all the key players needed to turn ideas into realities. The support that is given to this committee by administrators at CI, by teachers, staff, CIPA, and students, as well as our community partnerships, is tremendous, and greatly appreciated, and it ensures that we continue to be able to turn our ideas into authentic actions.

Last year, the decision was made to join Eco-Schools, to ensure that we empower our students to have a voice, and to provide them with opportunities to take meaningful, authentic action. Eco-Schools is a global programme engaging 19.5 million students across 68 countries and for nearly 25 years has been empowering children to drive change and improve their environmental awareness. We are delighted that Chadwick International is part of the Eco-Schools programme, and we are honoured to have recently been awarded the highly-coveted Eco-Schools Green Flag. This award makes CI the first school in South Korea to be awarded a Green Flag, and we now join just a handful of other international schools around the world who has been awarded one. Although we recognise that we still have progress to make in many areas, we are pleased that our efforts have been internationally recognised and acknowledged, and we are excited to continue our sustainability journey by working on new sustainability projects, generated by our students, to ensure that we maintain our green flag status in the years to come."

# Vince Schachner, Eco Committee Leader, Chadwick International School

"FEE Korea started with the Blue Flag programme since the organisation stemmed from Lifesaving Society Korea, which is a drowning prevention organisation. But with time, the importance of sustainability education can not be stressed enough. FEE Korea realised that Eco-Schools is the essence of EE and the core to maintain our life and community to be sustainable."

Peter DaeYoung Kang, FEE Korea CEO



# Thailand

WWF-Thailand National Operator: Alliya Moun-ob

Country size: 513,120 km<sup>2</sup> Population: 66.2 million Longest river: Chi River 765 km Highest mountain: Doi Inthanon 2,565 m National tree: Golden Shower Tree Joined Eco-Schools in 2016 Number of Eco-Schools: 30



#### National animal: Elephant

The elephant was chosen as the national symbol because of its incredible strength, durability, and longevity. Moreover, the white elephant is a symbol of royalty in Thailand.

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#### **National Legislation**

Environmental Education (EE) is part of the Ministry of Education policy and the National Development Plan, and most schools have been encouraged to run an environmental project. Currently, the Ministry is running environmental knowledge teaching.

#### **K-12 Education**

In the Ministry of Education, policy active learning aiming at creating a suitable learning environment through experiments, is one of the main focus areas in K-12. Although the term EE is not mentioned, most schools are using the environment and science as the preferred themes to integrate active learning in the curricula. Active learning is most commonly integrated into science subjects, but some schools also integrate it into other subjects such as social science and health. Moreover, the ASEAN commission encourages each country member to run an EE programme and the responsibility of doing so was assigned to the Department of Environmental Quality Promotion (DEQP). In 2018, WWF-Thailand became a partner of the DEQP, providing support in the youth leadership training.

#### **Professional Development**

In only one university in Thailand, it is possible to do an EE PhD. However, there are a lot of training opportunities to enhance the skills of those working with EE, including educators, students and project officers from many organisations. Unfortunately, EE still does not reach the majority of the people in the educational field.

Most teacher training is managed by DEQP, which has been implementing EE for ten years. However, DEQP is primarily offering professional development to its member schools. Non-profit organisations and organisations in the private sector train students who are interested in specific environmental topics, such as waste management, energy and water resources.



# THE STORY OF ECO-SCHOOLS

WWF-Thailand joined the Eco-Schools programme in 2016, with the financial support of IKANO, which also supports the Eco-Schools programme in Singapore and Malaysia. The Office of Basic Education Commission and the Office of Private Education Commission consulted WWF-Thailand to search for 20 potential schools in which to implement the programme. The Education Department of Bangkok also assisted in the implementation of the programme.

Although the Eco-Schools programme is growing slowly, the support from the network helps increase the visibility of the programme. Currently, the DEQP recognises Eco-Schools as the only student-led EE programme and is developing a strategy in cooperation with WWF-Thailand to promote it.

### **KEY MILESTONES**

In 2017, Malaysia hosted the International Eco-Schools Conference and invited Thailand and Singapore to participate. This was the first step in implementing the programme in Thailand. The year after, three schools received the first Green Flag awards in Thailand and the DEQP agreed to partner with the Eco-Schools programme and develop a plan together. In 2019, Mahidol University supported teacher training for the programme.





"At first, it was not easy. The garbage problem is close to us, but we have to be creative to solve it and to persuade all students to cooperate. In our school, we always inform about the benefits of waste management and waste segregation; we launch games to motivate all students. Moreover, our teachers also inform us on this issue, like my teacher in Art & Music class who composed a new song to raise students' awareness of waste segregation. Success is our pride. Now we know we can do it and we will maintain it for long."

#### Sutthawee, Student, Rattanakosin Sompotch Bang Khen School

"Apart from the schools receiving the Eco-Schools Green Flag, it is a pleasure that many other schools were also recognised to get Silver Awards and Bronze Awards, reflecting their potential in Environmental Education. We are proud to support the Eco-Schools programme for the second year, following IKEA's goal to encourage sustainable consumption and environmental responsibility."

#### Lars Svensson, Sustainability & Communication Director, IKEA Southeast Asia

"The students leading the programme can practice project management skills to become responsible and protect our world's natural resources and environment in the future."

Gordon Congdon, WWF-Thailand Conservation Program Manager

### **NATIONAL OPERATOR - REFLECTIONS**

EE is not a new thing for schools in Thailand. However, most organisations that run environmental projects are only focusing on the final target, such as how much the school can reduce their energy or waste. The first time WWF-Thailand presented the Eco-Schools programme to the schools, the fact that this was a student-led programme surprised teachers and students, as this was a new concept for both. It took some time for them to adapt to the programme and learn how to run it. After a couple of years, the teachers said that the Eco-Schools programme really benefited students and schools. The students have a fantastic will to improve the environment throughout the programme and a strong spirit to create a better world. Moreover, the opportunity of connecting schools in Thailand with schools in other countries is helping students gain experiences that go beyond the classrooms.

> WWF-Thailand Phisit Building, 3rd Floor, 9, Soi Pradipat 10, Praditpat Road Phayathai, 10400 Bangkok

Eco-Schools Czech Republic

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# **Central & North Europe**

Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Iceland, Latvia, Lithuania, Netherlands, Norway, Poland, Sweden & Switzerland



# Belgium

#### (Flanders)

Department of Environment and Spatial Development (MOS) National Operator: Linda Van Meersche

First Green Flag Ceremony in 2007

Country size: 135,22 km<sup>2</sup> Population: 6.5 million (Flanders) Longest river: Maas 925 km National plant: Heath Joined Eco-Schools in 2007 Number of Eco-Schools: 34

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# Highest mountain: Signal de Botrange 694 m

Signal de Botrange experiences stronger winds than the centre of Belgium as well as much greater rainfall than most of the rest of the country.



#### **National Legislation**

Belgium is a federal state and consists of three regions: Flanders, Brussels and Wallonia. Each community organises its own education system. In 2003, the Flemish government launched the Environmental Education (EE) Programme, which included the coordination and implementation of an EE policy, and the testing of innovative EE methodologies and programmes. Twenty practitioners were then assigned to build capacity and implement training on EE.

#### **K-12 Education**

For primary schools (students between the age of 2.5-12), Education for Sustainable Development (ESD) is not integrated into the final attainment levels. One school network has, however, already integrated it into the curriculum. In the near future, there are plans to integrate ESD in all final attainment levels.

The Flemish government is currently reviewing the final attainment levels for secondary education. For the first grade of secondary education (age 12-14), ESD is seen as a key competence. The final attainment levels for the second grade (age 14-16 and 16-19) will be ready in 2021 and 2023.

#### **Professional Development**

MOS has a subsite on 'KlasCement' where educational material on ESD is gathered. KlasCement is a portal site of the Department of Education where teachers, governments and NGOs can share their educational material.

The local MOS-coaches support teachers by holding pedagogical seminars and thematical workshops for teachers and school leaders. MOS organises network events and shares good practices. The MOSteam is also supported by an ESD team consisting of policy officers of the Flemish government.

### THE STORY OF ECO-SCHOOLS

Before Flanders joined the Eco-Schools programme, the organisation ran a local EE programme called MOS. The initial impetus to MOS was given in 1993, when the Vrije Universiteit Brussel received a research assignment to develop an environmental protection system for Flemish secondary schools.

In 1999, the environmental conservation project "Green School" was introduced by the Flemish administration in Secondary and Higher education.

In 2001, the MOS-project for primary schools started and in 2002, it was extended to secondary schools. The engagement of a MOSschool was achieved by implementing three steps and earning different MOS awards. As Flanders wanted to be able to award the schools who had achieved the third MOS award with an international standard for working with ESD, the organisation became part of the Eco-Schools programme in 2004. The first MOS-school to also receive a Green flag was Pius X in the Municipality of Destelbergen in 2007.

The EE conservation MOS-project is and has always been a cooperation between seven partners, namely the Flemish Government, the five Flemish provinces and the Flemish Community Commission.

In 2013, the current MOS-programme was given shape. MOS started a renewal operation based on study recommendations and the results of the MOS-communication review. In order to have a more structural impact and to realise behavioural change, MOS opted for tailor-made school coaching.



# **KEY MILESTONES**

Although in the early years MOS focused sensu stricto on immediate environmental conservation, the strategy of MOS evolved and followed developments in the field of environmental policy, education and society. Today, the focus is more on ESD and the way in which pupils handle local and global sustainability issues. In this way, environmental problems are put in a broader social context and are viewed as inseparable from other Sustainable Development Goals.

Until recently, Eco-Schools candidate schools had to fill in an Eco-Schools questionnaire for their certification process. To ease the process, MOS developed a workshop with the MOS workgroups (teachers, pupils/students, school leaders, parents, etc.), where the whole team decides whether the school is a real MOS-ambassador, i.e. that all Seven Steps are implemented and integrated into school life. This became the Green Flag assessment mechanism, which made schools feel appreciated and gave them less paperwork.

#### **NATIONAL OPERATOR - REFLECTIONS**

I started as a National Operator in September 2017. I always look forward to the school visits. Seeing what schools have achieved to make the Earth a better place, gives me a lot of energy.

The coaches visit the schools to decide in cooperation with the school team which topic they want to work on. They support teachers and principals to integrate the themes into the school policy and help schools find local partners, educational programmes for students and in working with the municipalities. Flanders has a climate trajectory called 'Climate Gangs' for primary schools, through which all schools from a municipality work together and the municipality itself is also a partner!





"Once upon a time (20 years ago), there was a school, named Pius X in Destelbergen. The school started an adventure... 'a MOS-adventure'. It was soon clear that the story of this school was a fairytale come true!

Pius X wants to be a reflection of what happens in the surroundings of the school. The school team raises the schoolchildren to become world citizens. We focus on sustainable development: enough for everyone and for always! Pius X takes care of the climate, not because we can, but because we need to! Sustainable development is embedded in the whole school. But it is a challenge to keep this approach up to a high level. When we choose the year theme, we always look at it through the Eco-Schools eyes. All these efforts from the children, the teachers and school leader resulted in five Eco-Schools Green Flags. In October, we are receiving our 6th Green Flag. Our mission is to be a school where sustainable development of people and the planet are most important. Our mascotte 'Gloobje' will stay at our site for a while because he still screams at the top of his lungs: 'Don't mess with MOS!' You see, fairytales do come true!"

Annick De Cuyper, Teacher, Pius X, Municipality of Destelbergen

**Department of Environment and Spatial Development (MOS)** Koning Albert II-laan 20, bus 8 1000 Brussel "Becoming a member of Eco-Schools was a logical step in the development of our environmental school programme MOS. It was a new and challenging opportunity to persuade the schoolchildren, students and teachers to continue with their contribution to the protection of our planet. For me personally, it meant the start of international friendships with people with their noses in the same direction. That made us all stronger. The National Operators meetings made me realise that our regional project was doing well. Talking with environmental minded people from all over the world and being exposed to a great number of good practices taught me a lot and convinced me of the importance of our work. During our formal and informal discussions, we all realised that teamwork on the environment strengthens cooperation within the schools in all areas."

Eric Craenhals, Former MOS-Coordinator - the person who introduced Eco-Schools in Flanders

"The Green Flag of Eco-Schools is an appreciation for schools who succeed to embed sustainable development in the whole school. These schools are an example and an inspiration for other schools. The Green Flag gives them access to an international network. Congratulations to all these ambassadors who fight for a sustainable future."

Joke Schauvliege, Flemish Minister of Environment and Spatial Planning during the 2017 Green Flag ceremony



# Belgium

(Brussels & Wallonia) COREN a.s.b.l. National Operator: Denis Jacob

Country size: Belgium 30,688 km<sup>2</sup> Country size: Brussels 161 km<sup>2</sup> / Wallonia 16,844 km<sup>2</sup> Population: 5.6 million (Wallonia and Brussels) Brussels joined Eco-Schools in 2015 Wallonia joined Eco-Schools in 2019 Number of Eco-Schools: 13

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# National animal: Lion

Belgium: Medieval heraldic symbol Wallonia: Rooster, symbolising the ties between Wallonia and the French Republic

#### Longest river:

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Meuse (Wallonia) 925 km (192 km in Belgium) Senne (Brussels) 103 km

# Highest mountain:

Signal de Botrange (Belgium and Wallonia) 694 m

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#### **National Legislation**

In the French-speaking part of Belgium, Environmental Education (EE) is by law included in Education for Citizenship. The Décret-mission states that one of the goals of a school is to help students become "responsible citizens who are able to contribute to the development of a democratic, solidary, pluralist and open society".

#### **K-12 Education**

EE is mostly included in science, geography and citizenship education. Meanwhile, there are opportunities for all teachers to include environmental topics in any subject and to collaborate on projects.

#### **Professional Development**

There is no complete professional course in EE, but some schools and non-profit organisations such as Helmo, Institut d'Eco-Pédagogie, CECAFOC, IFC, etc. offer postgraduate or in-service formation for teachers.

### THE STORY OF ECO-SCHOOLS

The Brussels Environment administration, in partnership with COREN, was interested in the implementation of the Eco-Schools programme in Brussels. Therefore, in 2015, the Ministry of Environment subsidised COREN to implement the programme in the French-speaking schools in Brussels.

The goal was to help schools extend their environmental actions, integrate EE and involve the school stakeholders by bringing a concrete methodology to do so. The first Green Flags in Brussels were awarded in September 2016 to four different schools: Ecole maternelle N°2 de Schaerbeek, Ecole Les Peupliers d'Anderlecht, Institut Frans Fischer de Schaerbeek, and Servites de Marie de Uccle.

In 2019, with the support of the Government of Wallonia and the French Community, the Eco-Schools programme will also be available for schools located in Wallonia.



Eco-Schools participating in the Environment Action Festival, April 2018

**COREN a.s.b.l.** Rue Van Elewyck, 35 1050 Brussels

#### **KEY MILESTONES**

In 2014, the preparation of certification tools began, and a year later the first schools joined the Eco-Schools programme supported by COREN. In 2016, the first four schools were awarded with the Green Flag and by 2018, six more schools were awarded.

2018 was also the year that saw the first award renewals. In September 2019, Eco-Schools was launched for schools located in Wallonia.

#### **NATIONAL OPERATOR - REFLECTIONS**

In 2018, a special education school, linked to a hospital for students with eating disorders, received the Green Flag. It was a huge victory for them! We are also very proud that Assomption Sainte-Thérèse from Boisfort won the jury prize at the Environment Action festival in 2017 - a festival that celebrates contemporary art and music with a special focus on positive awareness-raising events. In 2019, Servites de Marie from Uccle also won the jury prize at the same festival.





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"It is a recognition of all the work and effort by the team of our school and our partners, especially around our green spaces." Joëlle van Langendijck, School Director, Ecole maternelle N°2 de Scharbeek

"This programme attracted Brussels because it allows our schools to value all the projects they have already realised and it helps them understand the long-term approach. Sustaining Environmental Education activities and linking them to courses and other school projects, together with more efficiency and less downturn, are some of the benefits for a school when seeking the Eco-Schools label."

**Brussels Environment administration** 

"Environmental Education is often depending on individual teachers. They deal with several items to raise pupils' awareness and a lot of good work is being done. But as an institution, a school doesn't learn enough from these experiences to improve. Therefore, it is useful to apply the Eco-Schools methodology and tools. They provide a systematic and participatory approach so that Environmental Education becomes everyone's business and so every teacher and stakeholder becomes involved."

Thierno Ndiaye, COREN CEO



# Czech Republi

TEREZA, Educational Centre National Operator: Jan Smrčka

National tree: Linden tree, symbol of protection, hospitality and love

Country size: 78,865 km<sup>2</sup> Population: 10.5 million Longest river: Vltava 433 km Highest mountain: Sněžka 1,602 m National animal: Double-tailed lion Joined Eco-Schools in 2005 Number of Eco-Schools: 398



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#### **National Legislation**

Environmental Education (EE) has been part of the national legislation since 1992. The implementation of EE is enshrined in the framework of valid legal regulations (Act No. 123/1998 Coll., On the right to information on the Environment, as amended)

#### **K-12 Education**

EE is a mandatory requirement for schools as a cross-cutting theme, which must be incorporated into different school subjects at all school levels.

#### **Professional Development**

There are many educational training opportunities and courses open for all teachers in the Czech Republic as part of their professional development. One teacher is appointed Environmental Education Coordinator in each school in the Czech Republic. This teacher has to study a specially designed course with a length of 250 hours and pass an exam to be entitled to this task.

#### THE STORY OF ECO-SCHOOLS

In 2002, the Czech Republic launched its own Eco-Schools programme, which was initially not connected to the international programme. The Czech local programme was different from the international Eco-Schools, but when Educational Centre TEREZA found out about the international programme, they decided to bring it to the Czech Republic in 2005 and modify the Czech programme to follow the Seven-Step methodology. The organisation School Facility for Environmental Education Lipka, helped establish the implementation structure of the programme and became the first regional coordinator of Eco-Schools Czech Republic.

Later, a structure with several regional organisations supporting schools in their respective regions was developed. In 2006, the first school, General Janoušek Elementary School, was awarded the first Green Flag in the Czech Republic along with 14 other elementary schools.

### **KEY MILESTONES**

Changing the focus of the programme has been a key milestone. It helped change the way schools work with the environment by focusing on the Seven Steps, helped children get more involved in developing action competences and strengthened their democratic principles.

As a result of the implementation of the EU funded project We Eat Responsibly, an action-oriented global learning programme, TEREZA Educational Centre received the 2017 Global Education Innovation Award from the Global Education Network Europe (GENE).

In 2017 and 2018, GENE recognised the importance of innovation in global education through its Global Education Innovation Award. The award benefited educational projects that bring about positive change and open peoples' eyes and minds to the realities of the world, locally and globally. It supported global education initiatives that promoted creativity, participation, direct action, synergies and innovation, and ultimately inspired public policy.



"The programme significantly increases the environmental awareness of pupils, encourages their activity and increases interest in everyday school life. Pupils learn to deal with adults, defend their views and take responsibility."

Andrea Slováková, Eco-Schools Coordinator, ZŠ Trávník Přerov

"Great changes start small and every great deed usually consists of an immense number of smaller steps. You, Eco-Schools, are a shining example of this and for that we thank you. You are the seed, from which a tree will sprout. And this tree will keep growing and will shine with positive energy."

Ing. Vladimír František Mana, LL.M., Deputy Minister, State Administration

"I highly value the Eco-Schools programme for being so strong in engaging and empowering our youth, motivating teachers and benefiting communities. In fact, before I became the CEO of our organisation, I worked as an Eco-Schools National Operator and was leading the team to bring the Eco-Schools programme to our country. I am proud it has grown into perhaps the biggest, most sound and influential Environmental Education initiative for schools in our country and has become our organisation's flagship programme."

Petr Daniš, TEREZA, Educational Centre CEO





# **NATIONAL OPERATOR - REFLECTIONS**

The biggest challenge is to improve the democratic processes in schools, increase student participation in school operations and develop critical thinking. However, every time the programme surpasses the school walls. Every time, our campaigns and actions help activate local communities and inspire private or public institutions to work together to live more sustainably: the programme's biggest highlight.



**TEREZA, Educational Centre** Educational centre TEREZA, Haštalská 17 Praha 1, 110 00

# Denmark

Danish Outdoor Council

National Operator: Karen Præstegaard Hendriksen

Country size: 42,933 km<sup>2</sup> Population: 5.7 million Longest river: Gudenå 149 km Joined Eco-Schools in 1994 Number of Eco-Schools: 250



### National animal:

Mute Swan (national bird) and Small Tortoiseshell (national butterfly)

### National tree:

European Beech Fagus Sylvatica and Pedunculate Oak Quercus Robur

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#### **National Legislation**

Danish school legislation has several acts that support Education for Sustainable Development (ESD). The Danish "Folkeskole" constitutes the free, public school system, as well as the individual municipal schools. At the national level, the Danish Folkeskole is regulated by the Folkeskole Act, which provides the overall framework for the schools' activities.

The formal and overall aim of the Folkeskole Act, as declared by the Danish Government, can be summarised in three points. Firstly, the Folkeskole, in cooperation with the parents, provides students with the knowledge and skills that will prepare them for further education and training and instil in them the desire to learn more; familiarise them with Danish culture and history; give them an understanding of other countries and cultures; contribute to their understanding of the interrelationship between human beings and the environment; and promote the well-rounded development of the individual student. Secondly, the Folkeskole endeavours to develop the working methods and create a framework that provides opportunities for experience, in-depth study and allows for initiatives so that students develop awareness, imagination and confidence in their own abilities and backgrounds, so that they are able to commit themselves and are willing to take action. Finally, the Folkeskole prepares students to be able to participate, demonstrate mutual responsibility and understand their rights and duties in a free and democratic society. The daily activities of the school must, therefore, be conducted in a spirit of intellectual freedom, equality and democracy.

By means of this Act and the Executive Orders it contains, all municipal primary and lower secondary schools share a common aim, standard requirements concerning the subjects taught, standard regulations concerning the common objectives for the teaching in the individual subjects, as well as standard regulations concerning the leadership and organisation of the school system. However, it is the responsibility of the individual municipal boards to determine how the municipality's schools are to be organised in practice, within the framework established by law. The municipal boards themselves determine the municipal level of service for the Folkeskole within this overriding framework and can set their own additional objectives for the schools.

There is the freedom to allow for each Danish school to incorporate their own local characteristics. Therefore, schools can choose to have nature or sustainable development or "a green profile" as their individual characteristics, which is a great match with being an Eco-School.

#### K-12 Education

Each subject in the Danish schools has its own curriculum. Sustainable development is part of the curriculum in some of the subjects in the Danish Public Schools – mainly in the STEM subjects e.g. nature/technology in grades 1-6, food science in grades 4-7 and biology, geography, physics/chemistry and social science in grades 7-9 and in some electives classes.

#### **Professional Development**

In Denmark, teachers have different opportunities for professional development offered by university colleges, universities and different organisations, like the Danish Outdoor Council (DOC). To learn more about sustainability, they can attend Continuing Professional Development (CPD), as shorter brush-up courses offered by municipalities or organisations are without ECTS, and therefore not qualifying within the academic system. Within the academic system, they can specialise in a new subject (e.g. biology or geography) to acquire the competences to teach the subject. They can also take postgraduate courses or a full Master's Degree e.g. in Pedagogical Sociology.

### THE STORY OF ECO-SCHOOLS

The history of the Eco-Schools programme goes way back. Many people believe that the concept was developed during the first UN conference on the environment taking place in Rio in 1992. In fact, the principle was already on the agenda in 1972, at the Stockholm UN Conference on the Human Environment, when the world had already started to acknowledge that pollution was a problem for the planet. Denmark, already then, had the Ministry of Pollution Combating (today Ministry of Environment). At the Stockholm conference, one of the recommendations was that future generations should learn to take care of the environment.

Another conference was held in Tbilisi in 1977 with Environmental Education (EE) as the sole point on the agenda. The Danish Outdoor Council was represented at the conference. In 1987, FEEE (then Foundation for Environmental Education in Europe) was founded. Four countries were involved in the formation of FEEE: Spain, Germany, France and Denmark. In 1992, the former CEO of the Danish Outdoor Council received a visit from the Municipality of Copenhagen and an environmental organisation called Coast Watch, who both wanted to make a programme for schools for them to become more environmentally friendly. The Danish Outdoor Council wanted to be part of the project and all three organisations, therefore, created one programme which they called Green Flag Green School. The Municipality of Copenhagen ran the pilot phase in the East of Denmark and Coast Watch, which was based in Jutland, ran it in the Western part of Denmark. In 1992, the Municipality of Copenhagen assigned the full coordination of the programme to the Danish Outdoor Council. In 1992 and 1993, the first Eco-Schools pilot project saw the light of day and the Danish Outdoor Council brought the idea of Green Flag Green School to FEEE. The idea was to call the programme Green Flag - just like Blue Flag. After certain considerations regarding potential religious connotations, the name was changed to Eco-Schools.

Shortly after the pilot phase, Rønnebæk Skole in the Municipality of Næstved got on board and became the first school in Denmark to receive a Green Flag. Today the school is called Kobberbakkeskolen afd. Rønnebæk. In September 2019, the school celebrated the Eco-Schools 25th anniversary as part of the programme!

As soon as the programme was established, the strategy in Denmark became to involve the top administration in the municipalities. Thus, instead of sending the flag to the school, the Danish Outdoor Council sent – and still sends – the flag to the school's municipality mayor. The awarded school then invites the mayor to attend the flag-raising ceremony, which gives a special boost to the event. Today, many municipal politicians have agreed that all municipal schools should join the programme.





The programme started with primary and lower secondary schools, which still form the largest group of participating schools. However, it has also expanded into high schools, vocational schools and university colleges, though not to the same extent. The DOC believes that the programme supports students' community involvement and changes their understanding of the environment. The DOC has achieved a synchronous development of the Eco-Schools programme and the development of society, moving from from EE to ESD. We look forward to seeing where the programme will take us in the next 25 years!

#### **KEY MILESTONES**

Over the years, the Eco-Schools programme has been financially supported by the Ministry of Education and the Ministry of Environment. In 2012-2016, it was financially supported by the National Centre for Learning in Science, Technology and Health in Denmark. During this period, the DOC had to introduce a small participating fee to register with the programme. After 2016, this fee had to be raised. At the time, it was unclear how this change would be received by the schools, and a big member loss was expected. Surprisingly, almost none of the schools left the programme and new members kept joining. In Denmark, there are now Eco-Schools in 72 municipalities, which makes up a 70% of all Danish municipalities. Many of the participating schools have been part of the programme for 10 years or more. That we have developed a programme that is still attractive for schools to be a part of year after year is a great achievement.

## **NATIONAL OPERATOR - REFLECTIONS**

My organisation has been part of the development of Eco-Schools for the last 25 years. I have been part of the development for the last five. In that time, I have experienced the commitment from pupils, teachers, headmasters, municipalities and mayors around the country of Denmark, who are committed to engaging the youth in EE and action. It is truly inspiring to be part of the journey of sustainable development; whether it is a school collecting plastic at their local beach and turning it into a big sculpture of an octopus; a school planting a small forest with the 10 most common trees in Denmark so all children at the school will get familiar with them and remember them for the rest of their lives; a school making a stunning school garden from scratch with no funding at all, but goodwill and hard work from teachers, pupils, parents and the local community; schools in which they, after



persuasion from the pupils, have introduced one vegan day a week at their canteen; a school making a "reuse room" where pupils put clothes and toys that they no longer use and can come and collect what they need; or a school totally transforming their system for collecting and sorting waste after the pupils from the Eco Committee got involved.

I love working with each and every one of the schools. It is so inspiring to see how they engage in ESD, how they face their local environmental challenges and what sollutions they come up with. All the Eco-Schools approach the Seven Steps in their own way and it is lovely to see how flexible the programme is to the local context at each school. I usually say that in Eco-Schools we have Seven Steps, but there are 250 ways of implementing them!

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"Back in 1994, we started the programme at Rønnebæk School with some of the pioneers of nature and environment from the Municipality of Næstved. We started working with the themes of water, waste and energy and worked with them intensively for many years. Now the programme has grown and developed a lot. We can see here at the school that the children get the environmental engagement under their skin from early childhood and carry it with them the rest of their lives."

Lisbeth, Teacher, Kobberbakkeskolen afd. Rønnebæk. Lisbeth has been part of the school since the beginning of Eco-Schools back in 1994.

"As part of being an Eco-School, what I like the most is being out in our school garden. I love to sow, water it and wait for it to grow. We grow radish, potatoes and onions. All the pupils from the Eco Committee have been out in the school garden. It is lovely to be outside. You learn in another way and something else than what you do being in the classroom."

Emil, 9 years old, Grade 4 Student, Kobberbakkeskolen afd. Rønnebæk

"I'm proud to be the CEO of the organisation that formed the Eco-Schools programme. Back in the 80s, my organisation developed the idea of Environmental Education with the key principle of engaging the youth of today to protect the planet of tomorrow. And look at it now! Today more than 59.000 schools in 68 countries are involved in the programme. One of the greatest exporting successes of Denmark, if you ask me." Jan Ejlsted, Danish Outdoor Council CEO



# Estonia

Estonian Nature Conservation Society National Operator: Sirje Aher & Eeva Kirsipuu-Vadi

Country size: 45,227 km<sup>2</sup> Population: 1.3 million National animal: Wolf National plant: Cornflower Joined Eco-Schools in 2016 Number of Eco-Schools: 125

Minutes of mindfulness with nature, spring 201



# Longest River: Võhandu 162 km

Võhandu is Estonia's longest river. Part of it is called Pühajõgi (the Holy River) because the water was used to heal different diseases.

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People also thought that it was the home of God Thunder; as Thunder can bring either good or bad weather, one has to be careful not to make him angry with spilling tree chips or other trash into the water. When a mill was built and the flow of water was disturbed, many years of bad weather followed until the mill was demolished. Today, there is a nature protection area around Võhandu river.



#### **National Legislation**

Estonian legislation has several acts that support sustainable development and Environmental Education (EE). Since 1995, Estonia has had the Sustainable Development Act, which establishes the principles of the national strategy on sustainable development and is based on the principles established in the decisions of the UN Conference on Environment and Development in Rio de Janeiro in 1992.

The Act of Preschool states that one of the purposes of a preschool is to offer conditions and opportunities for a child to learn to value the environment. The Act of Education says that one objective of education is to create favourable conditions for the development of the individual, the family, the Estonian nation, including ethnic minorities, economic, political and cultural life in the Estonian society, as well as nature conservation, within the context of the global economy and global culture.

The Basic School and Upper Secondary School Act state that the socialisation of the new generation is based on the traditions of Estonian culture, common European values as stated by the European Union, and the recognition of the main achievements of world culture and research. People who have acquired general education are able to integrate in society and contribute to the sustainable social, cultural, economic and ecological development of the Estonian society.

#### K-12 Education

Estonia has long traditions in teaching about nature and EE. EE and ESD have been a compulsory part of general education since 1996. They are cross-curriculum themes that have to be integrated in every subject. All national curricula for general education, including preschool childcare institutions, basic schools and secondary schools stress ESD. The National Curriculum for Preschool Childcare Institutions sets five learning fields, including the relationship of students with the environment. The national curriculum is ultimately a core curriculum on which each educational institution bases its own curriculum in accordance with the guidelines. Beside cross-curriculum themes, schools can add optional subjects and many schools have themselves chosen or compiled courses on different ESD issues.

The Eco-Schools team in Estonia created learning/teaching material for 15-18-year-old students which covers 35 lessons on the UN Sustainable Development Goals. The material can be integrated into different school subjects or taught in separate learning courses.

#### **Professional Development**

Teachers have a number of opportunities for professional development. They can select in-service courses offered by universities and private organisations. Whole-school development courses and experience exchange are very popular. There are more than 150 EE centres supporting teachers' professional development and offering curriculum-based programmes for children, youth and adults.



# THE STORY OF ECO-SCHOOLS

Estonian Nature Conservation Society joined the Eco-Schools programme in 2016, as there were many environmentally friendly schools and kindergartens willing to join the network. Tallinn Department of Environment supported the idea and financed the participation of Tallinn schools and preschools. EE is a part of the national curriculum thus, in 2018, a number of schools across the country had the possibility to join the programme when the state organisation Environmental Investment Centre decided to finance the management of the programme as a national project.

In September 2017, 19 educational institutions were awarded a Green Flag. Within the first year, 37 educational institutions joined the programme and as of June 2019, there are 123 participating institutions all over the country – out of which most are preschools. The preschool curriculum gives teachers more freedom to choose and integrate topics, and to let children lead the process of learning than in primary schools. Due to frequent meetings and seminars, a good working network was easily created to exchange ideas and experience. In 2016, the coordination of the programme was outsourced to NPO HARED, Training and Development Centre, which has a long term good partnership with educational institutions on ESD and EE. In the autumn of 2019, the coordination is being outsourced to Tartu Nature House.

#### **KEY MILESTONES**

NPO HARED, Training and Development Centre is very happy that in three years the number of participating schools and preschools has grown rapidly, from 37 to 123 in an active network. There are 780 members in the closed Facebook group, where they frequently share information about their school actions. Every day there are stories about children exploring nature, discussing environmentally friendly ways of management, and actions towards a more sustainable future. The most popular topic is biodiversity. NPO HARED finds it very important that children and youth care about nature, can name different species, know their habitats and needs, and see their interconnections and relationships. This helps build the understanding of ecosystem balance and the need of sustainable management in the society - growing food, reusing, reducing food waste, using fewer materials etc.

"Tallinn Kindergarten Rabarüblik has participated in the Eco-Schools programme for three years. During this period, the kindergarten has started to plan its activities in a more conscious way. Teachers have become better in setting goals and evaluating results. Learning subjects have been diversified and teachers can now better integrate environment-related issues with the rest of the curriculum. In addition, the kindergarten now also has a better choice of learning tools. As the environmental consciousness of teachers has increased, children and families are more environmentally aware. Parents have become more interested in the activities and events of the kindergarten because many Eco-Schools activities require their involvement."

Piia Aasmäe, Vice-Principal, Tallinn Kindergarten Rabarüblik

"According to the feedback from schools, the Eco-Schools programme has greatly motivated Estonian schools to work with the Sustainable Development Goals. Estonian pupils enrolled in the programme promote different global environmental issues actively in their school through the formation of pupils' councils and organise thematic events on the topics of reusing materials, circular economy, recycling etc. Tallinn City Government, Urban Environment and Public Works Department value the Eco-Schools programme very much and support the activities in many ways such as consultation, organisation of thematic training for teachers, etc."

Gennadi Gramberg, Head of the Environmental Education Division, Tallinn Urban Environment and Public Works Department

"There are several organisations in Estonia active in Environmental Education for children and youth. The Eco-Schools programme differs with its specific focus and intelligibility for target groups. It is inspiring for all parties involved and its reach is global. Therefore, the Eco-Schools programme was met in Estonia with interest, and to start implementing it was comparatively easy. Our organisation, the Estonian Society for Nature Conservation, considers the Eco-Schools programme as a means to fulfil our founding charter in the field of Environmental Education for children and youth."

Juhan Telgmaa, Estonian Nature Conservation Society Board Member



Good partners and common goals make the work enjoyable!

#### **NATIONAL OPERATOR - REFLECTIONS**

I am very touched by the thoughtful enthusiasm of the teachers and responsible mind of children and youth. They understand very well that it is important to care for the environment and come up with proposals on how to waste less and protect nature. Many schools and kindergarten mow less in the yard to give insects more space and flowering plants the possibility to seed. Some of them keep a 'Darwin's square metre', which is a marked square metre, where one does not mow nor pick any flowers, seeds, etc. to enable research on biodiversity and the growing of species over time. They understand that it is equally important making flowerbeds for butterflies, but also letting nettles, willows and other food plants for caterpillars grow somewhere in the yard.

The other astonishing development is how quickly outdoor education has become a natural part of education in Estonia. We have long cold dark winters, but almost every possibility to learn outside of the classroom is utilised.

The network of National Operators is very supportive. Colleagues from England, the Netherlands and Finland have accepted our invitations to share their experience at our conferences. Together with Latvia, Slovenia and Iceland we started a common project under the Erasmus+ programme, HOB's adventure - Hands-on Biodiversity (HOB), which will take place 2018-2020. Good partners and common goals make the work enjoyable!

#### Highest Mountain: Suur Munamägi 318 m

The highest mountain is called Suur Munamägi (Big Egg Hill).

There are some myths connected to Munamägi and Kalevipoeg, a hero appearing in Estonian national epics. The legend says that Kalevipoeg was tired and wanted to lay down, but the ground under his head was too flat. He, therefore, scooped ground from the left side to the right and by doing so he formed Munamägi (Egg Hill). As the flies were buzzing around him, he turned from side to side, which is how the Vaskna Lake was made. When he got up, the first step he made became Tuulijärv (the Tuuli Lake) and the second Tuhkrijärv (The Tuhkri Lake).

Source: Estonian Literature Museum, The Archive of Estonian National Poetry "Rõuge parish Places and Lores.", Tartu 2001



# Finland **H**

Finnish Association for Environmental Education National Operator: litu Kiminki

Country size: 338,455 km<sup>2</sup> Population: 5.5 million Longest river: Kemijoki 500 km Largest lake: Saimaa 1,393 km<sup>2</sup> Highest mountain: Halti 1,324 m National animal: Brown bear National plant: Lily of the valley Joined Eco-Schools in 1998 Number of Eco-Schools: 312



# National tree: Silver Birch

A school visit to the Finnish partiament to teach Members of Parliament about recycling, 2017

In the old traditions of Fenno-Ugric people, the silver birch was seen as and called the "world tree".

This meant that the tree connected the world of the living humans and the world of their ancestors.



#### **National Legislation**

Environmental Education (EE) is not directly included in legislation but instead, it is included in the national curricula for kindergartens and preschools, primary and secondary schools as well as upper secondary schools.

#### **K-12 Education**

The implementation of EE is guided by the national curricula in K-12 education. In kindergartens, the curriculum includes targets such as strengthening children's relationship with nature, teaching sustainable lifestyle skills and supporting children's participation and community involvement.

In preschools as well as primary and secondary schools, the national curriculum identifies seven interdisciplinary skills that should be included in all school subjects and teaching. One of these seven skills is "participation, active citizenship and building a sustainable future". EE, and especially sustainable lifestyle skills, are also included in the subject-specific goals of most school subjects. Also, the preschool-secondary school curricula identify the "Eco-Social Approach", a concept introduced by the Finnish scholar Arto O. Salonen, as the value basis of school education. In this approach to education, ecological sustainability is seen as the fundamental basis for all well-being on earth, by understanding the ways ecosystem services support life on earth. It also emphasises the need to educate youth to understand that true meaning and happiness in life are derived from

community, belonging, kind actions and friendship, instead of material wealth and consumption that harm the earth.

In upper secondary education, EE is currently less visible, even though concepts such as "active citizenship", "sustainable lifestyle" and "global responsibility" are mentioned as a basis for the subjectspecific learning goals. However, the national upper secondary curriculum is currently being reviewed and the draft of the new curriculum seems to include EE, especially climate education, to a much higher degree.

#### **Professional Development**

Even though EE was included in the very core of the 2014 reviewed pre, primary and secondary school curricula, it has taken time for teachers to get tools to implement these goals. Only in recent years has Education for Sustainable Development (ESD) become a bigger part of teacher training in universities, rather than just a topic in biology and geography teaching. There is also state funding for organisations to provide teacher training in these subjects. However, no large scale EE teacher training has been implemented, except for a few active municipalities. Nevertheless, the Finnish Environmental School SYKLI has provided a special vocational study programme in EE for more than a decade already, resulting in hundreds of graduated "environmental educators". In recent years, SYKLI has also been providing teacher training and support for teachers on outdoor education, which has gained a lot of interest among Finnish teachers.



### THE STORY OF ECO-SCHOOLS

The idea of the Eco-Schools programme was brought to Finland by Finnish environmental educators, foremost Kaisa Pajanen. She first heard about the programme at an EE seminar in Denmark in 1996, after which she found out about the NGO, Håll Sverige Rent, which had just started running the programme in Sweden. Kaisa was inspired by their creative EE materials and by the great enthusiasm of Swedish Eco-Schools students and teachers. She had the feeling that the programme had the exact elements that Finland was in need of: new tools for teachers and students to act together in a participatory, empowering, purposeful and creative way.

Kaisa Pajanen presented the idea of the programme to the Finnish Association for Environmental Education, which then started doing background work in order to bring the programme to Finland. In 1998, the pilot phase of the programme was initiated in the region of Eastern Helsinki, funded by European Commission Regional Development Funds. Essi Aarnio worked as the pilot coordinator and one year later, in the spring of 1999, Finland's first three Green Flags were awarded to the secondary school Myllypuron yläaste and the kindergartens Päiväkoti Kurki and Päiväkoti Neulanen.

After the pilot year, the Finnish Association for Environmental Education received numerous requests from schools across the country, eager to join the programme. Even though future financing was still very insecure, the NGO decided to continue running the programme and accepted new enthusiastic participants from all corners of the country. Within the first year of running the programme nationwide, it had approximately 70 active participants.



### **KEY MILESTONES**

One of the key challenges and achievements of this journey has been providing support and spreading the programme to all parts of a large country despite limited staff resources. In 2001, the programme reached 100 participating schools. In 2008, it reached 200 and only four years later, 100 more joined. The Finnish programme had its 20th anniversary in the academic year 2018-19, which was celebrated in the spring of 2019.

In 2000, the Finnish Association for Environmental Education received the Environmental Award by Kesko, a Finnish market chain, for valuable work towards environmental protection and sustainable lifestyles, as well as WWF Finland's Panda Award.



"Our whole staff is very engaged in and proud of the Green Flag, and Environmental Education is deeply rooted in our values and everyday activities."

Karoliina Silander and Kira-Mia Tuisku, Eco-Schools Coordinators & Early Education teachers, Päiväkoti Neulanen

"I think good global programmes consist of a combination of two elements; doing concrete actions on a local level, and the support and power of a global network. This is where the Eco-Schools programme is excelling. The daily actions happen on a small, local level in schools and kindergartens, but at the same time, the participants know that similar small actions happen every day in the numerous Eco-Schools around the world. So with their small, local actions, the schools are actually all the time participating in a big, global movement!"

Sinikka Kunttu, FEE Finland Director



### **NATIONAL OPERATOR - REFLECTIONS**

The pride and joy children get from being part of the Eco Committee is a unique feature of the programme. It is also impressive to visit longer-standing Green Flag schools and kindergartens and see how deep-rooted sustainability and environmental values are in their everyday work.



Finnish Association for Environmental Education Lintulahdenkatu 10 00500 Helsinki

# France

Association Teragir National Operator: Julie Saturné

Size: 632,733 km<sup>2</sup> Population: 67 million Longest river: Loire 1,012 km National animal: Rooster Joined Eco-Schools in 2005 Number of Eco-Schools: 3,238



# Highest mountain: Mont Blanc 4,810 m

Mont Blanc is the highest mountain in the Alps and the mountain has got this name, which means White Mountain, due to the fact that it is covered by snowfield and glaciers.



#### **National Legislation**

According to successive Ministerial circulars, Education for Sustainable Development (ESD) is one of the main cross-cutting themes for all subjects within the school curriculum.

On 4 February 2015, the Minister of Ecology, Sustainable Development and Energy and the Minister of National Education, Higher Education and Research presented the government's roadmap for ESD. This roadmap provides a development of school trips in nature, organisation of debates on the theme of climate change and biodiversity, implementation of sustainable development approaches in schools and it recalls the challenges and objectives of the implementation of ESD, in connection with the law on energy transition for green growth, the law for the recovery of biodiversity, nature and landscapes, as well as the National Strategy for the Ecological Transition towards Sustainable Development (SNTEDD 2015-2020).

Each regional education authority designates employees in charge of the implementation of the ESD roadmap. Every teacher must contribute to delivering it and a growing number is including references to the 17 Sustainable Development Goals (2030 Agenda). The Ministry of Education also has its own award system for the schools implementing a sustainable development approach.

#### **K-12 Education**

In June 2019, the Ministry of Education set the goal that 10,000 schools should be implementing a global sustainable development project (such as Eco-Schools) by 2022. In 2019, the Ministry also decided that eco-delegates would be elected in each secondary school. There is a growing focus on biodiversity and climate change issues in the curriculum and the schools are asked to implement activities related to biodiversity, like vegetable gardens, composting, birdhouses, hives, etc.

#### **Professional Development**

There is still a need for training and for pedagogical and methodological support, as ESD often implies a personal engagement of teachers. With the growing focus given by the Ministry of Education on ESD, more and more training is being offered to teachers on the subject. Although there is still a lot of space for improvement in capacity building opportunities for teachers, organisations such as Teragir are regularly invited to participate in teacher training to talk about Eco-Schools and ESD.



# THE STORY OF ECO-SCHOOLS

Thanks to funding by CITEO, a waste management company, the involvement of Réseau Ecole et Nature, a national EE network, and the historical links of Teragir with the French institutions, the programme started in 2005 with 55 pilot schools with students aged 7-18. In the school year 2005-2006, 40 schools were awarded the Green Flag at the same time. The Education and Environment Ministries quickly supported the programme, and 200 schools participated in the second year and 400 in the third.

#### **KEY MILESTONES**

Each new sponsorship or partnership has been a milestone. Every year, Teragir educates and trains approximately 100 local partners in the Eco-Schools methodology, to be able to support the participating schools in their areas. Teragir also established deep connections with many local authorities. The sponsorship of MGEN Group in 2015 has been an essential step to strengthen support for the growing number of schools.

In 2017, Teragir signed a framework agreement with the Ministry of Education to cooperate in the field of sustainability education and promote global sustainable development projects, such as Eco-Schools and Young Reporters for the Environment, as well as to develop both programmes nation-wide. More than 3,000 French schools are implementing the Eco-Schools programme in 2019.

2019 is also a key moment for Eco-Schools in France, with new activities related to the 17 Sustainable Development Goals (2030 Agenda) and the release of a board game aiming to train students in the implementation of the Seven-Step methodology in their school.

Green Flag award ceremony at the Paris City Hall during the Eco-Schools NOM 2017



"From the beginning, what I have cherished about the Eco-Schools programme is seeing children evolve and gain confidence." Anne Rouvière, Teacher and Librarian, Collège Jean Perrin (Le Kremlin-Bicêtre)

"When Teragir proposed that we could support the launch of Eco-Schools in France, its high potential appeared clearly. Since then, 3 million French students identifies the issues and resources of their regions, related to sustainable development. They have learnt to be citizens, how to take care of their environment and each other. It is a major contribution to our work to enhance recycling and circular economy in the country." Séverine Lèbre-Badré, Communication Director, CITEO

"Sustainable development reminds us that we are all connected to the environment, and to each other. The nations of the world have set a common project to reach by 2030 in order to achieve sustainable development through seventeen great goals. It says that no one should stay away from this project. Everyone must be part of it, here in France and all over the world. Eco-Schools is probably the most powerful programme to implement global citizenship and sustainable development in a simple way. All stakeholders are associated: local authorities, parents, teachers, the finance sector. Last but not least, students are central to the project! We don't do it for them, but with them." Thierry Lerévérend, Teragir Director







#### **NATIONAL OPERATOR - REFLECTIONS**

Some of the biggest challenges that we have faced while running the programme in France have been finding funding, creating efficient tools for schools and managing the award process, as well as building a network of NGOs and local authorities able to support Eco-Schools and gaining the government's trust.

The signed agreement between Teragir and the Ministry of Education on cooperation in the field of sustainability education and the promotion of global sustainable development projects was a great recognition of the work of Teragir to implement sustainable development in schools. It also encourages and helps deepen the relations with the French regional education authorities.

Association Teragir 115 rue du Faubourg Poissonnière 75009 Paris

# Germany

Deutsche Gesellschaft für Umwelterziehung/FEE Germany National Operator: Robert Lorenz Green Flag award ceremony at Gut Karlshöhe, June 2019, Photo by Markus Scholz

2019

Country size: 357,386 km<sup>2</sup> Population: 82.7 million Longest river: Rhine 1,232 km Highest mountain: Zugspitze 2,962 m National animal: Eagle Joined Eco-Schools in 1994 Number of Eco-Schools: 780



# National plant: Cornflower

During the 19th century, it was customary for unmarried men and women in Germany to wear the flower in their buttonholes to show their marital status.

by Reiner Mathar

#### **National Legislation**

In 1980, the conference of the Ministers of Education (KMK) made Environmental Education (EE) compulsory for all schools in Germany. In the 90s, the global dimension of development was added, and in 2005 the first curriculum framework for Education for Sustainable Development (ESD) was decided by the Ministers of Education, followed by an extended version including the Sustainable Development Goals (SDGs) in 2016. This has become the basic curriculum for all German schools, as it was signed by all 16 Ministers and given to the schools as a guideline for ESD. Following the federal structure of the German education system, the concrete practice differs within this framework in the 16 states. Beside these regulations on ESD, Germany has a national strategy for sustainable development which is conceptualised on the state level; some communities have their own strategies. The national and state legislation very often include funding schemes for ESD by the Minister of Education and the Minister of International Cooperation.

#### **K-12 Education**

Germany has a long tradition of nature and EE as well as global citizenship education and ESD. All these different strands were integrated into a holistic concept for ESD at the end of the 90s. Following the federal structure of the whole education sector with the main responsibility on the 16 states level, the concrete practice differs, but all have integrated ESD as a cross-curricular topic for all educational institutions from kindergarten to upper secondary level and university education. The curriculum framework focuses mainly on competence development in the field of sustainable development and includes examples for primary education, lower secondary and even vocational education and training for all subjects in schools. All states support the development on school level by running school networks for ESD (Eco-Schools, Schools for the Future, Sustainable Schools, FairTrade Schools, Schools for democracy/non-violence and Global Schools). Most of those networks are supported by regional centres of expertise or NGOs to center the exchange of practice among schools and offer project development, including elements of a whole-school approach.

#### **Professional Development**

Teachers have good opportunities for professional development in Germany. ESD is part of the basic teacher training at the university and the didactic trainings within the first steps into teaching practice as well. ESD is part of in-service training run by local educational authorities, NGOs and regional ESD training centres.

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme started in Germany in 1994. Three German states started implementing it at the same time and in the following years more and more states followed their example. The German programme focuses on all school levels, except for kindergarten. An annual conference is organised for the regional Eco-Schools Coordinators, where they select three themes that Eco-Schools are encouraged to work with.



Deutsche Gesellschaft für Umwelterziehung e.V. / FEE Germany Goethestraße 64, 99096 Erfurt

# Iceland 🕂

Landvernd, Icelandic Environment Association National Operator: Katrín Magnúsdóttir

Country size: 103,000 km<sup>2</sup> Population: 356,900 Highest mountain: Hvannadalshnjúkur 2,110 m Joined Eco-Schools in 2001 Number of Eco-Schools: 180





# Longest river: Thjorsa river 230 km

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In Thjorsa, there are two islands called Tröllkonuhlaup (the Giantess Stepping-Stones)

The legend states that a female troll or giant lived in a cave by the river in a mountain called Búrfell. Wanting to cross the river without getting wet, she threw boulders into the Thjorsa river as stepping-stones.



#### **National Legislation**

The Ministry of Education, Science and Culture creates national curricula that follow legislation relevant to all school levels (including the Pre-primary Schools Act No 90/2008, the Compulsory School Act No 91/2008, and the Upper Secondary School Act No 92/2008). The legislation stipulates that education should promote individuals' duties to their community, the environment and the world. It should also promote "physical and mental well-being, a healthy lifestyle and a responsible attitude to living beings and the environment" (91/2008).

The National Curriculum (2011) prescribes that all schools in Iceland, from pre-school to upper secondary levels, build on six fundamental pillars of education. These are sustainability, equality, democracy and human rights, health and welfare, creativity and literacy. The educational ideal of action competence underpins the six pillars in the national curriculum. The decision to emphasise the action competence approach and the six fundamental pillars was based on a long tradition of democracy and citizenship education combined with Environmental Education (EE) and Education for Sustainable Development (ESD). The Ministry created the 2011 curriculum through a collaborative, creative process with several committees of stakeholders and experts. The 2011 curriculum can be seen as representing a shift from a more prescriptive curricular approach to a more descriptive curricular approach, in which the curriculum should serve as an idealistic guiding light for schools to take inspiration from. Schools are audited by the Ministry of Education, Science and Culture and evaluated on their implementation of the national curriculum.

#### **K-12 Education**

Based on the national legislation, the focus in the national curriculum defined by the Ministry of Education, Science and Culture for preschools, compulsory schools and upper secondary schools has been on action competence and sustainability education rather than EE. Sustainability education has, since 2001, been a cornerstone in the national curriculum. Furthermore, sustainable development is one of six fundamental pillars defined in the national curriculum along with equality, democracy and human rights, health and welfare, creativity and literacy.

#### **Professional Development**

Since 2014, people attending the Master of Education (M.Ed.) programme at the University of Iceland have to complete a 5 ECTS course focusing on education for sustainability.

Landvernd has been a leading organisation in improving the professional skills of teachers in regards to sustainability education. Once a year, the organisation offers conferences and in-service professional development courses focusing on sustainability education and which are open for all teachers participating in the Eco-Schools programme in Iceland. These have served to improve the professional skills of teachers as well as to inspire and invigorate the Eco-Schools' work in Iceland. Furthermore, Landvernd has in the past years, been efficient in developing and publishing material for teachers focusing on the Eco-Schools programme, sustainability education and EE. The material is available online and accessible to everyone. Landvernd aims to continue being a leading organisation in sustainability education in Iceland and has plans to develop more material and courses in this field.

#### THE STORY OF ECO-SCHOOLS

Landvernd, Environmental Association of Iceland, became a member of FEE in 2000. Already then, the aim was to become a leading organisation in EE in Iceland. The same year, Sigrún Helgadóttir, a natural scientist and teacher, was employed to facilitate the inauguration of Eco-Schools in Iceland. One year later, in 2001, Landvernd started running the Eco-Schools programme and the first schools started the programme in Iceland. Only one year later, on 27 May 2002, Selás school in Reykjavík was awarded Iceland's first Green Flag.

Some of the partners involved in the initiation process of the programme were the Ministry of Environment and Natural Resources, the Ministry of Education, Science and Culture, the Icelandic Institute of Natural History, the Directorate of Education, and the Environment Agency of Iceland. A delegate from each of these partners along with a kindergarten teacher, an elementary school teacher, an upper secondary school teacher and the National Operator of Eco-schools in Iceland, formed the first Steering Committee of Eco-Schools in Iceland and helped facilitate the inauguration of the programme.

The first schools to join the programme were Fossvogur school, Langholts school, Selás school and Selja school in Reykjavík, Linda school in Kópavogur, Engidalur school in Hafnarfjörður, Borgarnes school in Borgarnes, Borgarfjörður school in Hvanneyri, Snæfellsbær school in Lýsuhóll, Hallormsstaður school in Hallormsstaður, Mýrdalshreppur school in Vík, and Þjórsá school in Skeiða- and Gnúpverjahreppur.

### **KEY MILESTONES**

The biggest highlight is certainly having expanded from 12 to almost 200 schools, which is nearly 50% of all schools in Iceland at all school levels from preschool to university. In the last five years, Landvernd revamped the programme to be more student-centred, and to guide schools towards taking on more complex and impactful themes like global citizenship, climate change and biodiversity. To this end, Landvernd has developed a number of resources for schools and worked with schools to create learning materials. A course for upper secondary schools has been developed where the programme within the schools is almost entirely student-led. The book "Á grænni grein" (2017), which translates to "On a Green Branch", gives a good overview of the programme and its themes, and is available in Icelandic online. Furthermore, Landvernd has developed learning material about land restoration, ocean literacy, waste reduction and food waste, etc.

Conferences and in-service professional development courses are held annually and serve to inspire and invigorate the Eco-schools' work in Iceland. Eco-Schools students have held speeches at the Environmental Summit of the Ministry for the Environment and Natural Resources twice in 2014 and 2018. Eco-Schools have also many times received the annual award "Guard of the Environment" by the Ministry of Environment.

"Environmental Education and Education for Sustainable Development are the cornerstones of any successful environmental strategy. The Eco-Schools programme has been implemented in Iceland for nearly 20 years and has increased awareness, action and love for the environment and our beautiful nature. Eco-Schools are now, more than ever, important in helping to foster understanding and action in the necessary reform of our societies in the wake of the climate emergency. Congratulations FEE and Eco-Schools around the world!"

Guðmundur Ingi Guðbrandsson, Minister of Environment and Natural Resources

"The Eco-Schools programme is our flagship programme. At Landvernd we have been, through Eco-Schools, able to reach a whole generation of Icelanders that are now growing up to be environmentally conscious action takers. Eco-Schools is not only instrumental in improving the way we think about our environment, but it also plays an important role in training young citizens in methods of democracy, critical thinking and taking action."

Auður Önnu Magnúsdóttir, Landvernd CEO



# **NATIONAL OPERATOR - REFLECTIONS**

As the programme grows we are facing new challenges. One of the most prominent challenges we are facing is that schools that have been in the programme for many years lack the capacity to go deeper into more complex themes such as climate change, biodiversity and global citizenship. Thus, the focus has been on these schools when developing new material. We have also held workshops at our conferences and inservice courses for schools struggling with these issues.

As a personal highlight, I can mention the growing awareness of environmental issues and sustainability in the past years. Especially the students have become more aware and more eager to take action and show initiative in tackling the serious challenges the world is facing. By participating in the programme they are given the tools to take action and become more responsible and active citizens.

> Landvernd, Icelandic Environment Association Guðrúnartún 8 105 Reykjavík

### Highest mountain: Hvannadalshnjúkur 2,110 m

Hvannadalshnjúkur is positioned in Vatnajökull glacier, which is the largest glacier in Europe. It is located in Vatnajökull National Park, the biggest national park in Europe.

# National plant: Mountain Avens flower (Dryas Octopetala)

According to folklore, the plant has the ability to attract money through witchcraft and is hence also called a 'thief's root'.



# Latvia -

FEE Latvia National Operator: Daniels Trukšāns / Ilze Rusmane

EE General Assembly, 2018

National animal: the White Wagtail and the Two-Spot Ladybird

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Country size: 64,589 km<sup>2</sup> Population: 1.9 million Longest river: Gauja 452 km Highest mountain: Gaiziņš 311 m National tree: Oak and linden Joined Eco-Schools in 1998 Number of Eco-Schools: 213



#### **National Legislation**

Environmental Education (EE) is referenced in national legislation and must be included in all programmes as per Regulations of the Cabinet of Ministers. For instance, according to Cabinet regulation No. 716 Article 6(4), a preschool must provide the opportunity for their students to participate in conservation and protection of the environment in the school grounds, as well as to learn to make decisions and to take responsibility for their actions.

#### **K-12 Education**

Similarly, EE and sustainability topics must be included in all programmes from preschools to high schools within compulsory education in public (state-funded) schools. The standards of high school education aim to encourage students' active participation in sustainable development in their community by integrating environmental topics in the curriculum.

#### **Professional Development**

FEE Latvia runs its own course for teachers entitled "Environmental Education in Schools Based On a Competency-Oriented Approach and the Principles of the Eco-Schools programme".

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was introduced along with the four other FEE programmes in 1998. FEE Latvia, in cooperation with the Ministry of Environmental Protection and Regional Development of the Republic of Latvia, launched a successful pilot programme in Kuldiga Municipality, which then inspired other municipalities to join the programme. The first Green Flag in Latvia was awarded to Renda Primary School in 2004.

The Eco-Schools team is always full of ideas, but often does not have the capacity to fulfil all of them. The team, as well as the teachers involved on a voluntary basis, make the most of the programme with the available resources. Institutional state support has continuously been an identified need. However, FEE Latvia collaborates with the Ministry of Environmental Protection and Regional Development of the Republic of Latvia, which provides financial support annually. FEE Latvia helps teachers find ways to promote their work and achievements in their municipalities to receive more support.



## **KEY MILESTONES**

Some of the highlights in the programme have been the international collaboration, projects and experience exchange for the schools, such as We Eat Responsibly, as well as the increased activity, public reach and creative solutions for annual Global Action Days.

### **NATIONAL OPERATOR - REFLECTIONS**

From the feedback we get year after year and from the good practices we have observed at schools, we gather that the Eco-Schools programme indeed provides strong support for both formal education and local development. The high-point for the programme is that every school understands and appreciates it – even more so now that the school system is changing at the national level. For those involved in the Eco-Schools programme it has proven easier to adapt and understand the new goals and methods as they follow very similar principles: collaboration, teamwork, learning by doing; project-based learning, problem-solving, critical thinking, real-world experiences etc.

In these 17 years, we have seen numerous examples that highlight the immense value of the work of our schools. We feel that EE is a universal tool that promotes sustainable development and helps students develop 21st-century skills and responsible attitudes. It sparks the motivation to take action. An Eco-School is a platform where students develop critical thinking skills and the ability to cooperate. They learn to take an active role in solving various issues of their own and their community.

"Since our school joined the programme, I have noticed many positive changes in our habits and in the mindsets of both myself and other school staff members. We feel that our decisions and actions do actually have an impact and that we can spread our good examples by involving other people from our community in our activities. Our successes also put a certain pressure on the community as a whole to think more about sustainability. For the school staff, the opportunity to develop collaborations and friendships with other schools is highly valued as all the good practices and ideas can be pooled together. Another important aspect is that the Eco-Schools programme has given us a chance to participate in many local and international projects where teachers can exercise their creativity and learn about interesting examples from elsewhere. The Green Flag status also helps our visibility and is definitely something all schools are proud of."

Aija Pundure, Amata Primary School – one of the first schools to be awarded a Green Flag in Latvia

"It's not just education that the Eco-Schools programme is about. It inspires, engages and excites, proving that it is indeed a catalyst for youth initiatives in environmental protection, as well as the promotion of sustainability and civic engagement. Students learn from each other, bring their knowledge home and ultimately become exemplars in their local communities. More often than not the road to a better future starts with seemingly small everyday actions that anyone can take on. I am happy to see that Eco-Schools foster a generation that truly understands the need for these actions."

Janis Ulme, FEE Latvia Head



**FEE Latvia** Lapu iela 17, Riga



## Lithuania.

Lithuanian Green Movement National Operator: <u>Renaldas Rimavicius</u>

Country size: 65,300 km<sup>2</sup> Population: 2.7 million Highest mountain: Aukštojas hill 293 m National tree: Lime tree Longest river: Nemunas river 475 km in Lithuania, 937 km in total Joined Eco-Schools in 2004 Number of Eco-Schools: 89



## National animal: Stork

The White Stork is a national bird of Lithuania. The stork has been regarded as a sacred bird, a mythical predecessor, a protector who brings happiness, prosperity, justice and the guardian of the heaven seal. It is believed to be able to take human diseases and leave them in the swamps and it has, therefore, been considered as the dearest neighbour of the homestead, bringing happiness to the home. Folklore also says that the stork brings children.

From the wintering grounds, white storks come back to Lithuania around 25 March. Hence, ancient Lithuanians called this day "Blovieščiai", and celebrate the return of the storks.



#### **National Legislation**

In April 2015, the Lithuanian Parliament approved a new National Strategy of Environmental Protection. The strategy identifies four key areas for long-term environmental policy to be implemented by 2030. These are: sustainable use of natural resources and waste management, improvement of environmental quality, preserving of ecosystem stability, adaptation and mitigation of climate change issues.

The strategy states that participation of society is one of the basic factors in implementing the strategy successfully. Different ways of community involvement are described, including the integration of environmental and sustainable development themes into the various formal and non-formal education programmes. A programme like Eco-Schools, which involves schools and communities in environmental activities, therefore helps to implement the strategy.

#### **K-12 Education**

Natural science education is a part of secondary education approved by the Ministry of Education. In schools, Environmental Education (EE) is included in subjects such as global citizenship, nature and human in grades 5-6, and in natural sciences in grades 7-12.

A number of municipalities work with informal environmental schools or centres. Pupils from formal schools are able to participate in these centres and activities on environmental and sustainability topics every week throughout the academic year. Panevezio Nature School, one of these centres, has been participating actively in the Eco-Schools programme for years. National governmental bodies are also running some EE related activities through, for instance, the Lithuanian Centre for Non-Formal Youth Education.

#### **Professional Development**

EE is included in environmental study programmes at the university level, e.g. in Environmental Science, Environmental Management, Environmental Engineering, Environmental Management and Protection of the Environment, as well as in some pedagogical studies.

## THE STORY OF ECO-SCHOOLS

When Lithuanian Green Movement decided to start the Eco-Schools programme in Lithuania, the environmental departments of different local governments were asked for recommendations of schools actively working in the environmental field. Following these recommendations, some schools were invited to join the programme.

The Eco-Schools programme started in 2004 and 12 schools from ten different municipalities were involved. In May 2005, Triskoniu Basic School in the Pakruojis district became the first school in Lithuania to be awarded a Green Flag. Over the years the number of schools participating in the Eco-Schools programme increased. 75 schools were awarded the Green Flag in 2019. Today, kindergartens, primary schools, basic schools to pre-gymnasiums, gymnasiums, vocational schools and informal EE schools are involved in the programme. In September 2019, Siauliu Special Education Centre joined the programme.

## **KEY MILESTONES**

The Eco-Schools programme has helped establish and strengthen cooperation on environmental topics among schools in the same city or region, and among other stakeholders, like local state services of protected areas, local authorities, local forest industries, and local waste management bodies.

"We started with the Eco-Schools programme at Panevezio Alfonso Lipniuno Pre-gymnasium (at the time, Alfonso Lipniuno Secondary School) in 2004. I have been involved in Eco-Schools activities for thirteen years, and there are only good things I can say about the programme. Students themselves have organised activities, discussed successes, even some failures. The motivation of the pupils increased to participate in environmental activities in general, and a lot of practical work (observations, research, actions) has been implemented. Cooperation with other schools increased through various events, actions, conferences, and the school itself has become more known and visible. I am really glad about being involved in a programme like Eco-Schools. Better relationship with students, a different environment of communication and experiences."

Janina Morkeviciene, Former Biology Teacher and Supervisor, Panevezio Alfonso Lipniuno Pre-Gymnasium "I am very happy that the Eco-Schools programme is running in Lithuania. When we started Eco-Schools in 2004 I believed that the programme would bring a lot of benefits. And it is always great to see school communities after the summer vacation actively backing programme activities."

Rimantas Braziulis, Lithuanian Green Movement Chairman

Lithuanian Green Movement I. Kanto str. 6, Kaunas





## **NATIONAL OPERATOR - REFLECTIONS**

The Eco-Schools programme's financial situation is always a big challenge and the Lithuanian Green Movement feels a lack of support from national governmental bodies.

But the widespread involvement in environmental activities, school communities as well as local communities has been a key achievement of the programme. In my experience, students' understanding and knowledge of environmental protection in Eco-Schools is greater when compared to students in non-Eco-Schools.

# Netherlands

SME Advies

National Operator: Hak van Nispen

Country size: 42,508 km<sup>2</sup> Population 17 million Longest river: Rijn 1,233 km Highest mountain: Vaalseberg 322 m Joined Eco-Schools in 2013 Number of Eco-Schools: 163 Other FEE programmes: IVN for LEAF, YRE and KMVK for Blue Flag, Green Key



### National animal: Godwit

The Godwit is called 'grutto' in Dutch, because that is the sound the bird is making. About 80% of the world's godwit population is living in the Netherlands in the summertime. With their long beak they can easily find small worms in the wet grounds of the country.

Green Flag Stellegors, 2011

## National flower: Tulip (unofficial)

Though not an official symbol of the Netherlands, perhaps no one item symbolises the country more succinctly than the tulip, as the Netherlands produces approximately nine billion flower bulbs annually.



### **National Legislation**

The Netherlands has a long history of Environmental Education (EE) and Education for Sustainability policies, which began with the European Year for Nature Conservation in 1970. The first policy advice specific to EE in the Netherlands was released in 1975, the first national EE act was passed in 1988 and the first multi-year EE action programme was initiated in 1992. With its first national EE policy enacted in 1988, the Netherlands has a long and rich history of using EE as a key strategy in addressing environmental issues. By positioning EE as a platform for forging relationships and building capacity, the Netherlands' government facilitates a "learning society" to assist individuals and institutions in addressing key issues through education and sustainable practices. National policy also supports new forms of monitoring and evaluation for the country's prominent EE programmes, such as Groen Gelinkt, a web hub that offers teaching materials and information about EE and sustainability.

The sustainability topic was introduced into EE in the Netherlands in 1999. During the UN Decade for Sustainable Development, the Netherlands released two separate policies: one for EE and one for Education for Sustainable Development (ESD). The two policies converged in 2013 under the country's Duurzaam Door programme.

### **K-12 Education**

K-12 educators in the Netherlands can access EE resources through Groen Gelinkt, an online search system that allows educators from primary schools, secondary schools, and afterschool programmes to locate EE resources by topic and audience. Sustainable Teacher Education for primary school programmes (PABOs) offer support for schools in initiating sustainability projects. Sustainable Chain Gang (VO) provides a network for secondary schools to support one another in sustainability education efforts.

#### **Professional Development**

The Netherlands facilitates national education networks for sustainability in higher education and vocational practices to lobby at all levels and achieve key objectives for engaging students in sustainable development curricula, research, and practice. Sustainable PABOs supports environmental educators by offering professional learning opportunities through conferences, lectures and workshops, newsletters with tips and activities, and online resources. It also supports teacher training colleges and primary schools in learning to use PRISE (Primary Sustainable Education), an assessment and evaluation instrument for ESD in primary education.





## THE STORY OF ECO-SCHOOLS

The National Tourism Organisation, ANWB, was responsible for Blue Flag and in 2003, Henny Kromhout from ANWB/FEE asked Hak van Nispen from SME Advies to implement Eco-Schools in The Netherlands. At first, SME Advies was not convinced to participate because the organisation already had thousands of educational packages and activities offered to schools. SME tried the educational material within the theme of energy saving. No more convincing about the process and the philosophy of student-led change was needed - this was the right way to go!

## **KEY MILESTONES**

Without any support from the government, finances have been and will be a problem. At the moment, participating schools pay registration fees, sometimes with the support of the municipality. It would be a great development if the government or a fund would support the programme with the financial and human resources to implement it. In spite of lacking this, Eco-Schools is mentioned as an excellent example in many publications, in governmental policies and in scientific research. In 2015, 100 Eco-Schools were participating in the Dutch programme and only three years later, in 2018, the number increased to 150 Eco-Schools. SME has been cooperating with more than 128 EE centres in the Netherlands for local support of the schools since. Furthermore, 100 Eco-Schools have achieved the bronze certificate in 2019 and over 15 municipalities support the Eco-Schools programme.

"Rain, we've got plenty of it. Let's collect it and use it to flush our toilets" **Director, Primary school De Molenvliet** 

"Eco-Schools is an excellent example of how to develop sustainability in schools. It helps schools find their way towards sustainable change, instead of delivering education that focuses on knowledge transfer only. Student-led change gives a school a new perspective on education." Roel van Raaij, Ministry of Agriculture, Nature and Food Quality

"Eco-Schools is excellent and difficult at the same time. In the Netherlands, education is decentralised and liberalised, so schools are responsible for the way they offer education to students. There are many parties that want to offer their content to the schools for free. So it is difficult for schools to make a selection, therefore many teachers stay with the formal methods of educational publishers (the books). A long term process programme like Eco-Schools is different and schools have to pay for support. Schools are getting used to it and when they participate they are happy to see the changes and show it to others." Hak van Nispen, SME Advies CEO



## **NATIONAL OPERATOR - REFLECTIONS**

The cooperation with the local EE centres and municipalities on the local support of schools has been a highlight. These stakeholders know schools best, therefore they can really support them, which has been a unique feature in the Dutch programme.



# Norway

The Foundation FEE Norway National Operator: Sigrid Hungnes

Country size: 385,207 km<sup>2</sup> Population: 5.3 million Longest river: Glomma 621 km National flower: Purple heather National animal: Fjord Horse and White-Throated Dipper Joined Eco-Schools in 1999 Number of Eco-Schools: 965



## Highest mountain: Galdhopiggen 2,469 m

The question about which mountain peak is the highest in Norway has raged for decades. Some believe it to be Glittertinden others that it should be Galdhøpiggen. The debate comes down to one question: Should the ice count?

Galdhøpiggen has always been the highest with its 2,469 metres, against Glittertindens 2,452 metres. But because Glittertinden has had a large ice cap on the top, it was measured to be 2,472 metres high in July 1965. But since the glacier on the summit of the Glittertind is soon gone, this is no longer the case...



#### **National Legislation**

In 2017, Norwegian kindergartens received a new national framework plan. In this framework plan, the Sustainable Development Goals (SDGs) are highlighted as vital in childhood education and that the SDGs should be actively addressed in Norwegian kindergartens. In Autumn 2020, a new subject curriculum will take effect in Norwegian schools. This new curriculum can potentially be ground-breaking as it creates a framework for action-based learning that involves students in deep learning processes, introduces increased student participation and promotes interdisciplinary work on sustainable development.

#### **K-12 Education**

Norwegian schools are still very much focused on theory and classroom-based teaching. The Eco-Schools programme provides a useful framework to ensure a good Education for Sustainable Development (ESD) and Environmental Education (EE) through a more Problem-Based Learning approach. FEE Norway hopes that there will be great progress in this field when the new curriculum in schools is introduced in 2020. EE has a more prominent role in this new curriculum.

#### **Professional Development**

In Norway, EE is increasingly considered a relevant part of teacher education. For schools and kindergartens which would like to develop their environmental focus further, there are several courses during the year which they can attend. There is also a wide range of resources which is either available online or can be ordered free of charge, developed for teaching children and youth about sustainable development and the environment. It is also possible for kindergartens and schools to apply for project funding that they can use on specific projects on topics regarding nature, particularly projects emphasising outdoor education. This grant is highly accessible, and schools and kindergartens that are awarded project funds are invited to participate in networks with other schools, as well as attend seminars and workshops.

To date, approximately 1,000 Norwegian schools and kindergartens are Green Flag certified and several municipalities have now agreed that all schools and kindergartens in their area should be part of the Eco-Schools programme. In addition, increased public interest for environmental issues combined with the new school curriculum creates great potential for the further development of Eco-Schools in Norway.

In 2017, Borhaug School was awarded the Green Flag after being part of the Alcoa W3 project. The picture shows the Eco Committee receiving the Green Flag together with the school principal, the mayor, and representatives from school staff, Alcoa Foundation and FEE Norway.

## THE STORY OF ECO-SCHOOLS

Jan Brataas, the founder of the Foundation FEE Norway, approached FEE with a request to run the FEE programmes in Norway. FEE Norway started with Blue Flag and was not aware that the Eco-Schools programme existed. The organisation soon became familiar with Eco-Schools and realised that the programme could have a lot of potential in Norway. The programme started in 1999.

FEE Norway also established a collaboration with the Norwegian Ministry of Church and Education who were keen to support this new programme. The Church and Education Minister was present at the first Green Flag accreditation ceremony in Norway in 1999, where Nesheim School in Arendal was awarded a Green Flag.

## **KEY MILESTONES**

In 2000, the two major counties of Nord-Trøndelag and Sør-Trøndelag joined the Eco-Schools programme. Following this, four of the most populated municipalities in Norway also joined the programme. One of the greatest challenges has been a lack of time and resources for teachers in Norwegian schools to prioritise the great, but not obligatory, initiatives.





"We are very pleased with the Eco-Schools programme. Being a part of the programme has helped us to approach our environmental work in a more structured way. This is exactly what we needed as we have worked with environmental issues for several years without having a structure or clear direction."

Pedagogical Leader, Green Flag Kindergarten Tommlekollen Friluftsbarnehage

"For us in Trondheim municipality, Eco-Schools is the motor that starts Environmental Education in the municipality's schools and kindergartens, and that continues to evolve the quality of this work year after year. Eco-Schools inspire and motivate both students and teachers to focus on the environment and sustainable development in their everyday life at school and in practical projects. We are proud of the great collaboration we have created between certified schools, kindergartens, the municipality as well as many other local stakeholders in the municipality's strategic work for sustainable development."

Bjørn Arild Silseth, Trondheim Municipality

"Eco-Schools is by far the largest programme that FEE Norway runs, and also the one we are most proud to be involved in. Despite the fact that ESD in the Norwegian school system is far from excellent, we are very proud of the effort made by students and teachers in the Norwegian Eco-Schools and the work of our dedicated contacts in municipalities and counties, that work very hard to promote the Eco-Schools programme and support certified schools and kindergartens. Eco-Schools provides a simple, but genius framework and methodology for continuous Education for Sustainable Development, and our experience from running the programme in Norway for 20 years now is that it is becoming more relevant day by day. FEE Norway is very hopeful that in the next 25 years all of Norwegian schools and kindergartens, municipalities and counties will already know what a unique, powerful and engaging tool our programme can be."

Marit Kjellesvik, Foundation FEE Norway CEO

## Highest mountain: Galdhopiggen 2,469 m

...The latest official survey from the authority responsible for mapping this came out in September 2017. It shows that the snow cover at the top was 2,457 metres above sea level, 15 metres lower than in 1965. Since then, the ice cover has decreased further and there is now only a thin ice cap left.

This does not only mean that the race between Galdhøpiggen and Glittertinden has been decided but also that future discussion should not be about which mountain is the highest, but rather about the fact that Norway's glaciers are melting.

## **NATIONAL OPERATOR - REFLECTIONS**

I started as National Operator for Eco-Schools in Norway in February earlier this year. For me, a unique feature of the Eco-Schools programme is that the pupils actively initiate and implement environmental measures and positive action in collaboration with local, national and global stakeholders. Being part of, and identifying with, a greater global movement of positive action is empowering and creates hope for a sustainable future. Such optimism and agency are invaluable in a world facing the climate crisis.

The Foundation FEE Norway Postboks 4502 4673 Kristiansand



# Poland

Polish Foundation for Environmental Education National Operator: Jaroslaw Szczygiel

Country size: 312,696 km<sup>2</sup> Population: 38 million Longest river: Wistula 1,047 km Highest mountain: Rysy Mountain 2,499 m National tree: Birch Joined Eco-Schools in 2006 Number of Eco-Schools: 277



## National animal: Eagle

The national coat of arms of Poland is a white eagle with a golden beak and golden crown. The emblem originated when Poland's legendary founder Lech saw a white eagle and decided to settle and place the eagle on his emblem.



## THE STORY OF ECO-SCHOOLS

The story of the Eco-Schools programme in Poland starts in 2002 when the National Fund for Environmental Protection and Water Management provided a big grant for an Education for Sustainable Development (ESD) project with schools and a programme similar to Eco-Schools was initiated. In 2005, after implementing this other programme for a few years, the organisation approached FEE and the International Eco-Schools Director, who at that time was based in Portugal, to ask if Poland could join the programme. In 2006, the application was approved and the implementation of the programme began. The first Eco-Schools Coordinator in Poland was Malgorzata (Gosia) Luszczek, now International YRE Director. The transition from the national programme to the Eco-Schools programme ran smoothly, as the basics of the programmes were similar. In 2007, the first Green Flag was awarded to a primary school in Zawoja Przysłop, Małopolskie Voivodeship.





### **KEY MILESTONES**

The number of schools certified with a Green Flag went from just a few schools to 100 schools and then to 300. The Eco-Schools programme became the answer for many, especially rural schools. It became the means for local community engagement in different environmental improvements, not only in schools but also in students' households.

The educational linkages of the Eco-Schools Environmental Review and the professional ISO 14001 audit helps schools and convinces local governments to allocate resources for environmental performance improvements that are implemented together with educational activities – something that increases positive environmental impact rapidly and widely. Handbooks and other educational materials help teachers and students implement the Seven Steps.

A professional online calculator helps the monitoring of energy, water, waste and climate change impact from schools participating in Eco-Schools, and the operational structure of the programme includes local organisations coordinating the programme in different regions of Poland.

## **//**

"Ecology and sustainable development are very important tasks in the process of education. As the person who represents an institution in which one of the main aims is to support schools in Environmental Education, we engaged with pleasure in the cooperation with the Eco-Schools programme. It started in 2009, and has continued since. In the beginning, the programme was implemented in only a few schools from our region but we now have over 80 schools that have been awarded Green Flags. The programme is especially popular among kindergartens and primary schools, which means that the youngest children are involved in the process of eco-education. Our role is to support teachers and school coordinators who are responsible for the realisation of the programme in their schools. We consult on the action plans, organise workshops, conduct individual consultations, distribute some materials, etc. After almost 12 years of working with the programme I can witness change achieved in our schools and in our attitudes towards Environmental Education."

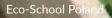
Alicja Szarzyńska, Eco-Schools Regional Coordinator

"...Everything starts at school. Not only because the Eco-Schools programme educates children, but also because children educate their parents, other family members and influence the local society. When running an Environmental Education NGO, or any other organisation related to the environment, it is crucial to run activities addressed to children that are supported by their teachers, parents and authorities. All these opportunities are given by the Eco-Schools methodology. As an NGO that cooperates with different stakeholders, such as businesses, municipalities and other NGOs, could we proudly call ourselves an Environmental Education NGO without the Eco-Schools programme?" Jaroslaw Szczyigeł, Polish Foundation for Environmental Education CEO

## **NATIONAL OPERATOR - REFLECTIONS**

The biggest challenge is to maintain continuous financial support that can stabilise the programme, not only coordination but also support for schools in educational and other ideas. Another challenge is to build a close collaboration with the Ministry of Education, which could help us include the Eco-Schools programme as a part of the curriculum. Unfortunately, due to the size of the country and lack of political links, it is very difficult to build that close relationship. ESD is not the first priority for the Polish government nor for many local governments that the schools belong to.

During the time the Eco-Schools programme has been running in Poland, participating schools have had the chance to be involved in some projects connected with EE. In 2015, our country participated in the EU funded We Eat Responsibly project, in cooperation with eight other European countries. The idea of the project was based on the Seven-Step methodology and became a reality through the involvement of a number of Eco-Schools. The idea of the project was also to engage and educate the teachers/school coordinators and the school staff. At the time, I was a National Coordinator of the Eco-Schools programme and the Coordinator of the We Eat Responsibly project. Personally, it was a time when I had the chance to support the increase of knowledge on responsible consumption and I managed to make some changes in my own everyday life in favour of responsible development.



## weden

Keep Sweden Tidy Foundation (HSR) National Operator: Kristina Bjerka

Country size: 450,295 km<sup>2</sup> **Population: 10.2 million** Highest mountain: Kebnekaise 2,098 m Joined Eco-Schools in 1996 Number of Eco-Schools: 1,700

## Longest river: Klarälven and Göta älv 731 km in total

Klarälven means 'the clear river' in Swedish. It changes name to Göta älv after it has passed through the lake Vänern, but is, however, still regarded as one single river.





### **National Legislation**

Sweden has always been at the forefront when it comes to working with the environment and has, therefore, created many laws and regulations. The realisation that nature has a protective value and that humans' rights to change and use nature are associated with a responsibility to manage nature and promote sustainable development, means that current and future generations are ensured a healthy and good environment, grown and led by a collective effort for sustainable development.

The Environmental Code was created in 1999 as part of Swedish legislation where the most environmental laws are collected. In 1999, the Swedish Parliament also decided on the first 15 environmental goals, as well as the generation goals, which we are still working towards in addition to the global goals.

#### **K-12 Education**

The Swedish curriculum states clearly that schools have an obligation to provide students with tools to understand how the environment, economy, health and justice are linked. Sweden has also joined the Global Sustainable Development Goals with the aim of leading the world towards a sustainable and fair future. Therefore, sustainability issues must have a central place in the Swedish school. The schools should provide students with tools to live and work in a sustainable way. This assignment is included in all parts of the curriculum for the compulsory school, preschool and recreational home.

According to the syllabus, all teaching should contain parts that see the subject from different angles or perspectives; a historical, environmental, international and ethical perspective. Through the environmental perspective, students should be given opportunities to take responsibility for the environment they can influence themselves, but also to create an overall understanding of global environmental issues. The teaching will show how different functions in society and different lifestyles can be adapted to create sustainable development.

### **Professional Development**

Unfortunately, little has been invested in government initiatives to educate teachers in Environmental Education (EE). At most, in Swedish universities and colleges, research and shorter voluntary courses are organised for the teacher-students. For pre-trained teachers, it is mostly NGOs that provide continuing education in sustainable development learning, funded by project grants.

## THE STORY OF ECO-SCHOOLS

Keep Sweden Tidy (HSR) started extensive EE efforts by educators across Sweden in 1993. The programmes were subsidised by HSR and the municipalities undertook to conduct follow-up training with their own funding. This effort led many educators to increase their knowledge of the issues and to use HSR's educational material. The people educated through these programmes became an important network for HSR.

At this time, there were three projects within FEE: Blue Flag, Eco-Schools and YRE. HSR had started the Blue Flag for guest ports and marinas and in order to participate in the FEE projects, participation in at least two projects was required. Therefore, one of the reasons the Eco-Schools programme started was the administrative requirement.

Another and more important reason was the need to create a tool for action for educators trained in the HSR network. A tool that also aimed to engage the students. Eco-Schools had started in the neighbouring country Denmark and a Swedish school, Flygelskolan, then joined the Danish programme. This programme inspired HSR and it was implemented as an environmental certification/management system with educational materials adapted for schools and preschools in Sweden in 1996.

## **KEY MILESTONES**

Schools in Sweden pay a registration fee to participate in the programme. We hope that in the future schools will not have to pay, as at the moment is discouraging them to join.

The year 2016, Keep Sweden Tidy Foundation celebrated the 20th Anniversary of Eco-Schools in Sweden. It was the first time a big Eco-Schools celebration took place across the whole country and it led to that we now have our own day in the calendar: "The Green Flag Day".

"We must work with sustainable development according to curricula and being able to do so within the framework of Eco-Schools gives us support, inspiration and structure. Together we are strong!" Eco-Schools Coordinator "All children and young people have the right to a sustainable future without waste and climate problems. We want to help them to work in a way that creates the ability to act and gives them future faith. Therefore, it is important that everyone is given the opportunity to work for sustainable development, whether they go to preschool, elementary school or high school."

Johanna Ragnartz, Keep Sweden Tidy Foundation CEO





## **NATIONAL OPERATOR - REFLECTIONS**

A highlight for me as the National Operator was when I first met all the other National Operators at the National Operators Meeting in 2018 and found out how many engaged people there are around the world. That is amazing.

Keep Sweden Tidy Foundation (HSR) Rosterigränd 4, 11761 Stockholm

## **Switzerland**

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Association J'aime ma Planète National Operator: Urban Furlan

Country size: 41,285 km<sup>2</sup> Population: 8.5 million Longest river: Rhine 375.5 km Highest mountain: The Dufourspitze 4,634 m National animal: Cow Joined Eco-Schools in 2015 Number of Eco-Schools: 55



## National plant: Edelweiss

Edelweiss is a non-toxic mountain flower. It has been used in traditional medicine as a remedy against abdominal and respiratory diseases. According to folk traditions, giving this flower to a loved one is a promise of dedication.



#### **National Legislation**

Environmental Education (EE), as part of Education for Sustainable Development (ESD), is an integral part of those public policies related to education. In the Federal Government's Strategy for Sustainable Development 2016-2019, ESD is listed as one of the action areas in the field of education and training. A national centre for ESD called Education21 was created in 2013. This centre acts on behalf of the federal government, the Swiss Conference of Cantonal Ministers of Education (EDK) and the civil society as a national focal point for the implementation and development of EE and ESD in Switzerland.

#### **K-12 Education**

Following the National Action Plan for ESD (2007-2014) in 2007, efforts have been made to mainstream EE and ESD into the Swiss education system. ESD is now incorporated in all three Swiss national curricula for mandatory education (Lehrplan21, Plan d'études romand, Piano di studio). ESD is not considered as a new discipline, but as a concept that underpins the learning process. Depending on the curriculum, it is either infused in various curriculum areas, such as natural sciences and social sciences or is introduced in interdisciplinary thematic areas of the curriculum.

#### **Professional Development**

ESD has been incorporated into the teachers' education and will be one of the development areas in Switzerland in upcoming years.

## THE STORY OF ECO-SCHOOLS

In 2015 J'aime ma Planète Association started the Eco-Schools programme in Switzerland. By then, the association had been involved in EE for around 10 years and was familiar with the benefits of the Eco-Schools programme. The programme was also known among some of the teachers, students and parents who had taken part in it before moving to Switzerland and who had shared their Eco-Schools experience with the association. Thanks to the programme's reputation, the president of the association. Patricia Defauw, the General Director, Catherine de Noyelle, and the National Operator, Urban Furlan, along with other members of the association, had decided to look into implementing Eco-Schools in Switzerland. Catherine de Noyelle met with the Eco-Schools team from France in January 2015. Following this, J'aime ma Planète Association applied for FEE membership and began running the programme the same year. Two years later, on 26 June, Switzerland's first Green Flag was awarded to Lycée Rodolphe Töpffer.

<

Collège Champittet Nyon celebrating their first Eco-Schools Award in 2018. The school created a one hour show on sustainable development and environmental conservation.



"One of the most unexpected things about running the Eco-Schools programme in our school is that it has helped unite the school community behind a common goal. It makes people who do not necessarily interact with each other on a daily basis work together and that is fantastic" Joseph Gabioud, General Director, Le lycée Rodolphe Töpffer

"A highlight of running Eco-Schools is to see its empowerment potential and the change that it brings to the school community. A quote from one of the teachers illustrates that well: "I have not only learnt a great deal, but I have also changed as a person. And I have never seen my students as motivated as they are with the Eco-Schools project". Gaëlle Kroh, Eco-Schools Coordinator, Les Coquelicots

"The Montagu Foundation started supporting J'aime ma Planète as early as 2011, as it was convinced that this young association could bring an innovative and enthusiastic message to schools in the Canton of Geneva. The association's activities quickly grew stronger and became increasingly dynamic, thanks to a highly competent team and quality teaching materials.

In 2015, FEE chose J'aime ma Planète as its partner in Switzerland for the development of the Eco-Schools programme. The Montagu Foundation was convinced of the relevance and the potential of this programme. In less than four years, dozens of schools throughout the country have committed to Eco-Schools, thus showing the increasing reach of the programme. The two new offices opened recently for the programme by J'aime ma Planète in other Swiss cantons, Vaud and Zurich, are a reflection of this.

The Montagu Foundation is proud to support such a committed and reliable partner. The Foundation is very grateful to J'aime ma Planète for all the work, to date and to come, done in educating the future generations and for the protection of the environment." **Eric Demole, Chairman of the Montagu Foundation** 

"The entire team of the J'aime ma Planète in Switzerland is very pleased and proud of being able to implement the Eco-Schools programme in the country. Arguably, this is one of the best programmes I have seen: it is well structured and thought through, setting the right basis for the entire school communities to teach and promote a sustainable way of living. I also applaud the action-oriented approach that requires a long-term engagement from schools. Over the years, we have seen growing interest and received very positive feedback from schools all across Switzerland. Thank you and wishing you another 25 successful years!" Patricia Defauw, J'aime ma Planète Founder and President



## **KEY MILESTONES**

Switzerland is a federal and multilingual country with a decentralised education system, where the education programmes must be in line with the three national curricula, one for each of the three linguistic regions. Moreover, in Switzerland, the decisions regarding the education sector are in the hands of the 26 Swiss Cantons. These peculiarities have important implications for the development of the programme on a national level. The approval given by three cantonal authorities of education in the French-speaking part of Switzerland was a very important step for the development of the programme, as it was what made it possible for the Eco-Schools programme to be implemented in various public schools in those cantons.

In terms of achievements in the schools, in the academic year 2018-19, a school campus became plastic-free. In June 2018, a two-hourlong end-of-the-year school show dedicated to Eco-Schools and nature conservation took place. In terms of programme development, among the biggest achievements of the programme have been the successful pilot project, with the first two schools receiving the Green Flag Award in 2016, the expansion of the programme throughout Romandy, the opening of an office in Vevey in 2017, the publication of the Eco-Schools Handbook and the creation of the website dedicated to the programme for the French-speaking part of Switzerland in Autumn 2018. In 2019, the Eco-Schools Handbook was also published in English for English-speaking schools. Moreover, this year, the programme has been extended to the German-speaking part of the country and an office has been opened in Zurich.

Since its launch, the programme has grown immensely and over 60 schools will have been a part of it by the end of the 2019-2020 school year.





## **NATIONAL OPERATOR - REFLECTIONS**

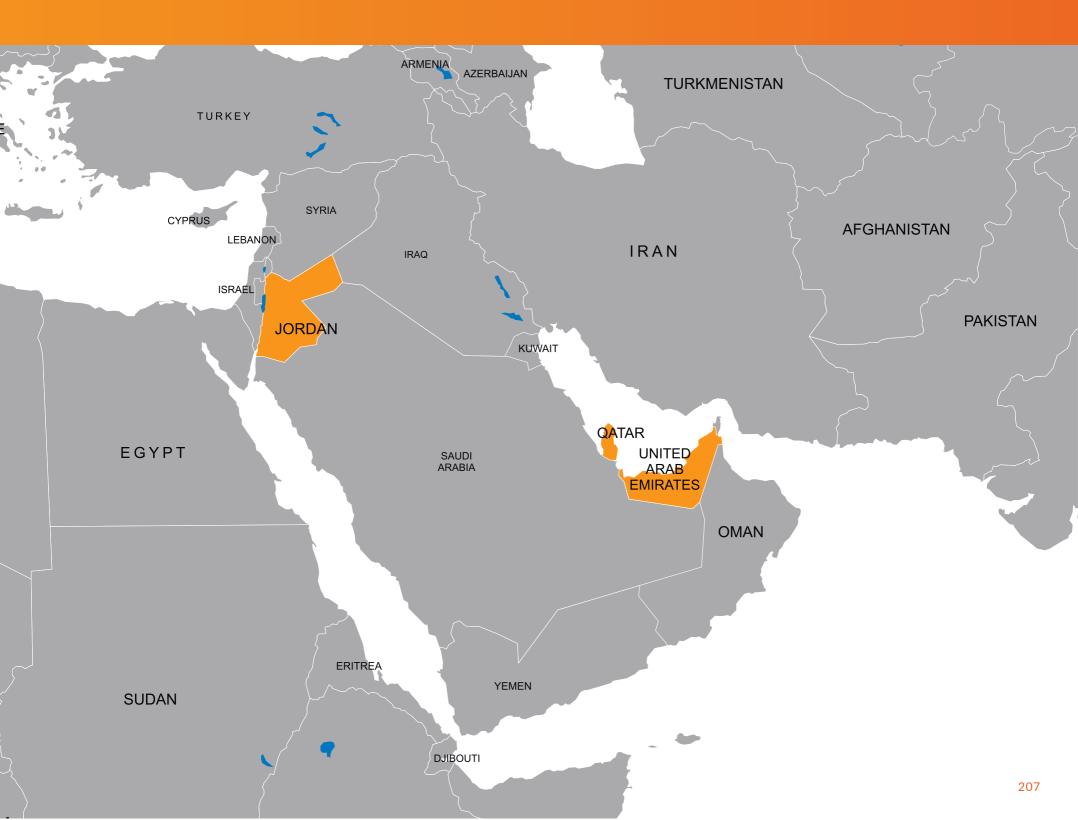
The role of the National Operator is unique, as this figure acts as a bridge between the local (national) Eco-Schools family and the international one. The sharing of experiences and knowledge within the international community is definitely a plus in running this programme. Children discovering aromatic and medicinal plants on the school terrace 2016. L'écoline, the first nursery school receiving the Green Flag award in Switzerland.

Association J'aime ma Planète Avenue de la Paix 11, 1202 Genève



# Middle-East

Jordan, Qatar & United Arab Emirates



## Jordan

ALL Y IN

The Royal Marine Conservation Society of Jordan (JREDS) National Operator: Aya Kalaldeh

Country size: 89,342 km<sup>2</sup> Population: 9.7 million Longest river: Jordan River 251 km Highest mountain: Mount Umm al-Dami 1,854 m National plant: Quercus ithaburensis Joined Eco-Schools in 2009 Number of Eco-Schools: 95



## National animal: White Oryx or Maha

White Oryx are able to detect rainfall from a distance and follow in the direction of fresh plant growth.



### **National Legislation**

Plans are underway to introduce Environmental Education (EE) into the school curriculum, with the aim of achieving a higher sense of public awareness towards the environment.

### **K-12 Education**

The Ministry of Environment and the Ministry of Education have formed a committee to identify and select which environmental topics will be taught to school students. The topics include climate change, forest protection, energy consumption, waste management, electronic waste, green economy, sustainable development and air pollution, among other issues that the committee deems of priority. Committee meetings are taking place in 2019 to draft curricula on EE for grade 6 up till tertiary level.

## THE STORY OF ECO-SCHOOLS

The Eco-Schools programme in Jordan started with a pilot phase of 15 participating schools. It began through a cooperation between the Ministry of Education and JREDS in 2009. The same year, the first Green Flag in Jordan was awarded to several schools in Amman.

In 2018-19, 210 engaged schools spread out in 11 districts in Jordan worked and participated in different activities with 45 open days/ workshops to present the main objectives. More than 98,558 students have participated in the programme, out of which 57% where female students and more than 3,500 teachers were directly or indirectly involved in the projects. 64% of the teachers involved were female.



## **KEY MILESTONES**

The JREDS team are conducting both announced and unannounced school visits to the involved schools, to ensure the compliance of the schools with the international programme. Results suggest that all schools are highly engaged with the Seven-Step methodology.

In 2018-19, JREDS and the Eco-Schools National Committee updated the national criteria for Eco-Schools.

## **NATIONAL OPERATOR - REFLECTIONS**

As long as we want change we must learn more and more. We will always remain the source of the right and influential information through our educational environmental programmes.



**The Royal Marine Conservation Society of Jordan (JREDS)** Amman, Shmessani, AbdelAziz Thaalbi Street, Bdg #7



"The activation of the Eco-Schools programme in our schools has left a fingerprint on our students, fellow teachers and part of our community. All are touched by this programme and its interaction, communication and follow-up. The programme also supports the confidence in sustainable development in our schools and has an active role in linking with life issues, helps schools develop and reinforces students' behaviours."

Wafa'a Quaba'a, Eco-Schools Teacher, King Abdullah Excellency School

"The Eco-Schools programme changed my life in many aspects; it has shown me the real-world problems that we are facing in our daily life. My life got better after I joined the Eco Committee: it encouraged me, even more to save our world from our previous disastrous practices." **Rakan Al-Shwekini, Student, Aqaba International Schools** 

"Since we started the school year, my children and their outlook towards the environment has changed significantly - even when we go to the beach. They are keen to ensure the cleanliness of the place. They even made me, as a parent, aware that plastic bags are one of the most important reasons responsible for the destruction of marine life." Ramzi Shwekini, Parent, Aqaba International Schools





# Qatar I

FEE

ECO-Scitto

Qatar Green Building Council National Operator: Ruba Hinnawi & Hamoda Yous

Country size: 11,571 km<sup>2</sup> Population: 2.7 million National animal: Oryx Joined Eco-Schools in 2018 Number of Eco-Schools: 7





Qatar is a peninsula located near major petroleum deposits. The coastline of Qatar stretches for 563 km with a scattering of sandy beaches along the north and west.

Qatar is mainly flat, consists of sand deserts, and a small part of housing in different vegetation zones where native trees, reeds and shrubs grow. The country's most distinctive geographical feature is in the south of the country, close to the border with Saudi Arabia; a wide area of dunes that surround an inlet of water from the Persian Gulf.



### **National Legislation**

Qatar National Vision 2030 is a development plan launched in October 2008 by the General Secretariat for Development Planning in the State of Qatar. It is built on four pillars: human development, social development, economic development and environmental development. The environmental development aims to preserve and protect the environment, including air, land, water and biological diversity, through an environmentally aware population that values the preservation of the natural heritage of Qatar and its neighbouring states, as well as through an agile and comprehensive legal system that protects all elements of the environment, responding quickly to challenges as they arise. Preservation is sought through effective environmental institutions that build and strengthen public awareness about environmental protection and encourage the use of environmentally sound technologies. These institutions will also conduct awareness-raising campaigns, employ environmental planning tools, and carry out environmental research.

#### **K-12 Education**

Qatar's Ministry of Education and Higher Education, has several topics in regards to energy and water efficiency, renewable energy sources, climate change and local flora and fauna included in its science curriculum, in order to comply with Qatar National Vision 2030.





#### **Professional Development**

There are a number of professional development opportunities in Environmental Education (EE) in Qatar. Qatar University offers undergraduate and postgraduate Environmental Sciences programmes and Hamad Bin Khalifa University offers graduate and postgraduate programmes, like Master and PhD programmes in Sustainable Energy and Sustainable Environment. Qatar Foundation Universities, Virginia Commonwealth University Qatar, Texas A& M Qatar, Carnegie Mellon University Qatar and Georgetown University Qatar, offer Environment and Sustainability undergraduate courses.

As for courses offered by non-profit organisations, there are several opportunities as well. Qatar Green Building Council offers a variety of workshops for professionals in various sustainability rating standards for professional accreditation like the LEED (Leadership in Energy and Environmental Design) rating system, WELL Standards, Green Classroom Professional workshops to certify teachers and school staff to manage their classrooms and schools in a more environmentally sound way and convey the message to their students. The Global Organization for Research and Development (GORD), offers certification for professionals in the design and construction field in the Global Sustainability Assessment System (GSAS) rating system.

Qatar hosts a number of annual prestigious conferences such as the World Innovation Summit for Education (WISE) and Qatar Green Building Conference (QGBC). QGBC carries out Qatar Sustainability Week and the Qatar Sustainability Awards annually. Both events aim to further engage the community in a wide range of sustainabilityoriented activities. Conferences are an accessible platform to share research papers, experiences, recent trends and knowledge with professionals and the community.

## THE STORY OF ECO-SCHOOLS

The Eco-Schools programme in Qatar started in 2015 and was an individual effort by teachers who directly contacted Eco-Schools Global. Doha College, a private international school, was the first Green Flag awarded school in 2015, awarded by Eco-Schools Global. In 2016, Qatar Green Building Council became a FEE member, as the FEE vision, mission and programmes align with QGBC core objectives. QGBC started with Green Key programme.

Schools in Qatar, in alignment with the Qatar National Vision, started small sustainable initiatives to bring students awareness to environmental issues. Therefore, the importance of implementing the Eco-Schools programme in order to guide schools in a meaningful path, goal-oriented sustainable education became the obvious next step. In 2018, QGBC became the National Operator for the Eco-Schools programme in Qatar. QGBC communicated with awarded schools and introduced the programme to others, and thereafter, schools started to show interest and join.

### **KEY MILESTONES**

In September 2019, QGBC organised the first Eco-Schools Congress. The congress was a great opportunity to create a network of schools and present the programme to attract more interest. Through workshops, it provided a platform for students to present their ideas and solutions for their daily challenges. Students were engaged in hands-on activities to meet the Zero Food Waste Event goal by composting food waste, packaging food in compostable containers and donating it.



"The English Modern School Doha is eager to begin the Eco-Schools journey because it will help our students identify areas of improvement in 'their' world. This will allow them to engage in important 21st-century learning skills using communication, collaboration, creativity, and critical thinking to make action plans and solve real-world problems. The Eco-Schools structure will help our students identify areas where they can make measurable and actual changes and improvements and not just talk about what they could do." **Renee Koval, 21st Century Learning Coordinator, English Modern School** of Doha

"The Eco-Schools programme is a necessity in Qatar that allies with Qatar Vision 2030. The Eco-Schools programme is the best programme that provides environmental education and awareness along with a hands-on pedagogy that is oriented towards action, tangible results and behavioural change. As a country with limited natural resources, this is exactly the programme we need for our young generations, leaders of tomorrow." Meshal Al Shamari, Qatar Green Building Council Director

## **NATIONAL OPERATOR - REFLECTIONS**

As a National Operator, I was impressed by the dedication of students to a subject they really believe in. When you expand their interest beyond the classroom walls to the whole globe, they get so creative and their ambitions are limitless. In one of our Eco-Schools, second-grade students started with a simple food waste project and the school now has a composting bin, greenhouse, control over the cafeteria, food serving, portions and cutlery!

**Qatar Green Building Council** Qatar Green Building Council Building P.O. Box: 5825, Doha

## National treee: Sidra

The Sidra tree came to represent nourishment, strength and courage, as well as learning and growth. In the hearts and the minds of the people of Qatar, the Sidra tree exemplifies perseverance, solidarity and determination as it manages to fruit and flower in the harsh climate of the desert.



مرور منصور مع مستور المالة مشرور المعادر اليونية المالية معاد الرومانات الميانية وماليا وسعا الله وم اللايانية والمالية من أشارة معاد الليونية والمالية معاد الله وما الليونية

# **United Arab Emirates**

Environmental Center for Arab Towns (ECAT) National Operator: Fatima Mubarak Ismail

Country size: 83,600 km<sup>2</sup> Population: 9.4 million National animal: White Oryx National plant: Tribulus Omanense Joined Eco-Schools in 2012 Number of Eco-Schools: 122





#### National bird: Falcon

The falcon is not only the national bird of the United Arab Emirates. It is also the most important entity in one of the country's traditional sports, Falconry.



#### **National Legislation**

In UAE, the national curriculum is formulated by the Ministry of Education and implemented in all public schools. Environmental Education (EE) is mentioned explicitly and it is suggested that it is included and integrated in both specific subjects and as a crosscutting theme.

#### **K-12 Education**

The United Arab Emirates engages schools in EE and sustainability practices through a number of key programmes that share objectives at the local, national and international level. The programmes help harness the power of youth as change agents in society.

#### **Professional Development**

ECAT is organising three annual teacher training workshops attended by approximately 50 teachers and trainers every academic year.

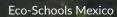
## THE STORY OF ECO-SCHOOLS

ECAT started implementing the Eco-Schools programme in 2012, in partnership with the Ministry of Education and Education Zones.

Today the programme is running in 8,13% of the country's elementary and secondary, private and public schools. There are approximately 4,000 teachers working with the programme and a challenge is, therefore, to get every one of them to participate in the three annual workshops hosted by ECAT.

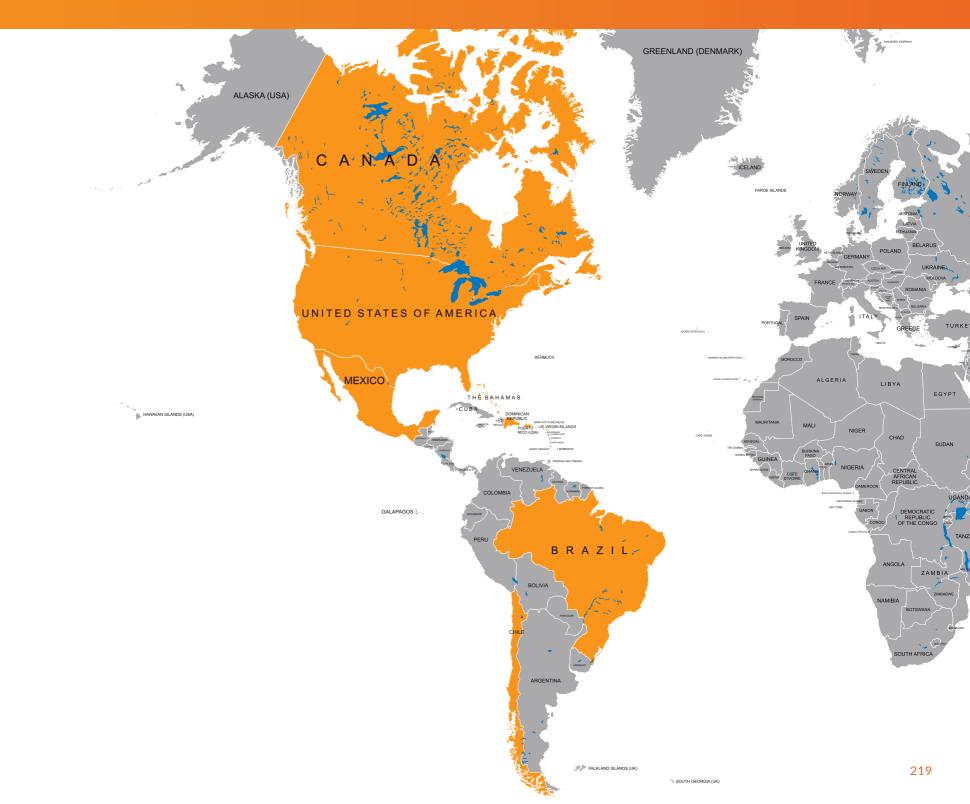
Environmental Center for Arab Towns (ECAT) Al Hudaiba Awards Buildings - Block C P.O.Box 67 Dubai





# North & South America

Bahamas, Bermuda, Brazil, Canada, Chile, Dominican Republic, Mexico, Puerto Rico, US Virgin Islands & United States of America



# Bahamas

Bahamas Reef Environment Educational Foundation (BREEF) National Operator: Kevin Glinton

Eco-Schools

Country size: 13,878 km<sup>2</sup> Population: 351,461 National bird: Flamingo National tree: Ligum vitae / Tree of Life Joined Eco-Schools in 2009 Number of Eco-Schools: 31



#### National fish: Blue Marlin

The Blue Marlin (Makaira nigricans) is **a** majestic fish that is found in both the Atlantic and Pacific Oceans, with reports of the largest sizes found in the latter.

St. John's College

Many people first encounter the fish in Ernest Hemingway's book "Old Man and the Sea." Hemingway was a frequent visitor to The Bahamas, especially the island of Bimini.

A powerful and aggressive fighter, the Blue Marlin can swim far or dive deep, and leap high into the air in a display of strength.



#### **National Legislation**

The Bahamas does not have any formal national legislation or national mandate for Environmental Education (EE). However, there are a number of national policies that promote public awareness and EE. Some of those policies include; 1. The National Biodiversity Strategy, 2. The National Climate Change Policy, 3. The National Energy Policy and 4. The National Wetlands Policy.

The Bahamas Ministry of Education has also included EE in several guiding documents. "Vision 2030: A Shared Vision for Education in the Commonwealth of the Bahamas" notes that primary school students are "expected to have an appreciation of their physical environment and of society, and to understand their duty and responsibility to community;" and every secondary school student should (among other competencies) "embrace his/her roles as environmental steward."

The Bahamas Teacher's Handbook emphasises the importance of environmental stewardship and civic engagement, particularly for social studies.

#### **K-12 Education**

Presently, K-12 EE is structured around concepts outlined in the K-12 science and social science curricula and is supplemented by the work of several environmental conservation and educational organisations in the Bahamas, including BREEF. Additionally, many Bahamian schools maintain eco-clubs and other public and private sponsored programmes in an effort to expose students to environmental issues.

#### **Professional Development**

Since the late 1990s, BREEF has been hosting an annual summer training workshop for teachers that equip them with knowledge, skills and resources to transmit important environmental stewardship messages to successive generations of Bahamians. The annual summer workshop has grown to become the flagship teacher training programme for marine conservation in the country and achieved its goal of training one teacher in every school in The Bahamas in 2017.

### THE STORY OF ECO-SCHOOLS

The Eco-Schools Bahamas programme was piloted in 2009 by BREEF after the Bahamas Ministry of Tourism and Aviation had expressed an interest in starting the FEE Blue Flag programme. With the financial support of the Ministry of Tourism and Aviation, BREEF was successful in identifying seven schools on the islands Eleuthera, Abaco and New Providence to accept the challenge of making environmental awareness and action a part of the life and curriculum of their schools. Casuarina McKinney-Lambert, Executive Director of BREEF was responsible for the overall management, communications and activities associated with piloting the new Eco-Schools Bahamas programme. Casuarina remains very passionate and supportive of the Eco-Schools Bahamas programme. She was assisted in the implementation and growth of the Eco-Schools programme by Charlene Carey, Environmental Educator, Projects & Office Manager at BREEF.

Marcia Musgrove, Outreach Manager at BREEF served as the National Operator for Eco-Schools Bahamas until 2016. The first Green Flag awarded in the English-speaking Caribbean was Deep Creek Middle School (DCMS) of Eleuthera in 2010. In 2012, Hope Town Primary School, Abaco became the second school to receive the prestigious Green Flag Award.

The Commonwealth of The Bahamas is an archipelago of around 700 islands and more than 2,000 rocks and cays in the West Atlantic south-east of the coast of Florida, USA, and north-east of Cuba. Given the nature of our geography in The Bahamas and the increasing number of participating (and interested) schools, there is always a need for additional volunteers and partners to mentor schools through successful implementation of the Seven Step programme. To date, we've been very fortunate in identifying individuals and organisations to help meet this challenge. At the moment, efforts focus on locating mentor individuals and organisations to support the increasing numbers of interested Family Island schools.

In 2013, the Eco-Schools Bahamas Native Plant Biodiversity Project was implemented to promote native plant diversity and environmental sustainability. It included the development and publication of "The Native Plant Garden Manual for Schools", which was designed to help schools and the wider community plan and implement and maintain native plant gardens.

In 2015, BREEF held the Eco-Schools Youth Environmental Leadership Summit, and in 2016-2018, it ran a project on Engaging Young People to Reduce Plastic Pollution in Landfills & the Ocean. A series of initiatives were developed, like the Designer Bag Challenge, the Reuse This Bag School Campaign, and School Recycling.

In 2019, BREEF counts 31 registered Eco-Schools on five islands of The Bahamas!





"It was a very important moment for the students of DCMS to be the first to receive a Green Flag certification in The Bahamas and the English-speaking Caribbean. For a community in one of the more remote areas of the Family Islands and one that is often under-served, the accomplishment and the leadership skills it gave the children was a real boost which translated into their academics and other areas of community life."

Former DCMS principal, Dr Joanna Paul, Director of Development Lyford Cay International School, Nassau

"On behalf of the Keep Grand Bahama Clean (KGBC) Committee, we extend our heartiest congratulations to you on your 25th Anniversary. The dedication your organisation has shown to such a wonderful environmentally sustainable programme should be commended and we are elated to be a part of your vision. We wish you the most enjoyable celebration as you mark this milestone."

Olethea Gardiner, Environmental Inspector, Building & Development Services, The Grand Bahama Port Authority, Limited. Freeport, Grand Bahama

"BREEF is proud to have served as the National Operator for Eco-Schools in The Bahamas for the last ten years. We have seen the positive social and academic impact that the programme has on young people. We look forward to many more years of helping students become environmental stewards through the Eco-Schools programme and extend our congratulations on the occasion of the 25th anniversary." Casuarina McKinney-Lambert, Bahamas Reef Environment Educational Foundation (BREEF) Executive Director



#### **NATIONAL OPERATOR - REFLECTIONS**

The opportunity to interact and work on a daily basis with environmentally conscious students committed educators and Eco-Schools volunteers is priceless.



### **National Plant: Yellow Elder**

The yellow elder was chosen to be the national flower of the Bahamas because it is native to the Bahama Islands, and it blooms throughout the year. Bahamas Reef Environment Educational Foundation (BREEF) #11 Caves Professional Centre, West Bay Street & Blake Road P.O. Box CB-11005, New Providence



Bermuda Underwater Exploration Institute (BUEI) National Operator: Julie Steele

Country size: 53.2 km<sup>2</sup> Population: 64,000 Highest mountain: Town Hill 76 m National tree: Juniperus bermudiana/Bermuda cedar Joined Eco-Schools in 2013 Number of Eco-Schools: 20



# National animal: Pterodroma Cahow/Bermuda Petrel

For 300 years, the Pterodroma cahow was thought to be extinct, but in 1951, eighteen nesting pairs were rediscovered.

A national programme to preserve and restore the species has helped increase its numbers, but scientists are still working to enlarge its nesting habitat on the restored Nonsuch Island.

#### National Legislation

Established in 2016, the Department of Environment and Natural Resources (DENR) is the result of an amalgamation between the Department of Conservation Services and the Department of Environmental Protection. DENR is the primary government agency responsible for ensuring the proper use of Bermuda's natural resources and the protection of the environment, within the framework of sustainable development. One of DENR's core objectives is to provide Environmental Education (EE) on Bermuda and other islands for visitors, locals and schools through engaging and entertaining exhibits at the Bermuda Aquarium, Museum and Zoo, for which DENR also provides both staff and facilities.

#### **K-12 Education**

NGOs including BUEI, Greenrock, BEST, Keep Bermuda Beautiful, and the Bermuda National Trust supports K-12 EE, offering informative talks and educational programmes island-wide.

#### **Professional Development**

Many of these programmes seek to engage educators through teacher professional development workshops that align with the curriculum.

# THE STORY OF ECO-SCHOOLS

Until the Eco-Schools programme was introduced to Bermuda in 2013, the island did not have a recognised, integrated EE programme that promotes long-term, whole-school (students, teachers, parents, community) action for sustainability. Greenrock, a registered Bermudan charity organisation that strives to be catalysts for changing mindsets, so that sustainable use of resources is included in decision-making for individuals, government or businesses, led the charge for the Eco-Schools programme.

Greenrock was selected to represent Bermuda as a member of the Foundation for Environmental Education (FEE), establish a globally respected partnership and introduce Eco-Schools to the Bermudan society through roadshows and school outreach. Since then, there have been 22 schools with approximately 300 students participating in campus Eco-Clubs, leading the charge for sustainable practices within their broader school communities.

As of April 2019, the Bermuda Underwater Exploration Institute (BUEI) has become the official member organisation of FEE and the National Operator for Eco-Schools Bermuda.



Since 2013, Eco-Schools Bermuda has grown to include over 20 schools on the island with six schools achieving Green Flag status and many others steadily moving along eight various pathways. In 2019, BUEI overtook the administration of this valuable sustainability programme and two new pathways will be open to schools across the island, with increased programme support available and networking opportunities for participating schools.

#### **NATIONAL OPERATOR - REFLECTIONS**

A challenge has been to maintain continuity and momentum through staff changes and resource fluctuations both as an NGO and with the schools. This programme is new to BUEI, but we are looking forward to our journey with all of the schools, beginning this school year as the National Operator. The conversations with the current participants have been positive with many looking forward to the next steps in the coming year.





"After participating in today's [professional development] workshop, I now have a better sense of how being in the garden or measuring the school's trash can be integrated into my classroom teaching. I knew the concepts before, but now I have a practical approach and I wish more of my colleagues attended this session. We need all the help we can get and I can really see my students getting energised over some of these activity ideas."

**Teacher, Francis Patton Primary School** 

"A strong foundation for the Eco-Schools programme has been laid by Greenrock in the last five years and places BUEI in a solid starting position to continue with this valuable programme".

Tara Curtis, BUEI CEO

"Eco-Schools Bermuda began in 2013 with just 2 schools and it has now grown to be in 20 schools with more in the pipeline. Around 300 students participate directly, with many more benefitting simply from the programme presence in their school. The programme involves both public and private schools, ranging from pre-school right through to tertiary education, including one special education school. It is a wonderful programme that has a direct and measurable impact on the students and provides tangible and financial benefits to the participating schools. We believe it is a core component of helping ensure the sustainability of our island for future generations."

Nick Campbell, Greenrock Director



**Bermuda Underwater Exploration Institute (BUEI)** 40 Crow Lane Pembroke Brazil 📀

Instituto Ambientes em Rede National Operator: Ricardo Cerruti Oehling

National animal: Arara Azul (Hyacinth Macaw) and Onça Pintada (Jaguar)

FEE

Eco-Schools



Country size: 8.5 million km<sup>2</sup> Population: 210 million Longest river: Amazon river 6,400 km Highest mountain: Pico da Neblina 2,994 m



National tree: Ipê Amarelo (Yellow Ipê) Joined Eco-Schools in 2008 Number of Eco-Schools: 17

CREDO NEVE

#### **National Legislation**

Brazil's federal law 9.795/99 - National Policy for Environmental Education (PNEA) states that Environmental Education (EE) must be present in both formal and nonformal education, at all kind of schools both public and private and at all levels of education, from K-12 to colleges and universities. Future work for the government includes creating an online tool for resource sharing, networking for EE professionals, public policy, actions and projects, and distance education courses. Additionally, the government is looking to begin a National Training Programme for Implementation Managers.

#### **K-12 Education**

In K-12 Education, Brazil has a "Sustainable Schools National Programme" developed by the Ministry of Education, which supports Brazilian schools in their transition process towards socio-environmental sustainability and turning into sustainable education settings and contributing to better life quality within the communities. The programme actions are implemented within the curriculum, management, facilities, and the school-community relationship, and are developed through five lines taken in steps, in a similar way as the seven steps in the Eco-Schools programme. Those five steps are:

- Learning processes and pedagogic practices
- Diagnoses and research
- Communication
- Management and Infrastructure
- Articulation and interface with other national policies

#### **Professional Development**

In terms of professional development, Brazil is working on providing online tools for resource sharing, distance education courses and networking, and is in the process of developing a national EE system to improve the scope and impact of its national EE policy.

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme started in Brazil in 2008. IAR already worked with environmental projects and some actions included education for students. At that time, IAR had already been a FEE member for three years and that helped the organisation become more visible across Brazil. In April 2010, Escola da Colina received the first Green Flag in the country. In cities like Florianópolis, the programme is strengthening the partnership between IAR and the Municipality Educational Secretariat due to the interest that private schools show in the programme.

With HSCB and Eletrosul as sponsors for the programme, IAR has been able to increase its visibility as a National Operator all over the country and to pilot the programme in public schools.



Eco Committee meeting EM Vereador Ary da Silva School, São Paulo, March 2019

Presidente Tancredo Neves Rural Family Home, school from Southern Bahia region with their students after receiving an Eco-Schools Pilot Certificate. Presidente Tancredo Neves, Bahia, October 2019

The Ministry of Environment has engaged in talks with IAR, working on the possibility to incorporate the Eco-Schools programme within its own national sustainable programme in order to strengthen it. IAR has created partnerships with local counties in order to engage more public schools. The programme in Brazil has been sponsored by entities such as HSBC, Eletrosul and Alcoa Foundation.

Another key moment was when a national website was launched with resources and material translated to Brazilian-Portuguese.



Escola da Colina, the first Brazilian school awarded with a Green Flag. Schools coordinators, IAR team and students celebrating their achievement, São José dos Pinhais, Paraná, April 2010

"We are proud to be part of the Eco-Schools programme! Through this work, we combine Environmental Education with Formal Education. Thus, we give a permanent character to the theme, making the process cyclical and evolutionary. In daily activities, students learn about the benefits of the environment and the need to preserve it. In these years as an Eco-School, we have shared experiences and multiplied actions in favour of the planet."

Simone Aparecida Zanardini, Educational Coordinator, Escola da Colina

"When we got to know about the Eco-Schools programme in Brazil, we wanted to engage schools of the Southern Bahia, called 'Rural Family Homes' that are already working in the environmental field and are following all the principles that FEE stands for. From our contact and commitment in Brazil, coming to know the operation closely, each step to be followed, including the training of people, increased my engagement and thus the Rural Family Homes joined and will soon receive a Green Flag. In my last trip to Portugal, I was very impressed. Recently, when I saw a Green Flag at the Lisbon School of Nursing, I dreamed of the flags in those schools in Bahia, a school community recognised for the work they have done.

I see how young leaders are mobilising, see every step as an achievement, every action as a new challenge, and so, they continue to learn and understand the importance of our work connected to the SDGs and sustainability. This is an agenda that corroborates with our work in the Regional Coordination of PEA-UNESCO Network in Bahia. Congratulations on the 25th anniversary!" Joana Maria Almeida, Regional Coordinator of PEA-UNESCO, Bahia

"Sustainability has been a primordial issue in all fields, each time more important. The Eco-Schools programme has been a fundamental tool to make students engaged and aware - the students who will be our future leaders. Local schools are always looking for new methodologies and subjects to introduce to their students and the programme simply achieves their expectations. It is a very organised and effective methodology that can guide students' actions and learnings." **Ricardo Cerruti Oehling, IAR Director** 

Instituto Ambientes em Rede (IAR) Rua Tenente Silveira, 482 Sala 204 88010-301 Florianópolis

## **NATIONAL OPERATOR - REFLECTIONS**

The biggest challenge is to involve more schools in the programme, mainly public schools. Our country is abundant in natural resources and offers lots of opportunities for our students to be aware, to explore and learn about the environment. Our challenge is to find the resources to support those schools, which have brilliant and dedicated teachers, concerned about sustainability aligned with their disciplines. In 2018, after 10 years of implementing the Eco-Schools programme, we could award the first public schools in Guarujá - before that, we only had private schools. It was a huge moment for them, as they were an example of engagement, commitment and mainly creativity since public schools have practically no resources. At the celebration ceremony, the city Mayor, the Environmental Secretary, the Educational Secretary, the Tourism Secretary and all school staff were present, as it was a very important moment.



# Canada 🖊

EcoSchools Canada National Operator: Lindsay Bunce and Theresa Ramirez

# National animal: Beaver

Country size: 9.9 million km<sup>2</sup> Population: 37 million Longest river: Mackenzie River 4,000 km Highest mountain: Mount Logan 5,959 m



National tree: Sugar Maple Tree Joined Eco-Schools in 2019 Number of Eco-Schools: 718

ST. ALEXAND

#### **National Legislation**

In Canada, direct federal government involvement in formal Environmental Education (EE) is quite limited because the constitutional authority for education sits at the provincial and territorial level. The federal government plays an important role however, by fostering partnerships, funding for non-profit organisations, supporting national initiatives, and facilitating working groups.

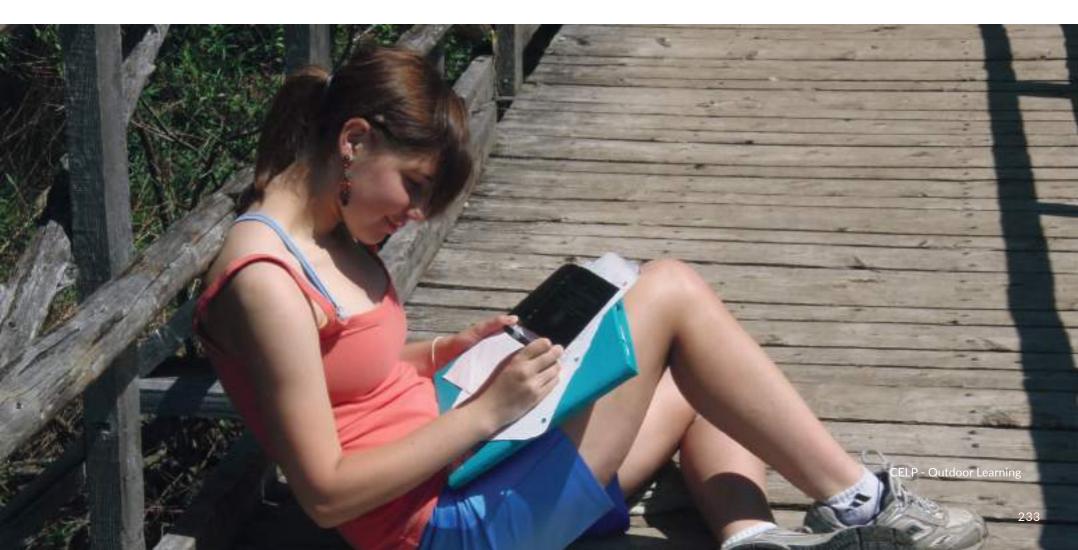
#### **K-12 Education**

The focus on EE varies across provincial and territorial curricula, with some regions having formal courses centred on environmental learning and others embedding EE across all curriculum strands. School boards and districts are responsible for implementing the provincial or territorial curriculum and make decisions around the budget allocated to EE, as well as which external environmental programmes are available to school communities. Some school boards in Ontario have included the Eco-Schools certification as a component of their board's sustainability action plan and as such, encourage participation through a system-wide approach.

#### **Professional Development**

Professional development opportunities for teachers, administrators, caretakers, and support staff influences the success and impact of EE efforts across Canada. This is typically carried out through regional initiatives directed by non-profit environmental organisations, university faculties of education, and provincial or territorial Ministries of Education.

The Canadian Network for Environmental Education and Communication (EECOM) facilitates a national annual EE conference. In October 2020, EcoSchools Canada will be co-chairing the EECOM conference with the Ontario Institute for Studies in Education at the University of Toronto, and the Dr Eric Jackman Institute of Child Study Laboratory School.



EcoSchools Canada (formerly Ontario EcoSchools) has been certifying schools across Ontario in environmental learning and climate action since 2005. In the last 15 years, EcoSchools Canada has certified over 3,000 schools.

The programme has received generous support from the Ontario Ministry of Education, Ontario Ministry of Energy, Ontario Ministry of Environment, Conservation and Parks and Employment and Social Development Canada.

In 2015, EcoSchools Canada received the Minister's Award for Environmental Excellence from the Ministry of Environment, Conservation and Parks, and in 2019, the organisation was nominated for the UN Global Compact Network Canada SDG Leadership Award.

#### THE STORY OF ECO-SCHOOLS

EcoSchools Canada began as Ontario EcoSchools. The development of the programme started in 1999 and was the result of the amalgamation of six smaller municipal school boards forming one large school board currently known as the Toronto District School Board (TDSB).

The programme was at the time only available to schools in the TDSB, was also partially modelled after the ISO 14001, which is focused on environmental management systems and underpins the international Foundation for Environmental Education Eco-Schools programme from which EcoSchools Canada also drew inspiration.

Based on the initial success of the programme, Richard Christie, now Senior Manager of Sustainability at TDSB, approached the York Environmental Education Consortium (YEEC) in 2005 about expanding the initiative in Ontario. The YEEC was made up of like-minded school boards that had created a regional learning community through sharing EE resources and troubleshooting challenges. Under the guidance of Catherine Mahler, who was working with the TDSB at the time, the consortium was able to secure funding to begin a provincewide initiative that was incubated within York University's Faculty of Environmental Studies.

The YEEC transitioned to become the Ontario EcoSchools Steering Committee comprised of seven school boards and two community partners who championed uptake of the programme in new regions. The school boards included: Durham District School Board, Halton District School Board, Halton Catholic District School Board, Thames Valley District School Board, Toronto District School Board, Waterloo Region District School Board, York Region District School Board, Toronto Region Conservation Authority and York University. These partners continue to support programme delivery as the Eco-Schools Programme Advisory Committee.

Ontario EcoSchools incorporated as EcoSchools Canada in 2017 with a vision of delivering the programme to schools across the country. In 2019, when EcoSchools Canada became an affiliate member of FEE, the first Green Flag was awarded to Cousteau School in Vancouver. EcoSchools Canada is now in the process of mapping FEE's Eco-Schools programme to fit with the already existing progamme and is delivering a pilot programme outside Ontario from September 2019. EcoSchools Canada's goal is to open certification to all schools across the country and reach 2 million students by 2022.



# **||**

"When I was in grade nine, I saw a poster for my school's environmental activism team, the EcoNinjas, and thinking it would be a good way to get involved in my new school, I went to the first meeting. To put it simply, that decision changed my life. That day, I walked into a classroom full of students who were passionate about the environment, who weren't afraid to stand up for what they believed in, who challenged each other to do better and were full of wonderful ideas. If you truly want to make a change, it's these types of people that you need to surround yourself with. You don't have to possess a certain list of traits, be a specific type of person or dedicate your life to the environment to be to changemaker; you just have to care and be willing to do something about it. One of your first steps towards action can be getting certified as an Eco-School. This voluntary programme recognises environmental action and has a vision of certifying every school in the province. My school is at the Gold level right now, but I'm determined it will be Platinum by the time I graduate. At the end of the day, what matters most is your passion to leave the world in better shape than how you found it. Complacency is the environment's greatest enemy. It's the moment you pick up the pop can on the trail instead of walking by it that change starts to take hold. When you put your heart into it, others will notice, get inspired, and follow your lead." **Emmalee Frketich, Student at Westmount Secondary School,** Hamilton-Wentworth District School Board

"As an organisation that lives and breathes sustainability and is focused on the next generation, it was a privilege to work with such inspirational students. The dialogue between our team and these change agents was eye-opening and left me confident that the future of our earth is in great hands."

Mikhael Metauro, Director of Supply Development, Cascades Recovery+, speaking about working with student EcoTeams at the EcoSchools Youth Conference

"Eco-Schools continues to lay the foundation for building environmental leaders and bringing school communities together to reduce our collective impact on the earth. Through benchmarking, creativity, and innovation, our network of over 1,900 schools is inspiring positive, meaningful action across all levels of the education sector. We are so proud to celebrate and recognise their accomplishments. "

Lindsay Bunce, Executive Director, EcoSchools Canada



**EcoSchools Canada** 360 Dufferin Street, Unit 102 Toronto, Ontario, Canada M6K 1Z8



# **NATIONAL OPERATOR - REFLECTIONS**

EcoSchools Canada has only been part of the National Operator community for a few months so this is difficult to pinpoint one highlight moment. We are very excited to meet the other Eco-Schools leads from across the globe and learn more about how other countries have been delivering the programme.

As with many other environmental charities in Canada, securing financial support to continue to grow the programme can be a challenge.

# Chile

Fundación Educarse National Operator: Antonio Hirane

Country size: 743,532 km<sup>2</sup> Population: 18.3 million Longest river: El Loa 440 km Highest mountain: Ojos del Salado 6,891 m Joined Eco-Schools in 2018 Number of Eco-Schools: 1



#### National animal: Huemul and Condor

The national emblem has a motto that says "By reason or force" and each animal represents one of these concepts.

Activity with students from Eco-Schools Latvia

The Huemul, an original deer from Chile, represents the "reason" referring to the ability of human beings to reflect, deduce or think.

The condor, the biggest bird flying in our skies, standing at the right side of the emblem represents the "force".



#### **National Legislation**

The trajectory of Environmental Education (EE) in Chile has been to collect and integrate trends worldwide. In 2009, Chile's government approved the National Educational Policy for Sustainable Development. With the return to democracy, the civil society was able to organise itself around environmental protection interests, thus developing initiatives to promote formal and non-formal EE.

Along with this, the legislation initiated a progressive incorporation of the environmental dimension, with the enactment of the Environmental Bases Law (1994) specifically, and with the Education, Law Reform initiated in 1996. These legislations opened a space for the insertion of environmental issues by allowing educational establishments to define their own plans, study-programmes and complementary contents since the new contents were proposed as Fundamental Objectives and Minimum Contents. Since then, formal education has been incorporating more space to strengthen EE within educational establishments.

EE is described in Law 19.300 of General Bases of the Environment (Article 2) as a "permanent interdisciplinary process, aimed at the education of citizenships that recognises values, clarifies concepts, and develops skills and attitudes necessary for a harmonious coexistence between human beings, their culture and their surrounding biophysical environment".

The same Law, modified by Law 20.417, considers EE as an instrument of environmental management, and states that it must be oriented towards "the understanding and awareness of environmental problems, and must incorporate integration of values and the development of habits and behaviours that tend to prevent and solve them".

#### **K-12 Education**

There is a National System of Environmental Certification for Educational Establishments (SNCAE), which gives certification to K-12 schools that develop methodologies and strategies for EE practices. This national system (SNCAE) seeks to be a comprehensive strategy to address EE for sustainability in kindergartens and educational establishments of basic and secondary education, special-differential and professional technicians.

This system integrates, in an interrelated way, EE into three areas:

• Curriculum scope: its objective is to highlight the existing environmental subjects in the curriculum, plans and study programmes of the establishment, seeking that the educational contents are consistent with the local environmental reality, in order for the establishment to address the actions in a transversal and interdisciplinary manner.

• Management scope: seeks to incorporate environmental practices in the management of its resources such as water, energy, waste, etc. and in the educational tasks of the establishment (Institutional Educational Project IEP, Coexistence Regulation, etc.)

• Scope relations with the environment: this area emphasises the interaction of the educational establishment with its immediate environment (economic, social and environmental dimension), resulting in the establishment of being a proactive actor, a member of cooperation networks for local territorial intervention. In addition, the establishment develops educational processes relevant and contextualised to the local and global reality, generating significant learning processes.

However, EE is not explicitly included in the K-12 curriculum, the SNCAE System is voluntary, and EE is a concept developed by the Ministry of Environment, but which it is not very integrated into the work of the Ministry of Education.

#### **Professional Development**

In terms of professional development, Alberto Hurtado University offers a four-month EE diploma, and USACH offers a diploma in Education for Sustainable Development (ESD). The Adriana Hoffmann Academy of Environmental Formation offers several online and faceto-face courses for teachers in Chile. Training for environmental educators also exists, for example in Katalapi. Playa Ancha University offers the only Environmental Education Master's degree programme in the country.

Due to this limited status, it is an important task to continue developing EE at its different levels throughout the diversity and wide spaces of the country, for example, by formalising it in the curriculum of educational institutions.

> **Fundación Educarse** Cinco Norte #1011. Viña del Mar. Región de Valparaíso-Chile

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme is currently in the implementation phase. Fundación Educarse has been developing resources, e.g. a website, handbook, themes, etc. and recruiting schools to join the programme since October 2018, when the organisation was accepted by FEE as National Operators for both the Eco-Schools and the Blue Flag programme.

Since then, Fundación Educarse has been coordinating and developing several meetings with relevant stakeholders in order to introduce the programme, invite schools to be part of it and receive financial support to implement it in public schools. To achieve the latter, the organisation has held meetings with mayors of different municipalities and presented the programme to the Ministerial Secretary of Education, and to several school principals with an invitation to be part of Eco-Schools Chile. All these presentations have been greatly received, and the programme is therefore launching in March 2020 when the school year begins.

## **KEY MILESTONES**

In 2019, Fundación Educarse has had different opportunities to present the programme to local as well as national educational authorities. The programme has been very well received by ministerial representatives, which has opened up the path to include more schools in the programme. One of the most important milestones was presenting the programme to the Mayor of Concón in the region of Valparaiso. The Mayor has shown great interest in implementing the programme in public schools in this municipality by 2020. The Eco-Schools programme was also presented to headmasters from the Association of British Schools in Chile (ABSCH) in Valparaiso, who also received the information positively.



"Chile is going through a very delicate situation regarding environmental issues (lack of water, poor recycling systems, etc.), so there is a national need to make progress in environmental education, and Eco-Schools could be crucial in achieving this goal."

Maria Antonia Muñoz, Director of the Private Co-Educational School of Quilpue & Member of Fundación Educarse

"Chile is a country that faces enormous challenges in educational and environmental matters. We strongly believe that the formation of a new generation sensitive to the importance of taking care of the environment will be a key step to guarantee the sustainable development of our country".

Antonio Hirane Castaño, Fundación Educarse Director

#### National tree: Araucaria

The Araucaria has been protected in Chile since ancient times by the indigenous people Mapuche and Pehuenche who consider it a sacred tree. It supported their livelihood by supplying edible pine nuts.

With the independence of the country, the tree continues to be protected in large areas. Due to its small distribution, it is protected in the Chilean National Parks of Conguillío, Tolhuaca Laguna del Laja, Huerquehue, Villarrica, and Nahuelbuta.

# **NATIONAL OPERATOR - REFLECTIONS**

The main challenge so far, in our experience, is that Chileans are still not as receptive in regards to the urgency of incorporating sustainable attitudes and lifestyles. A second challenge is related to the availability of the public sector, private sector and citizens themselves, to allocate financial resources and efforts to implement a sustainable way of life.

However, it has been impressive to see how well the Eco-Schools programme has been received by the government and educational authorities, who see it as the means to improve environmental performance. We are also very impressed by the number of people who want to be part of the programme, even before its launch. Another aspect that has proven relevant to the Chilean programme is its ability to adapt to the local reality and its simple and systematised implementation. All this adds to the strength of the programme and to the reason why it is widely successfully implemented in all parts of the world.





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Dominican Republic ----

Instituto de Derecho Ambiental de la Republica Dominicana (IDARD) National Operator: Cesarina Aquino

Country size: 48,442 km<sup>2</sup> Population: 10.7 million Longest river: Yaque del Norte River 296 km Highest mountain: Pico Duarte 3,098 m National plant: Bayahibe Joined Eco-Schools in 2007 Number of Eco-Schools: 39



# National animal: Cigua Palmera

The Cigua Palmera (Dulus Dominicus) was declared the national bird on 14 January 1987.

It does not sing like the nightingale, nor is it as charismatic and colourful as the parrot.

Many people wondered why it was selected as the national bird. The reason is sought in its taxonomic uniqueness, and in the complexity of its reproductive behaviour.



#### **National Legislation**

In 1977, the government instituted the Environment Department. Subsequently, the Ministry of Agriculture created the Department for Wildlife and an Environmental Education (EE) division in 1978 and 1979 respectively. In 1985, law No. 295 was proclaimed, which prescribed the teaching of EE in all public and private schools at all levels.

After the country's participation in the Rio Conference, law No. 300 was enacted in 1998. This law derogated law No. 295 and re-established the mandatory teaching of EE. Two years later, the Secretary of Environment and Natural Resources, now Ministry of Environment and Natural Resources, was established through the regulatory framework No. 64-00 which records in detail all definitions and sanctions related to the protection and conservation of the environment in the Dominican Republic. In chapter VII, articles 56-58, EE is described as an essential element for the maintenance and preservation of the nation's natural resources.

The Senate approved the EE project and remitted it to the Chamber of Deputies on November 20th 2017. According to the said project, the development of ecological conscience is the essence and purpose of EE, so that the planet's health can be guaranteed in the broadest context of biodiversity.

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme began through the coordination of Instituto de Derecho Ambiental de la República Dominicana (IDARD) with support of EGE HAINA, a wind-power generation company in the country, which sponsored four public schools for the academic year 2007-08, as part of the company's initiative for social responsibility. The schools were located in the communities of Higuey, San Pedro de Macorís and Barahona and through four follow-up visits, they were trained in the Seven Steps and the environmental issues they were addressing. In 2008, the first Green Flag in the Dominican Republic was awarded to La Punta Pescadora School.

Currently, in the academic year 2019-20, 58 public and private schools are participating in the programme, with the support of six sponsors.

Instituto de Derecho Ambiental de la Republica Dominicana (IDARD) Fernando Manuel Castillo No. 6 Ensanche Miraflores, Santo Domingo



The programme and the constant training for students to raise awareness on issues of waste management, resource-saving, climate change and biodiversity have contributed to both the creation and maintenance of the school garden for the production of organic vegetables and the promotion of healthy food, as well as the reduction, reuse and recycling of usable materials generated in the activities. It has resulted in the reforestation of endemic trees, in waste reuse workshops such as fabrics, oils, paper, cardboard and plastic for the reduction of the carbon footprint and use of materials and in greater involvement and awareness of the surrounding community in common environmental problems.

All this has been made possible by the Eco-Schools teams in all the different schools that have been participants in the programme since 2007. This work for quality EE delivered by IDARD has been recognised by Fundación Propagas.

The biggest challenge for the programme is the resources for its implementation, as well as the limited support from government institutions.

"The Eco-Schools programme has been an opportunity to develop environmental and citizenship competencies in the educational community, promoting environmental awareness to improve the reality of the educational centre and the community." **Evelyn Valera Portes, Principal, La Punta Pescadora School** 

"On behalf of the Ministry of Education, we consider this programme impressive because it will strengthen all of the national educational work in environmental education".

Jose Amando Rodriguez, Director of the Department of Environmental Education of the Ministry of Education

"Eco-Schools is the best tool to teach young people to take actions in favour of the environment, realistic concrete actions adapted to the needs of educational centres." Cesarina Aquino, IDARD Director





The Cigua Palmera belongs to a monospecific family (Dulidae), which means that it is the sole species in its family (Dulus). There are no more than 10 monospecific families in the world, and the Dulus Dominicus is the only one endemic in the Antilles.

This playful little bird builds a massive nest in which every family has its own 'apartment' with its own entrance to ensure each couple's privacy. It only builds them on palm trees that are isolated from any other tree to ensure that neither rats, snakes or humans have easy access to it.

#### **NATIONAL OPERATOR - REFLECTIONS**

The way in which the student community and the inhabitants close to the schools have radically changed their environmental practices, especially with waste management, which is an urgent problem in our country, gives us great pride. Also, to see how through the programme, the children and young people of tomorrow are more aware of how we should treat our planet, gives us the satisfaction of duty fulfilled. To experience these things has been very special for me.

# Mexico 🔹

FEE Mexico National Operator: Joaquín Díaz / Rebeca Sánchez

Country Size: 1.9 million km<sup>2</sup> Population: 123.5 million Longest river: Rio Conchos 9,034 km Highest mountain: Pico Orizaba 5,634 m National flower: Dalia flower National tree: Ahuehuete Joined Eco-Schools in 2012 Number of Eco-Schools 38



# National animal: Golden Eagle

Mexico's Coat of Arms depicts a golden eagle perched on a prickly pear cactus, with a rattlesnake in its beak. The emblem refers to the legend of the Aztecs' arrival to the Valley of Mexico.



#### **National Legislation**

In the national legislation, the Education Secretary has integrated Environmental Education (EE) as a main component of education, but only to a basic level in selected themes.

#### **K-12 Education**

In grades 4-12, the educational system has four academic training fields and EE is incorporated in Exploration and Understanding of the Natural and Social World. Between grades 4-5, there is a subject called Natural World, which is divided into three parts. Only one of these parts is concerned with the environment. In grades 6-9 there is no subject including EE as a main component, however, it is incorporated e.g. in the biodiversity subject. In grade 10. it is incorporated in the teaching of the ecosystem in the biology subjects. In grade 11, the environment is not a part of any subject or field, however, in grade 12, there are learning objectives related to contaminating substances and separation.

#### **Professional Development**

Center for Environmental Education and Communication (CICEANA) offers a number of professional learning opportunities, including workshops and support in the design of, e.g. school gardens. Beyond this there are, unfortunately, very limited professional development opportunities available for teachers and trainers working with EE.

# THE STORY OF ECO-SCHOOLS

In 2012, the NGO Pronatura launched the implementation of the Eco-Schools programme. The first school to be awarded with a Green Flag was Colegio Contadero on 4 July 2014. In the school year 2016-2017 ten schools were running the programme and two of those received the Green Flag.

In September 2017, FEE Mexico took over the role as a National Operator. FEE Mexico made alliances with municipalities and stakeholders such as the Municipalities of Benito Juarez, Los Cabos, Puerto Morelos, Isla Mujeres and Zihuatanejo, as well as Reciclando Mexico and Honneywell, which have been essential to the development and expansion of the programme. By the end of the school year 2017-2018 there were 21 schools with 18,0000 students working with the programme and within 2018-2019, 38 schools with 30,000 students were registered and active.



According to the Global Shapers Survey 2018, developed by the World Economic Forum, 48.8% of 31,495 young students who were interviewed around the globe, believe that the biggest global issue is climate change and the destruction of nature. 1,661 young Mexican students were interviewed using the same survey and 71.9% answered that the biggest issue was related to corruption.

It is an achievement that Eco-Schools in Mexico has grown 200% in the last 17 months from 18 schools in the centre of the country to 38 schools in 8 states. The 38 schools have almost 30,000 students, 450 teachers and are located in 8 states. The 38 Eco Committees consist of a mix of students, parents and school authorities, with 1,900 people in total. Since 2017, more than 44,000 students have been involved with Eco-Schools Mexico.

#### **NATIONAL OPERATOR - REFLECTIONS**

The highlight moment was realising the impact that an Eco-School can make in a community. This month we had the Green Flag event in Mexico, a few days later, one of the school teachers of the Esc. Sec. Tec. 186 Adolfo Lopez Mateos called me and told me that the programme had a huge impact on the reduction of plastic waste. The collection and recycling in the school decreased by 50%. Also, during the arrival as well as when the event ended, we could see that the surrounding area of the school was clean - something amazing.

**FEE Mexico** Francisco Javier Mina #112, Col. Morelos, Toluca

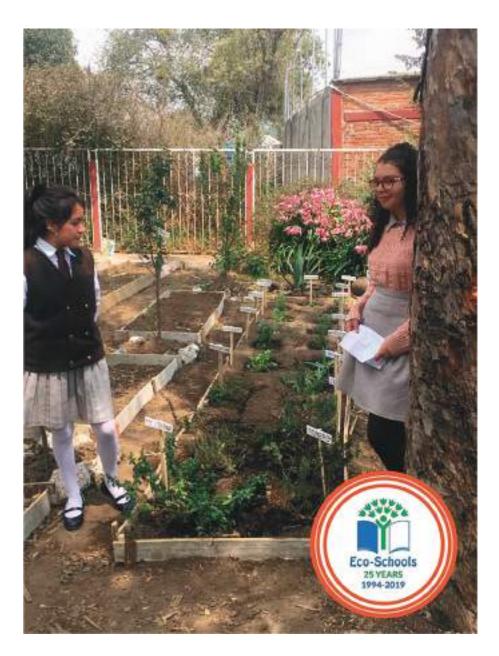


"With the involvement of teachers and students, but also families who have gradually joined, it's very rewarding to recognise that children take this knowledge from school to their homes to transform the way things are. Our proposal is not only to teach students to respect the environment and their planet, but it is also to encourage families to participate in this process, recycle, but also to safeguard traditions and collaboratein collective efforts."

#### Armando Salgado García, Principal of Escuela Secundaría Técnica 56 Enrique Ramírez y Ramírez

"The lesson given to us by these young people is the very important one of perseverance, but beyond that it requires will and love for the ecosystem, love for our country, love for our Earth. So, I will do nothing but congratulate and join that effort. We would have to begin at home, but here it is starting with the school and that is certainly to give an example and be congruent. Participants who today achieve a Green Flag: the challenge is greater for you now because, from this day, it is you who inspire other schools. Today you, students from these 11 schools, will help all the citizens of Los Cabos build a new and better story. How? By being the inspiration, getting that Green Flag as a badge in your school and inviting and setting an example that we can do it, united." Jesus Armida Castro Guzman, Mayor of Los Cabos, speech given during the Green Flag event in Los Cabos Municipality on 24 July 2019





"Implementing Eco-Schools in the country has been a huge challenge. More than 1.9 million square kilometres represent big difficulties. But our network is growing thanks to the changes in society. Eco-Schools gets involved with more and more positive change agents every day. We are now present in 20 municipalities and influencing more than 30,000 students. Finally, we are working under three main premises; Sensitisation. All anthropogenic activities have an impact on the environment. We have to know it! Responsibility. Individually or as a society we all have liabilities and we have to face it! Action. Every effort is important and has a positive impact. We have to make it happen!" Joaquín Díaz, FEE Mexico Executive Director



# Puerto Rico

Organization for Sustainable Environment (OPAS) National Operator: Marisol M. Quinones

Country size: 9,104 km<sup>2</sup> Population 3.1 million Longest river: Río de la Plata 97 km Highest mountain: Cerro Punta 1,338 m National animal: Todus Portoricencis Joined Eco-Schools in 2007 Number of Eco-Schools: 36



# National plant: Flor de Maga

Although originally endemic to the humid mountains of limestone in the western and north-central portions of the Island, today it grows everywhere in Puerto Rico due to its extensive cultivation.



#### **National Legislation**

In terms of Environmental Education (EE) in Puerto Rico, the initiatives are related to specific moments in the country's history. To date, there are countless environmental laws for the use of natural resources, planning and development, but it should be noted that Puerto Rico does not have a concerted environmental strategy or policy for EE. However, several government agencies subscribe to programmes resulting from federal laws of the United States, which are adapted to specific initiatives on the island.

#### **K-12 Education**

The curricular frameworks of the Department of Education of Puerto Rico have EE as one of the cross-cutting themes for all subjects within the school curriculum. For many years the science programmes have overviewed the development of materials, resources and training for the integration and teaching of environmental issues. As a result, EE is implemented in schools through the scientific lenses. This approach tends to be fragmented due to the lack of training and national integrative strategies that establish the guidelines for environmental learning/sustainable development education through all curricular subjects. In this regard, the Eco-Schools programme in Puerto Rico has served as a framework for promoting integrative educational processes towards sustainability education.

#### **Professional Development**

Professional development programmes in EE have been carried out mostly in university programmes and initiatives developed by non-profit organisations. In Puerto Rico, only one university offers a degree in EE at the graduate level, which is mainly focusing on teacher training. More than ten projects of environmental and didactic training in environmental issues and sustainability have come out of this faculty that have served more than 500 teachers. The rest of the initiatives have been specific training offered by the Department of Education of Puerto Rico, for teachers who teach science subjects and by non-profit organisations dedicated to EE on the island.



Darelis Flores, Eco-Schools Puerto Rico Coordinator, recognised by the U.S. Environmental Protection Agency for introducing climate change in preschool education in 2015

# THE STORY OF ECO-SCHOOLS

In 2007 and after several years of good results with the Blue Flag programme, OPAS decided to expand its services and to incorporate another FEE programme within its organisational platform. The administrators of OPAS, including Maylene Pérez, OPAS Founder and Executive Director at the time, and Mayrelis Narváez, first Eco-Schools National Operator, had a special interest in EE initiatives due to their graduate formal academic qualifications in Environmental Affairs. At the time, there were several schools that participated in Blue Flag as collaborators and felt the interest to pursue a serious commitment to the environmental management of their school. With the support of these school communities, the Eco-Schools network started to take form and in 2008, School of San Juan and Basilio Millán School in Toa Baja became the first two schools in the programme to receive the Green Flag award.

In 2014, OPAS received the award for EE performance granted by the U.S. Environmental Protection Agency for the trajectory and performance in EE. During the 2014-2015 academic year, two of the coordinators of the Green Flag schools were recognised for their leadership in the programme by the U.S. Environmental Protection Agency, the Association of Science Teachers of Puerto Rico and The White House.



OPAS' main achievement with Eco-Schools has been the development of the programme for thirteen consecutive years, with a gradual increase of participating schools without any recurrent government or private sector funding for the organisation. The organisation also gained support from two municipalities on the island for several schools within the programme.

In addition, a relationship has been developed with the International Earth Charter initiative by participating in the first education forum and the publication of several environmental lessons designed by the coordinator of one of the participating schools. In February 2017, three Eco-Schools supported the House of Representatives in presenting a paper in the public hearings to derogate or amend the 2015-274 law that prohibited single use of plastic bags, which resulted in the amendment of the law to no derogation.

OPAS is continuously focusing efforts on the search for funds to maintain the operationalisation of the programme.

#### **NATIONAL OPERATOR - REFLECTIONS**

As a National Operator in the Eco-Schools programme in Puerto Rico, it has been a great personal and professional satisfaction to see the programme grow and see initiatives developed in schools. One of the initiatives established with very positive results has been the creation of the Eco-Schools Academy. This two-day workshop gives school coordinators the opportunity to share content, learn more on innovative strategies and establish working links with other schools within the programme.

After the Hurricanes Maria and Irma arrived on the island with their devastating effects on both the social and natural systems, it was a need we had to address to provide space for resilience and adaptation to climate change. A programme called My Resilient Eco-School was created, which seeks to educate school communities and prepare them to face natural disasters. This programme was presented at the Global Clinton Initiatives Conference held on the island of St. Thomas in June 2019.

"As a growing Eco-School, our learning community is aware of how to positively impact our environment. The Eco-Schools programme has allowed us to nourish a culture of peace, a consciousness of everything that surrounds us. We have left old habits behind to re-learn a new way of living that goes hand in hand with our planet and its inhabitants." Darelis Flores, Teacher and Coordinator, School of San Juan - one of the first two Eco-Schools awarded in Puerto Rico and recipient of the EPA Environmental Education award 2014

"When I think about the experiences of the Eco-Schools programme in Puerto Rico during these past thirteen years, almost all of them are characterised by hard work, collaborative actions, a resilient attitude and a consistent commitment to promote sustainable actions in our schools and communities. Although the educational model that has emerged for our context has taught us about the importance of democratic participation, an ethic of care, inclusion and EE, perhaps the most powerful learning we have had is related to the need of a shared vision that fosters a holistic education for a sustainable culture. That is why, in our country, the Eco-Schools programme is equivalent of a shared vision towards sustainability, hope, empowerment and resilience - fundamentals to transform our society into a more just and peaceful one." Dr María de Los Ángeles Vilches-Norat, Faculty at Earth Charter International Costa Rica and Ana G. Méndez University

"The Eco-Schools programme in Puerto Rico is not only an environmental programme, it is a methodology that supports sustainability in the community in an organised manner to maintain long-term change. It is a process that draws on the efforts of student educators and administrators who are committed to the development of sustainable practices in the school. Every day, we at OPAS, work to offer our participants the best resources and development opportunities in their schools. We work tirelessly to continue growing and strengthening the programmes within our institution. We recognise the commitment of our schools and the indisputable achievements they have had over time. We firmly believe that one of the areas of change towards sustainability lies in education and therefore we will continue to develop initiatives that contribute to the transformation towards sustainability on our island." **Ruz I. Deliz, OPAS Executive Director** 

**Organization for Sustainable Environment (OPAS)** P.O. BOX 9300845 San Juan, P.R. 00928 "From my perspective, the most important impact of Eco-schools in Puerto Rico is the change in behaviour in a very short period of time. This does not only take place for the students who participate, but also for teachers, parents, administrators and custodial personnel who are part of the school community. Traditionally, teachers do not have the opportunity to see how young people develop and become more aware of their surroundings. The Eco-Schools programme provides, through its Seven-Step structure, the opportunity to not only create that awareness, but also to realise we are part of the problem and can become part of the solution through sound environmental actions."

Lourdes Díaz, OPAS President of Board of Directors



# United States of America

National Wildlife Federation (NWF)

National Operator: Kim Martinez

Greenpoint Green Flag Event May 20<u>17. Pho</u>to: Teri Brennan

Schools

Country size: 9.3 million km<sup>2</sup> Population: 329 million Highest mountain: Denali 6,190 m National tree: Oak Joined Eco-Schools in 2008 Number of Eco-Schools: 5,500



#### Longest river: Missouri River 3,767 km

According to the myth, the catfish in the Missouri River are big enough to swallow a human being.

#### National animal: American bison

The Bison is a uniquely American animal and is the embodiment of American strength and resilience. As it is as fearless as the bald eagle, as strong as the oak and inspiring as a rose, bison is considered as the national animal of USA.



#### **National Legislation**

The United States supports Environmental Education (EE) through national initiatives that aim to design and deliver guidelines for promoting excellence in the field, demonstrate the value and impact of EE through empirical evidence, and promote environmental literacy in each state. The National Environmental Education Act was passed in 1990 and requires the U.S. Environmental Protection Agency to provide national leadership on EE. The office of Environmental Education at EPA was developed as a result of this Act and provides support to schools and organisations across the country to enhance EE. The North American Association for Environmental Education (NAAEE) is the largest non-profit organisation supporting EE in the United States and has affiliate member groups in each state that work on state-based EE policy. At the federal level, there is also the Green Ribbon Award Program through the US Department of Education that makes yearly awards to those schools/districts that show great progress and achievement in sustainability and EE.

#### **K-12 Education**

Education in the United States is provided in public, private, and home schools. State governments set the overall educational standards, often mandate standardised tests for K-12 public school systems. School funding consisted of \$1.5 trillion per year, out of which the bulk of the \$1.3 trillion in funding comes from state and local governments, with federal funding accounts for only about \$200 billion.

#### **Professional Development**

Most EE professional development for educators is conducted by a multitude of non-profit organisations that work with schools across the nation. There is an increasing demand for Science, Technology, Engineering, and Math (STEM) professional development. Educators are also interested in pedagogy that supports the use of real-world data, real-world issues, and real-world solutions.

#### THE STORY OF ECO-SCHOOLS

In April 2008, Kevin Coyle, NWF's Vice President, Education & Training Programs, asked Laura Hickey, NWF's Senior Director, Education & Training to look into the Eco-Schools programme. Kevin was desirous of having a "green" school programme in the United States that could serve as an umbrella for NWF's existing K-12 education programmes, i.e., Schoolvard Habitat<sup>®</sup> and Climate Classroom, and complement NWF's children and nature magazines. Kevin had heard about Eco-Schools and thought that instead of developing an entirely new programme, it would be worth considering being part of the Eco-Schools network. In May 2008, Kevin Coyle and Laura Hickey reached out to FEE to inquire about being the host organisation in the United States. FEE had received several inquiries from NGOs in the U.S., but none had had the bandwidth or national presence to run the programme until NWF applied. Laura Hickey spent several months researching English-speaking Eco-Schools websites and programmes and developed the NWF Eco-Schools USA programme plan which was submitted to Finn Bolding Thomsen on 9 July 2008.

The programme plan included not only how NWF would launch the programme, but also which environmental themes U.S. schools would address. Funding for the start-up of the Eco-Schools USA programme came from a donor bequest as well as from NWF unrestricted funds. FEE's Board of Directors considered the application at the board meeting in October 2008, and the National Wildlife Federation was approved as the USA's host organisation for the FEE programmes. This decision was confirmed at the 2009 General Assembly in Latvia.

Although NWF was approved as the host in late 2008, the programme wasn't launched until November 2009, when the team became fully staffed with Elizabeth Soper transferring to the K-12 team and the fully functional Eco-Schools USA website went live. Two years later, on 2 August 2011, the Savannah Country Day School in Georgia received the first Green Flag in the United States. NWF has now been running Eco-Schools in the United States for ten years.

### **KEY MILESTONES**

In 2013, the Eco-Schools USA Website Dashboard 1.0 was released. Here, registered schools in the U.S. have the ability to track progress toward their goals, showcase their accomplishments and share their environmental impacts with data-driven metrics.

In partnership with U.S. EPA, EPA Taiwan and NWF's New Jersey Affiliate, New Jersey Audubon, the U.S.-Taiwan Eco-Campus Partnership programme was born in 2014. The goal was to develop an international sister schools programme that would bring communities in both countries together around the theme of sustainability.

In 2015, the National Wildlife Federation Honoured America's Top 10 Eco-Schools and one year later in 2016, NWF reached a milestone of 10,000 K-12 schools participating in the school greening efforts via Eco-Schools USA (5,000 registered) and NWF Schoolyard Habitats. In 2017, Eco-Schools USA introduced the Learning About Forests (LEAF) and WOW: Watersheds, Oceans and Wetlands pathways. In 2018, a Green Flag milestone was celebrated when the 100th Green Flag bestowed by Eco-Schools USA was awarded. This year has also been one to celebrate as it is not only the 25th Anniversary to the global Eco-Schools programme, but also the 10th Anniversary of the NWF as the host of the Eco-Schools programme in the United States.

The U.S. Department of Education has a Green Ribbon Schools award which aims as recognising schools that reduce environmental impact and costs, improve the health and wellness of schools, students, and staff and provide effective environmental and sustainability education. The combined progress in all three of these areas, which are known as Pillars, serves as the basis for recognition. More than 100 Eco-Schools have received the U.S. Department of Education Green Ribbon Schools Award since its inception in 2011.

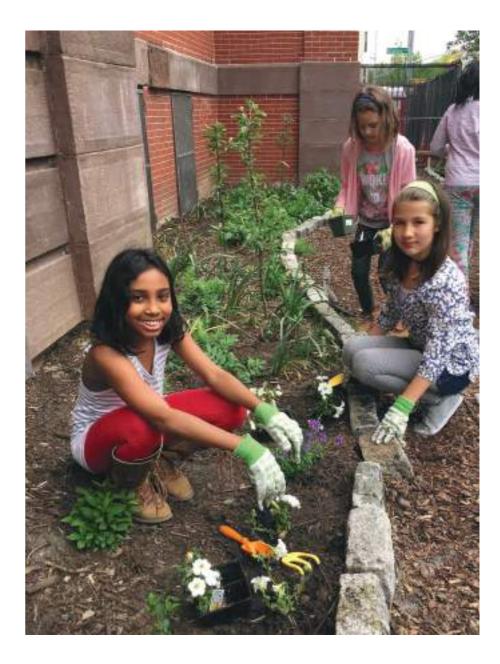


"Our students have become more aware and passionate about the environment, and, in turn, they are driven to protect our planet. Eco-Schools provides incredible opportunities for students to collaborate, deepen their observation skills, increase their questioning skills, and learn that they can make an impact, no matter their age. Our students have increased their environmental literacy and are eager to share what they know with younger students and our wider community." Jennifer Hertzberg, Principal, Flint Hill Elementary School

"We congratulate the team at the Foundation for Environmental Education (FEE) on the occasion of your 25-year anniversary! The work that the National Wildlife Federation is driving through the Eco-Schools programme is inspiring youth from the U.S. and around the globe to engage in joint environmental stewardship projects in their homes, schools, and communities. We, along with our partners at the Global Environmental Education Partnership (GEEP), look forward to developing closer ties between FEE programmes and GEEP initiatives as we work to expand the global conversation on environmental literacy." U.S. EPA's Office of Environmental Education & Office of International & Tribal Affairs

"The impact of the students in America's Eco-Schools is truly remarkable. Students restoring local forests and wetlands; pursuing zero-waste through recycling, and reducing air and water pollution - all while engaging in hands-on activities that build essential science and math skills and forge lifelong connections with nature. The National Wildlife Federation is so proud of the first 10 years of the Eco-Schools programme, which has improved students' academic performance, developed greater problem-solving skills, and enhanced leadership abilities. By providing millions of students with quality environmental education, Eco-Schools is instilling a lasting love of nature and preparing environmentally conscious youth to create a more sustainable future for all Americans."

Collin O'Mara, National Wildlife Federation President and CEO



## **NATIONAL OPERATOR - REFLECTIONS**

It is always a challenge to work in such a huge country. With over 132,000 schools, we have needed to focus our efforts on reaching schools in the largest 25 school districts across the country, which is still only a fraction of the number of schools. So capacity, funding and educational policies are our biggest challenges - every state, municipality, town - have their own educational policies. A huge moment was, therefore, when we hit 100 Green Flags! Each time we receive an application for the Green Flag award, we learn so much about our schools and are able to track not only their progress but ours as well.

# US Virgin Islands

Virgin Islands Conservation Society (VICS) National Operator: Valerie Peters

Country size: 346.4 km<sup>2</sup> Population: 107,200 Highest mountain: Crown Mountain 474 m National animal: Bananaquit Joined Eco-Schools in 2017 Number of Eco-Schools: 7

## National plant: Yellow Trumpet bush

Yellow trumpetbush is an attractive plant that is cultivated as an ornamental, but can occasionally become an invasive weed.

ach of Eco-Schools at Jane E Tuitt on St Thomas





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Although Environmental Education (EE) has not been widely incorporated into the national curriculum, a wide range of non-profit organisations implement EE initiatives throughout the islands, many in conjunction with biodiversity and marine conservation programmes.

#### THE STORY OF ECO-SCHOOLS

The years 2016 and 2017 were dedicated to laying the groundwork to introduce the Eco-Schools programme in the US Virgin Islands. In May 2016, the Department of Education approved the Eco-Schools initiative as a programme in which local public schools could participate to support their STEM and environmental programmes. In early 2017, the Department of Education assigned a liaison to assist with identifying potential candidates and assisting with implementation.

Hundreds of hours were spent meeting with various governmental officials, senators, the Climate Change Commission, Curriculum Centre superintendents, administrators, educators, experts in their fields, government agencies, NGOs, scientists, possible donors etc. The intent was to introduce the Eco-Schools concept to as diverse groups as possible to gain territory-wide awareness and buy-in, and identify potential partners and align with their EE outreach work as well as existing programmes that align with Eco-Schools.

Due to the two recent hurricanes that devastated the US Virgin Islands in the summer of 2017, VICS was unable to launch the Eco-Schools pilot programme in the US Virgin Islands during the fall of 2017. To build on the work that had been done on a volunteer basis, VICS reached out to the National Wildlife Federation (NWF) – Eco-Schools USA for assistance.

On 9-10 April 2018, two Eco-Schools introduction meetings were held on both St Thomas and St Croix. The intent was to encourage schools to participate in the programme utilising the Eco-Schools USA website, format, and materials (which are aligned with NGSS, Common Core Standards and National Science Standards). The response was overwhelmingly positive, and the Science Curriculum Coordinator, Gerald Walters, encouraged public schools in the US Virgin Islands to sign up for Eco-Schools. Teachers recognised the opportunity to spend more time teaching and less time developing new lesson plans to keep up with ever-changing standards. An MoU was established with NWF, which allowed registered US Virgin Islands schools to utilise all Eco-Schools USA's materials free of charge. In conjunction, Eco-Schools US Virgin Islands planned to foster locally relevant partnerships to support local EE initiatives and collaborate in developing locally relevant educational materials.



Throughout the academic year 2018-19, VICS has been in communication with schools to encourage them to take on a single theme or be recognised for the sustainable work they are already doing for them to achieve the bronze, silver or Green Flag award by the end of the 2019-20 school year. In addition, VICS will encourage additional schools to take on the Eco-Schools challenge and begin their process as well.

VICS is currently establishing MoUs with various local agencies to provide expertise on various topics – to date, the Department of Planning and Natural Resources, the Department of Energy, VI Waste Management, EPA, Nature Conservancy, University of the Virgin Islands.



## **KEY MILESTONES**

The introduction and initiation of the programme was a challenging task as the Islands, including the education system, are still recovering from the 2017 hurricanes. Some schools have closed, some are operating double sessions and many are in desperate need of repairs and upgrades.

Some other achievements since the programme was implemented have been the creation of raised beds and gardens at Jane E Tuitt Elementary School as well as the silver award of Claude O Markoe School on St Croix.

"Sustainability has become a priority in the US Virgin Islands since the devastating 2017 hurricane season. Eco-Schools is the perfect medium to help integrate resiliency practices to preserve natural resources and prepare the islands for the consequences of climate change." **Paul Chakroff, Virgin Islands Conservation Society Director** 

#### **NATIONAL OPERATOR - REFLECTIONS**

A highlight moment for me as the National Operator has been getting the opportunity to bring together a wide variety of stakeholders to help support education in the US Virgin Islands.

Virgin Islands Conservation Society (VICS) 4126 Anna's Retreat St Thomas, 00802 USVI



#### The islands

The US Virgin Islands consist of 4 larger islands: St. Croix, St. Thomas, St. John, Water Island, and 50 smaller islets, cays, as well as a coral reef system which harbours immense biodiversity.

The US Virgin Islands are one of the few localities under the U.S. flag with coral reefs. Coral reefs are valuable resources and are of tremendous economic value. They function in shoreline protection, support our fisheries and support our tourism-based economy. Furthermore, much of the country's population depends on marine resources for their livelihoods, such as through fishing and tourism.



# South & Eastern Europe

Bosnia & Herzegovina, Bulgaria, Croatia, Cyprus, Greece, Italy, Malta, Montenegro, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Turkey & Ukraine



## Bosnia & Herzegovina

Social Innovation Incubator MUNJA National Operator: Jan Z. Kulenovic

Country size: 51,209 km<sup>2</sup> Population: 3.5 million Highest mountain: Maglic 2,386 m National animal: Grey wolf Joined Eco-Schools in 2018 Number of Eco-Schools: 23



## Longest river: Bosna 273 km

During the 9th century, the entire province and later kingdom took the name Bosnia, after the river Bosna.

#### National plant: Liliumbosniacum

One of the key coat of arms of the Kingdom of Bosnia was the plant Lilium.



#### **National Legislation**

Bosnia-Herzegovina has a complex educational system that is fragmented and divided into three ethnically defined curricula instead of in one national curriculum. Moreover, school system administration is divided by authority among 14 Ministries of Education: 10 cantonal, 2 other entities, 1 Brcko District and 1 national Ministry of Civil Affairs, responsible for national coordination and international cooperation in the fields of science and education.

#### **K-12 Education**

The educational system is divided into the preschool level, elementary school (grades 8-9), high school (grades 3-4) and higher/university education. Within this system, Environmental Education (EE) is not a separate subject, but a cross-curriculum topic that has certain units covered in different subjects e.g. nature & society for elementary school or later in biology. More practical work is done through ecoclubs, an extra-curricular activity designed and run by teachers without any official framework, monitoring, guidebooks or the like.

Some NGOs share EE content through workshops in schools - again without a fixed plan, procedure, certification or monitoring, which becomes a more ad hoc and improvised educational content.

#### **Professional Development**

There are no official EE programmes for teachers, nor university programmes in Bosnia-Herzegovina targeting the environment and sustainable development as primary subjects.

There is, however, the possibility for such courses through a number of NGOs or international programmes. After the war, there have been a lot of international NGO and UN programmes in the country on various topics for capacity building of schools and teachers, some of them supporting teachers in the field of EE as well.

## THE STORY OF ECO-SCHOOLS

The Eco-Schools programme started in 2018 as an initiative from a recycling operator company called EKOPAK in cooperation with the organisation Social Innovation Incubator Munja, which has 17 years of experience in the field of youth empowerment. The programme implementation was initiated with mentorship support from the Eco-Schools programme in Slovenia, as well as the Ministry of Education, which provided recommendations for the introduction of the programme.



## **KEY MILESTONES**

The key achievement for the organisation is the successful kickstart of the programme and involvement of 23 elementary schools in 2018. Just a few months later, the implementation of the first creative Tetra Pak competition was launched, through which 170 student works from 240 students were collected.

"It is very important that Bosnia-Herzegovina takes part in global programmes that will support Environmental Education and empower young people."

Amela Hrbat, EKOPAK CEO, Strategic Partner

"To empower young people and to support the systematic development of Environmental Education is crucial for Bosnia-Herzegovina, and the Eco-Schools programme gives even more through international cooperation and global practices."

Jan Z. Kulenović, MUNJA Incubator Director





**Social Innovation Incubator MUNJA** Skenderija 15 71000 Sarajevo, BH

## **NATIONAL OPERATOR - REFLECTIONS**

Funding can always be a challenge, especially in the start-up phase of the programme where one has to create awareness within and the interest of local authorities. However, the first orientation seminar for schools at which teachers and principals showed huge interest and motivation, but also a lot of experience with different creative activities in the field of Environmental Education, was a highlight for me.



## Bulgaria

Bulgarian Blue Flag Movement (BBFM) National Operator: Petya Yordanova

Country size: 110,994 km<sup>2</sup> Population: 7.1 million Longest river: Iskar 340 km National animal: Lion National plant: Rose National tree: Oak Joined Eco-Schools in 1995 Number of Eco-Schools: 158



#### Highest mountain: Rila 2,925 m

According to the legend, Rila Mountain was a woman, whose name was Rila. She married a man from the highlands against the will of her parents. The man was called Pirin. The young couple got married with no wedding ceremony, or songs or a party and without their parents' blessing. They went away and settled in an isolated place. Rila and Pirin had two kids: a boy named Iskar and a girl named Mesta. Nobody had ever heard such names before.

The father was always going hunting, and the mother was looking after the kids and the house. The two children were very naughty. All-day long they were running, fighting, yelling and were up to mischief. Every day Rila was asking Pirin to talk to the kids and to help her with their upbringing, but he did not want to listen. His main duty was to find food and clothes for his family and the rest was the obligation of the mother. One day the brother and sister got into a serious fight and Rila raised her arms to stop them and with tears in her eyes, she cursed them: "May God separate you so that you never meet or see each other again. May people be afraid and run away from you. May you live with reptiles, fish and frogs. May God turn me into stone so that I may not say a single word to you again. May I never give you any love nor be able to hug you. May the trees be my children. May my body turn into earth and rocks. May my tears turn into springs and lush rivers. And, Lord, if you really exist, please turn Pirin into a mountain as well, so that people will not laugh at him because of his naughty children."

She had hardly finished these harsh words before a bright lighting cut across the sky. A strong thunder was heard and within minutes, Rila turned into a mountain – the Rila Mountain. Pirin turned into a rock and became the Pirin Mountain. The two children turned into rivers. The girl, Mesta, being gentler, ran quietly down the hills of the mountains. The boy, Iskar, who was wild and naughty, took his turbulent waters north through the mountains, crossed the Balkan Mountain and merged waters with the Danube River that was similarly unruly and uncontrollable.

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#### **National Legislation**

Educational reforms in Bulgaria over recent years have permitted a new and definitive Environmental Education (EE) programme to be introduced. This programme is particularly related to nature conservation; it has had an important impact on the whole secondary school curriculum and has influenced teacher training.

The problems of ecology and nature conservation are represented in the Bulgarian school curricula and included in the Cultural Educational Areas (KOO in Bulgarian): 'natural sciences and ecology' and 'geography and economics' from grades 3-12 of the secondary education. The State Educational Requirements presume inclusion of environmental and nature conservation aspects in school curricula and textbooks.

#### **K-12 Education**

The school curricula allow the inclusion of environmental problems in three ways: (1) implicit inclusion of some notions or data in the lessons; (2) explicit inclusion of concepts related to topics like hazardous substances and health; and (3) inclusion of ecology and nature conservation chapters. The complex formation of the components of ecological consciousness is derived as a strategic orientation of ecological education in the pre-school context. The formation of environmental consciousness starts already when the children are in kindergarten and this is an important component of the programme. Mastering environmentally friendly behaviour is part of the civic socialisation of the child. The EE of preschool children is a scientific direction studying the pedagogical factors for the formation of a child's environmentally friendly attitude, not only towards nature and its surrounding environment, but also to the social and psychological environment of the child.

In 2016, the Ministry of Education determined a State Education Standard for civil, health, environmental and intercultural education, which made Education for Sustainable Development (ESD) a government policy and integrated activities of the Ministry of Education, Youth and Science and the Ministry of Environment and Water. EE is now also integrated into the activities of a number of NGOs.

#### **Professional Development**

There are many universities and research institutes offering Masters programmes in Environmental Engineering, Environmental Sciences, or Environmental Education. There are also many environmentallyfriendly courses in other departments of the faculties of Pedagogy, Natural and Applied Sciences and the faculties of Landscape Architecture, Urban Planning, Social and Administrative Sciences, Geography, Biology, Sociology, Physiology, Agrarian Sciences and Aquaculture. There are courses and programmes related to EE and ESD in the departments for training and improving teacher qualifications.

## THE STORY OF ECO-SCHOOLS

In 1993, Bulgarian Blue Flag Movement (BBFM) was accepted as a member of FEE and started the Blue Flag programme. In 1995, the organisation started the second FEE programme - Eco-Schools, which was seen at the time as very well structured and with a lot of potential. The first Bulgarian Eco-Schools Coordinator was Iliya Shterev, one of the co-founders of BBFM, along with Eng. Simeon Mitzov and the Secretary of the organisation, Nikolina Mancheva. Bulgaria was the first country from the Eastern and Central Europe's former socialist countries to start Eco-Schools.

It started with 5 schools in the Burgas region with the collaboration of Burgas Municipality and the Regional Inspectorate of Education. Soon after the programme was implemented in Burgas, a teacher from Mihail Lakatnik School was asked to participate in the Eco-Schools National Operators and teachers meeting in Spain in 1996.

## **KEY MILESTONES**

In 1996, Bulgaria started implementing Eco-Schools in 10 schools and kindergartens in Burgas, while in 1998, on 20 May, the first school in Bulgaria, Mihail Lakatnik School in Burgas was awarded the Green Flag. This was also the first school in Eastern and Central Europe to be awarded. In 1999, Nature Park Golden Sands became a coordinator of the programme for North-East Bulgaria, with 12 more schools and kindergartens from that region joining Eco-Schools.

2002-2004 was a period for expansion for Eco-Schools in Bulgaria. In 2004, the organisation received recognition and started a collaboration with all municipalities where Eco-Schools was implemented, and in 2006, it received recognition by the Ministry of Environment. In 2009, BBFM implemented a joint programme on active learning and energy efficiency, in collaboration with the Energy Agency of Plovdiv. In 2012-2014 the school network of Eco-Schools and Learning about Forests expanded to 127 schools. 68 Bulgarian schools participated in FEE's Litter Less Campaign in 2012-2017, 52 schools participated in the We Eat Responsibly EU funded project running in 7 Eco-Schools countries in 2015-2017, and 72 schools participate to date in FEE's The Great Plant Hunt biodiversity project.

Finally, in 2018, Mihail Lakatnik School received its 10th Green Flag award and became an ambassador school for Bulgaria.



#### **NATIONAL OPERATOR - REFLECTIONS**

Being involved in the Eco-Schools programme first as a teacher since 1996 and as a National Operator since 1998, I have followed and participated in the growth, the changes and the development of the Eco-Schools programme globally and locally. It is a world movement of dedicated NGOs, schools, teachers, students, parents and communities that has proven its sense, effect and influence on generations with its Seven-Step methodology, with the achievements and recognition of the dedication and creativity of generations of teachers, students and children from a very early age.

It is one of the best feelings to see the eagerness of the teachers from the network to get together, exchange ideas, collaborate, share materials, develop projects, create real friendships, and to be proud to work for the vision of Eco-Schools.

"The awarding of the Green Flag and the participation of Mihail Lakatnik Primary School in the Eco-Schools network was not only a recognition but also a great responsibility and challenge for the whole school community. Changes were seen in the school's development strategy. The school environment, both interior and exterior, has been constantly changing to meet the aim of creating environmental awareness and a part of everyone - students, parents and teachers.

The Eco-Schools themes have been present in all subjects. This has been a challenge for the whole school community. Teachers, as real innovators, have created learning tasks, group activities and celebrations, which challenged the way we saw the environment, teaching children and their parents, and resisting conservative administrators. The contacts and the exchange of ideas with other Eco-Schools and the dedication of our coordinator, Petya Yordanova, helped a lot. When the followers are more, the work is more complete and pleasant, and the results inspire and rejoice.

So much has been done in these 25 years that it is hard to share all experiences. But, most importantly, we've managed to change the attitude of children and their parents' towards the environment. Our first eco-students are already parents. We know that they will convey the idea with which they grew up: We have borrowed the earth from our children, and we have to leave it cleaner and richer. I believe we have contributed to raising awareness among people and changed ourselves and others in the name of the cause of preserving the beauty and richness of our wonderful planet!"

Veselina Vazharova, Director of Mihail Lakatnik Primary School



"It is amazing that the whole school has to be involved in the Eco-Schools programme and activities! This is a programme that has to be implemented by the whole school, teachers and staff community! People from the Eco-Schools network in Bulgaria know each other, they initiate meetings, they want to get together and feel like a family!" Krasimira Askerova, Director of Nature Park Golden Sands

"Our organisation, the Bulgarian Blue Flag Movement, started its contribution to the noble mission of the Foundation for Environmental Education with the Blue Flag programme - how our Movement got its name. But ever since the Eco-Schools programme was inaugurated in Bulgaria it proved to be the flagship of our aspiration for a better future by educating the children and their teachers and parents how to live sustainably.

We, ourselves, learnt a lot and still keep on learning throughout the long journey since the foundations of the Eco-Schools programme were laid in our country in 1995. I can try to enlist some of its aspects, but only the achievements of our Eco-Schools can pin-point the real success of the programme in Bulgaria. As an educational programme, it is extremely important, because it keeps the children challenged and engaged with the environmental issues that we face daily. It keeps students committed to life-long learning, critical thinking and creativity.

The Eco-Schools programme brings knowledge and skills and social involvement to deal with the ecological challenges using the appropriate means. So we hope to continue this exciting journey because we haven't explored enough the positive assets and impact this programme has brought to our lives."

Stanimir Georgiev, Bulgarian Blue Flag Movement Chairman of the Board

Bulgarian Blue Flag Movement (BBFM) 1A Vail Levski str. Pomorie 8200

## Croatia

Association "Lijepa Nasa" Zagreb National Operator: Anita Šetić

Country size: 56,594 km<sup>2</sup> **Population: 4.3 million** Longest river: Sava 562 km Highest mountain: Dinara 1,831 m National tree: Slavonian Oak **National plant : Iris Croatica** Joined Eco-Schools in 1998 Number of Eco-Schools: 340





#### National animal: Marten

In Croatia, there is no official national animal. However, the marten holds a special significance. In the Middle Ages, marten pelts were highly valued goods used as a form of payment in Slavonia, the Croatian Littoral, and Dalmatia.

The banovac, a coin struck and used between 1235 and 1384, included the image of a marten. This is one of the reasons why the Croatian word for marten, kuna, is the name of the modern Croatian currency. A marten is depicted on the obverse of the 1-, 2-, and 5- kuna coins, minted since 1993, and on the reverse of the 25- kuna commemorative coins.



#### **National Legislation**

Environmental Education (EE) is implemented in national legislation via the National Curriculum and Educational statute. Environmental protection in the Republic of Croatia was determined by the process of Croatia's accession to the EU.

The Environmental Protection Law is a basic legal act in the field of raising people's awareness and the level of education in environmental protection. It prescribes that the basic aims of environmental protection are achieved by developing conscience for the need to protect the environment in the upbringing and educating process. The Ministry of Environment is responsible for the development and implementation of the National Sustainable Development Strategy of the Republic of Croatia, whereas the Ministry of Education is responsible for the development of guidelines for an educational programme which is in accordance with the Sustainable Development Strategy of the Republic of Croatia.

On the basis of the Environmental Protection Law and guidelines from the National Environmental Strategy, the Government of the Republic of Croatia has enacted a national plan of activities concerning the environment, which proposes a wide span of different instruments for implementing the environmental protection policy. Education is emphasised in the national plan as the key instrument for the process of developing critical thinking on ecology issues. For example, one of the main aims of EE is connecting EE and ESD with the school programmes at all levels of the educational system.

#### **K-12 Education**

Over the past 28 years, the Croatian education system has been under reform, where the philosophies and approaches to education, as well as basic documents have been changed. One reform currently underway is called "School for life." The educational system in Croatia includes four levels; preschool, primary, secondary and tertiary/ higher education. Compulsory education is 8 years (age 6 to 14). With the new reform, EE and ESD are implemented as cross-subject topics in primary and secondary schools and every teacher needs to find a way to incorporate it in their subject curriculum. In preschools (kindergartens), EE and ESD are implemented as topics through the preschools annual action plan and curriculum that educators implement in their everyday work with children.

#### **Professional Development**

Professional development programmes for EE are mostly carried out through tertiary/higher education as university programmes in natural sciences and postgraduate programmes in natural and social sciences. There is also one programme at the secondary vocational school level in which students may enrol. For educators at the preschool, primary and secondary level, the Teacher Training Agency, which is an agency of the Ministry of Education, is organising teacher training with the topic of environmental and sustainable development education. Educators are encouraged to take part in this training, but it is not compulsory.

## THE STORY OF ECO-SCHOOLS

The implementation of the Eco-Schools programme in Croatia started in February 1998 and was supported by the Ministry of Education and the Ministry of Environmental Protection. Within the first three years of existence, the Eco-Schools programme had 150 participating schools. On 14 March 2001, 20 out of 150 schools were awarded Green Flags at Croatia's first Eco-Schools promotion ceremony. In 2002, another 33 schools were awarded and over the last 19 years, all of these 150 schools have become Green Flag awarded Eco-Schools.

Also within the first three years, Association Lijepa Nasa organised numerous teacher training seminars about the Eco-Schools programme, its methodology and how to implement the programme in schools, and prepared Eco-Schools materials which were used to promote the programme in Croatia and educate teachers and local communities.

The biggest challenge for the Eco-Schools programme in Croatia is the financial costs of programme implementation and transformation of local community mindsets.

## **KEY MILESTONES**

In 1998, the Eco-Schools programme started in Croatia, and in 2001, the first generation of Eco-Schools, 20 primary and secondary schools were awarded Green Flags. In 2005, the fifth generation of Eco-Schools, including the first special schools and in 2006, the sixth generation, including the first kindergarten, joined the programme. In 2009, the first student dorm and in 2015 the first higher education institution joined the programme, and in 2019 we count a total of 340 Eco-Schools participating in the Croatian programme.

"We understood that there is no sustainable development without Environmental Education and protection so we started to educate our students to protect the environment. We use our actions to guide our students to nourish and protect the environment. That is why we joined the Eco-Schools programme."

Primary School Fran Krsto Frankopan Osijek, Eco-team

"All schools involved in the Eco-Schools programme made a strong professional commitment to change their behaviour towards the environment. This process of change was supported by parents, environmental experts, Association Lijepa Nasa and local and national communities."

Former Minister of Education, Vladimir Strugar, at the ceremony of the first generation of Eco-Schools in Croatia

"I always emphasise the immense value of the Eco-Schools programme and that accession into this programme must be a well thought and responsible step. This is a long-term programme which is conducted with the consent and support of the local community in which a certain Eco-School is situated. The Eco-Schools status is a great accomplishment and a badge of honour for a school, a community and our country, as this programme is recognised and valued around the world."

Ante Kutle, PhD, Association "Lijepa Naša" President

Association "Lijepa Nasa" Zagreb A: Heinzelova 6 10000 Zagreb





#### **NATIONAL OPERATOR - REFLECTIONS**

Two of the most successful Eco-Schools projects were implemented in cooperation with companies such as Toyota Fund for Europe and MARS Wrigley Foundation that supported projects run by FEE International with financial support to the national level. This was a great example of cooperation between the civil and business sectors on the promotion of environmental protection values. Primary School Petar Kanavelić Korčula: Earth day celebration. Children made big plastic bottle caps mosaic. Caps were collected during the whole school year with local community help. This was their attempt to raise awareness of sea plastic pollution.

# Cyprus

Cyprus Marine Environment Protection Association (CYMEPA) National Operator: Michael Ierides

Country size: 9,251 km<sup>2</sup> Population: 1.2 million Logest river: Pedieos 98 km National animal: Ovis Orientalis, also known as Cyprus Mouflon (Agrino) Joined Eco-Schools in 1996 Number of Eco-Schools: 90



### Highest mountain: Mt Olympus 1,952 m

Mount Olympus is situated in Troodos mountain, which is the biggest mountain range in Cyprus.

Research on Troodos flourished after the late 1960s when ophiolites presented fragments of ocean crust. It helped create an understanding of the construction of ocean lithosphere, the nature of the seismic layering of the oceanic crust and the magmatic, structural and hydrothermal processes at the ridges. Most importantly, it has helped with the understanding of the mechanisms associated with plate collision.



#### **National Legislation**

Environmental Education (EE) as a subject is only obligatory in primary education. Teachers have a binding framework which incorporates the topic.

#### **K-12 Education**

The curricular framework of the Ministry of Education, Culture, Youth and Sports have EE as a pillar of the school curriculum. Science was the basis for integrating EE in school life and teaching about the environment and relevant issues. In Cyprus, Eco-Schools formed the springboard for change in the National Curriculum and is still the most massively widespread programme of Education for Sustainable Development (ESD).

#### **Professional Development**

Professional development programmes in EE have been developed solely by universities, especially at the Master's level. At present, there are no professional development initiatives developed by non-profit organisations.

## THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was introduced in Cyprus by CYMEPA and the Ministry of Education and Culture in 1996. Schools were approached to participate and two years after the programme was introduced in the country, on 19 June 1998, twelve schools were awarded the first Green Flags in Cyprus at the same time.

### **KEY MILESTONES**

In 1997, CYMEPA began cooperation with the Pedagogical Institute to establish the contents of the major themes of the Eco-Schools programme. The biggest challenge has been and still is the financial sustainability of the programme. In 1999, the Hellenic Bank became the major sponsor of the programme.

In 2019, CYMEPA received the Award of Golden Protector on the Environment from the President of the Republic of Cyprus. The award recognises the overall contribution of CYMEPA, including its work with Eco-Schools.



"As the principal of the private school "TO KPY $\Phi$ O  $\Sigma$ XO $\Lambda$ EIO", I have been involved with the Eco-Schools programme for the last 4 years. My students have benefited greatly, developed environmental attitudes and engaged in a variety of activities for the environment. I believe that by participating in the Eco-Schools programme, students have become environmentally active citizens."

George Georgiou, Principal, ΤΟ ΚΡΥΦΟ ΣΧΟΛΕΙΟ Private School

"The Eco-Schools programme has provided a process through which all environmental activities in a school are streamlined and strategically focused on improving the school environment, knowledge, attitudes and behaviour of children. In Cyprus, it is the programme of ESD with the highest participation and the greatest impact."

**Dr Demetrios Mappouras, Inspector of Secondary Education** 

"Eco-Schools is a well-structured programme of Education on Sustainable Development with a simple process and concrete results. In Cyprus, we are now educating the second generation of youth, as some of the early school children are now teachers in Eco-Schools. The only downside is that there is limited financial support as we cannot charge the schools, and the local authorities are not involved in the education system." **Dr Michael Ierides, CYMEPA Secretary-General** 

## **NATIONAL OPERATOR - REFLECTIONS**

CYMEPA was awarded by EU Commissioner for the Environment, Margot Wallstrom, for its achievements in the framework of the Eco-Schools programme on 27 June 2002. This was a big recognition of our work.

> Cyprus Marine Environment Protection Association (CYMEPA) CYMEPA, 8, Argyrou Droussioti Street 3041 Limassol, Cyprus



#### National tree: Golden Oak (Quercus alnifolia)

Quercus alnifolia, commonly known as the golden oak, is an evergreen oak species of Cyprus. Its common English name refers to the golden coloured lower surface of its leaves.

Quercus alnifolia belongs to the endemic flora of the island and it is confined to the igneous geological complex of Troodos Mountain.

In February 2006, the Parliament of Cyprus selected the golden oak to be the country's national tree.



## Greece 💻

Hellenic Society for the Protection of Nature (HSPN) National Operator: Theodora Polyzoidou

Country size: 131,957 km<sup>2</sup> Population: 10.7 million National animal: Dolphin National tree: Olive tree Longest river: Aliakmonas river 322 km Joined Eco-Schools in 1994 Number of Eco-Schools: 208



## Highest mountain: Mt Olympus 2,918 m

Mount Olympus was said to have been created after the battle, known as Titanomachy, between the older gods called Titans and the younger ones called Olympians. Olympus was then considered to be the home of the victors of the battle, the twelve Olympian gods, according to ancient Greek Mythology.

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#### **National Legislation**

Environmental Education (EE) was officially introduced in Greece with a law in 1990 for secondary education and in 1991 for primary education. The aim of EE was stated as: "for students to become aware of their relation to the natural and social environment, of the problems connected to it, and to take action so that they contribute to the general effort of dealing with them." To meet these needs, the Ministry of Education compiled a Cross-Curricular Programme Framework of Studies in order to give directions for project implementation.

#### **K-12 Education**

EE is part of non-formal education in Greece, i.e. it is not directly prescribed by the formal K-12 curriculum compiled by the Ministry of Education. It is implemented on a voluntary basis by teachers within the following framework:

• In kindergarten, as a project/programme during formal programmes in connection to the curriculum in subjects such as greek language, math, ICT, art, etc.

• In primary school, as a project/programme in grades 1-4, during project time, i.e. teaching hours intended for cross-curricular projects. In grades 5-6, EE is introduced during formal programmes in connection to the curriculum in subjects such as greek language, math, ICT, art, geography, foreign languages, etc.

• In secondary education, e.g. in after-school clubs, with the voluntary participation of teachers and students and with parental consent.

Teachers submit their EE programme outline to the EE coordinator of each Education Directorate, and programmes are finally approved on their educational and scientific merit. Teachers have the right to choose, or co-decide with their students, their project topic in relation to the local environment, e.g. island or mountainous area, the local needs, e.g. reinforcement of the recycling process, the immediate needs that arise, e.g. forest fires, etc. Schools can become members of networks of the same EE topic in order to get support as members of communities of practice.

#### **Professional Development**

Teachers' professional development in relation to EE is conducted by coordinators of EE programmes, mainly through seminars and workshops at local or national Centres of Environmental Education. Several NGOs work in collaboration with the above structures.

## THE STORY OF ECO-SCHOOLS

Greece has been an active member of FEE since 1992. Following a proposal by FEE, Aliki Vavouris, Blue Flag National Operator at the time, and Petros Brousalis, then Vice President of the HSPN Board of Directors, HSPN organised a presentation of the European network Eco-Schools. This presentation was attended by many delegates experienced in EE. Amongst them were Stamatis Skampardonis and Antiopi Frantzi, who undertook the responsibility to develop and coordinate the Eco-Schools network in Greece, starting in 1994.

The 1990s were the golden decade of EE in Greece. At the time, Stamatis Skampardonis was Environmental Education Officer, as well as a representative of the Ministry of Education and responsible for all EE projects. When he took up the coordination of the Eco-Schools programme, his institutional position made it easy to overcome difficulties and bureaucratic issues. In the school year of 1994-1995, a pilot phase was initiated and eight schools started implementing the programme. Four years later, on 10 January 1998, 3rd Primary School of Lavrion was awarded the first Green Flag in Greece.

#### **KEY MILESTONES**

The most important achievements of the programme are the decades of teacher training that have been achieved throughout the 25 years of programme implementation with the support of the local authorities, Environmental Education Centres, Environmental Education Officers, and the great variety of educational materials created, which have become very popular amongst teachers from all grades. These training opportunities integrated new educational methods and approaches in the Eco-Schools programme and managed to successfully involve the local communities with the environmental issues that emerged.

Hellenic Society for the Protection of Nature (HSPN) 20 Nikis str. 10557 Athens, Greece

"When our school was nominated as an Eco-School, its shape changed radically. It became a school open to everyone, more democratic and a place where each person takes their own path and is responsible for their actions. Through our participation in the Eco Committee, we learnt to collaborate as a union and in a more democratic manner. We carried out most of the Eco-Schools' themes and we designed and implemented action plans. Our school totally changed. It became more attractive to students and parents, and more importantly, it became a sustainable school."

#### Dimitris Loukas, Mayor of Lavrion and former Headmaster of the 3rd Primary School of Lavrion

"Our main target is for all the schools to actively participate in the network - a determining factor in creating a sustainable school. I also believe that the empowerment of Eco Committees will play a significant role in the true engagement of the whole school unit and in raising awareness within the school community and local society." Stamatis Skampardonis, Vice-President of the National Eco-Schools Steering Committee

Eco-Schools has been implemented in Greece with great success. This is due to the fact that the programme has managed to motivate the school community towards environmental issues which direct their own schools and local communities to cultivate a new thinking, lead to collaborative actions, promote innovation, expose schools to new knowledge and align them to international priorities and collaborations in the fields of environment and climate change. I also believe that the programme, despite its rather structured format, does provide space for initiatives at the school level, thus enhancing its potential further. Its recent link to the Sustainable Development Goals of the United Nations demonstrates a new dimension of merit for the programme.

It is my strong belief that the programme, through its pertinent implementation in Greece, has already resulted in a new generation of citizens, more sensitive to environmental issues and more willing to undertake responsibilities in favour of the public interest. It has also resulted in more educated teachers on environmental issues, a major legacy of the programme in terms of school education in Greece. Last but not least, the role and contribution of the Hellenic Society for the Protection of Nature regarding the successful implementation of the programme in Greece has been pivotal."

Professor Constantinos Cartalis, National and Kapodistrian University of Athens, Member of the National Eco-Schools Steering Committee



## **NATIONAL OPERATOR - REFLECTIONS**

One highlight moment that comes clear in my mind was during the Green Flag Award Ceremony in 2016, where students travelled a very long way just to take part in the ceremony!

Over the years, the challenge remains the same, and that is the expansion of the network all over the country. Our vision is to celebrate the 50 years of the programme having doubled the number of schools, as well as having made an impact on important issues humanity is faced with - such as climate change, pollution, waste and poverty - through a path that makes our students active citizens.







Country size: 301,340 km<sup>2</sup> Population: 60.4 million Longest river: Po river 652 km Highest mountain: Monte Bianco 4,810 m National tree: Olive tree and Oak tree Joined Eco-Schools in 1998 Number of Eco-Schools: 329



#### National animal: Wolf

According to a legend, Romulus and Remus were the grandchildren of the king of Alba Longa, Numitore. Amulius, Numitor's brother, wished to be king and forbade Numitor from the land.

As Amulius was also afraid that one day Romulus or Remus could take his crown, he ordered a servant to kill the children. However, the servant was not brave enough to do it, so he decided to put the children in a basket and leave them in the river Tevere. The basket was pushed by the current, but after some time it stopped at Palatino (a place in Rome). Here the children were found and rescued by a female wolf that brought them to shepherd Faustulus, who then raised them



#### **National Legislation**

Environmental Education (EE) is widespread in Italy. A cooperation agreement aimed at promoting EE and sustainable development in schools has been signed by the Ministry of Environment and the Ministry of Public Education. However, no concrete results have yet emerged.

#### **K-12 Education**

Unfortunately, too little attention is paid to EE by government bodies and there is a lack of financial resources for this sector. Italy is lacking a systematic approach to Education for Sustainable Development (ESD) as well as to EE.

#### **Professional Development**

Recently, professional development programmes related to EE have been carried out in a few Italian universities. Other initiatives have been developed by non-profit organisations and by FEE Italy, but these projects are not spread evenly across Italy as EE is often not seen as a profitable area of work in Italy.

#### THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was initiated in Italy through a pilot phase in 1998 in the Friuli-Venezia Giulia region in the north of Italy.

In 1998, a group of schools were awarded the Green Flag at the same time and a year later, in the school year 1999-2000, ten Italian regions took part in the programme. The primary cause of this rapid progress was the success and positive results of the Eco-Schools pilot phase. These results, achieved thanks to the work of the then FEE Italy team, the Eco-Schools National Operator Raffaella Riccobene and the FEE Italy President Claudio Mazza (at the time President of the FEE Italy Management Committee), allowed the programme to rapidly expand to over 100 schools located across the country.

When Romulus and Remus grew up, they went back to Alba Longa and killed their uncle Amulius. Numitor became the king of Alba Longa, while the brothers decided to found a new town. However, Romulus and Remus started fighting on the name to be given to the town and, after a terrible quarrel, Romulus killed Remus. He then founded the town, named it "Rome" after himself, and became the first king of Rome.



#### **KEY MILESTONES**

Each year has been a milestone, because year by year new schools join the Eco-Schools programme. Municipalities have been supporting Eco-Schools' growth for many years by joining Eco Committees, as well as financially supporting local schools.

Besides the four international FEE programmes, Blue Flag, Eco-Schools, Green Key and YRE, FEE Italy also runs Green Spikes (Spighe Verdi), which is an Italian pilot sustainable development programme for rural municipalities. Green Spikes helps rural municipalities choose and develop sustainable management strategies through a voluntary certification path linked to a recognisable brand. Green Spikes can be considered the twin programme of Blue Flag for the rural environment. It includes the full participation of farmers and other stakeholders involved in the agriculture sector, public authorities and the entire community concerned. 42 municipalities received the Green Spike award in 2019. FEE Italia has involved relevant national partners in this programme, such as the Ministry for the Environment, and the Ministry of Agriculture, Food, Forestry and Tourism.

#### **NATIONAL OPERATOR - REFLECTIONS**

It is necessary to convey that Eco-Schools is a programme intended for the whole school community, not only for a few students or teachers. The whole school community should be involved in the programme to generate positive change in the surrounding local community. This is what Eco-Schools does in Italy.

The Eco-Schools programme has seen an increment in the number of Italian schools in these 25 years. It is a method of working on sustainability that increasingly meets the teaching methodology by uniting the community around common goals and generating positive change.

**FEE Italia** Via Tronto 20 00198 Rome

"The Green Flag must not only be obtained but must also be preserved. The Eco-Schools programme begins its journey by working towards a cleaner and neater city, with less waste and better use of its resources. The community can succeed in respecting the planet and living better!". **Student at School I.C. Sauro, Imperia** 

"The Green Flag is a recognition that enhances the prestige of our municipality and of our schools. Today, when the news on climate change dominate media and social networks, knowing that our students are committed to doing their part to protect the future of the planet encourages us adults a lot. I hope a positive awareness of the environment will grow in all our children and that young people like Greta Thunberg, who is awakening the consciences of the world on climate change, will emerge."

Otello Bergamo, Councillor for Quality and Environment of Jesolo Municipality

"When the Eco-Schools programme started in Italy in 1998, we took up a great challenge because nobody talked about Environmental Education at that time. Participating schools realised that they played a role in the growth of students, the school itself and the whole community. Strong emphasis was put on the different methodological approach of the programme. This is the fundamental basis that differentiates Eco-Schools from other sustainability projects undertaken by Italian schools.

The Eco-Schools programme starts from a self-assessment, which consists in analysing the sustainability level of the school in connection with the social and local context. After that, an action plan is linked to the curriculum and to other actions or school projects. Therefore, it is a 'political' choice of the entire school community or network of schools moving towards sustainability; it is not a single project added to others. Moreover, it presupposes a true interdisciplinary approach. We are far from the individual educational paths that are often delegated to individual teachers, within single disciplines and individual classes. To strengthen their actions, schools must demonstrate co-planning skills with the entire local community, involving students, their families and local stakeholders, with a modern and innovative approach which incorporates knowledge, tradition, and integration between theory, concrete experience and transmission of values.

To be awarded, schools must demonstrate that they have promoted a lasting virtuous change that belongs to the whole local community." Claudio Mazza, FEE Italy President





# Malta \*

Nature Trust Malta National Operator: Paul Pace

Country size: 316 km<sup>2</sup> Population: 470,000 National tree: The Sandarac Gum Tree National animal: The Blue Rock Thrush and the Pharaoh Hound Joined Eco-Schools in 2002 Number of Eco-Schools: 121



## Coastline: 179 m

Malta consists of small islands. There are neither mountains nor permanent rivers.

Taken together, the two largest islands have 179 metres of coastline.



#### **National Legislation**

The National Curriculum Framework document features Education for Sustainable Development (ESD) as a cross-curricular theme.

#### **K-12 Education**

ESD is officially a compulsory component in the educational entitlement of students in compulsory school age (3-16). ESD is infused in various curriculum subjects. However, the bulk of the school-based ESD related initiatives are extra-curricular.

#### **Professional Development**

ESD is featured in the initial teacher education programme - although it is still not a compulsory component in all the subject areas. Professional development courses in ESD targeting practising school teachers are offered on a regular basis by staff from the Centre for Environmental Education & Research, which is a part of the University of Malta. This centre actively supports Nature Trust in the running of Eco-Schools. The school-based courses focus on how to promote ESD through the Eco-Schools programme.

### THE STORY OF ECO-SCHOOLS

Contacts with the Foundation for Environmental Education (FEE) to implement Eco-Schools started after Nature Trust learnt about Eco-Schools from a presentation by Nigel Thomas, Director of FEE at the time. He presented the programme at the European Conference on Environmental Education Policies and their Implications for Sustainable Development, which took place in Benediktbeuern, Germany on 8-10 June 1998. After the conference, a negotiation process was initiated with the support, assistance and guidance from the International Eco-Schools Coordinator at the time, Sergio Santos. He also had high-level meetings with the educational and environmental authorities to explain the benefits of the programme. Hon, George Pullicino, Parliamentary Secretary for the Environment was the main driving force from the government side. He was very enthusiastic about empowering children to have an active role in the safeguarding of the environment. Later on, he was instrumental in supporting Nature Trust in setting up the Parliament and Summit initiatives. Also Hon. Louis Galea, Minister of Education, supported the programme by assigning 6 teachers to work fulltime on the promotion of the programme in schools and Andrew Calleja, Chairperson of the Maltese Environment & Planning Authority (MEPA), provided financial support for the launch of the pilot project. President and CEO of Nature Trust, Vincent Attard, was the one who ultimately decided to invest (as an NGO) in the programme. This was a very courageous step at the time, as the concept of a wholeschool approach to EE by empowering students was still very new. The Eco-Schools programme was officially launched in Malta in six pilot schools in 2002 and Dr Paul Pace, from the Maltese Association of Environmental Educators (MAEE), became the National Operator. Besides developing the strategy for the implementation of the programme, he designed and produced the educational resources needed by the teachers/schools.



# **KEY MILESTONES**

Awarding the first Green Flags on 9 February 2006 - four years after the launch of the programme - was certainly one of the key milestones as it proved that Eco-Schools was not just increasing in popularity (number of registered schools had reached 43 in just 3 years), but also in quality. The two first schools to receive the award were St Joseph School, Blata I-Bajda and St. Joseph, Mater Boni Consilli School, Paola.

Two other milestones were the registration of the first postsecondary school in 2007 and the award of the Green Flag to the first resource centre for persons with disabilities in 2014. These events were an indication that the programme was diversifying and that the skills acquired in the students' younger years were being transferred. Since its inception, the major focus of Eco-Schools in Malta was that of empowering students by giving them a voice in policymaking fora. Consequently, our programme has achieved various milestones in this field. The most notable is the organisation of the first Eco-Schools Parliamentary session on 2 June 2005 and the first Young People's Summit on 7 March 2009 that have now become annual appointments. Through the opportunities offered by Eco-Schools, over the years students have given valid contributions in international fora such as the Commonwealth Heads of Government Meetings (2015 and 2018) and the Informal Meeting of the EU Environment Council (2017). In 2018 and 2019 Regional Eco-Schools Committees were set up during which students proposed suggestions such as rehabilitation of delapitated areas into green open spaces and public gardens; the use of sustainable technologies to promote water and energy conservation; the introduction of waste management practices in government offices; and policies concerning sustainable development.

Considering that Eco-Schools is the largest ESD programme in Maltese schools, in 2016, Nature Trust organised the first FEE Fest - a three-day event providing an opportunity to learn about the various FEE programmes, develop ideas for cross-curricular work, get information about various sustainable projects, initiatives and provide an excellent platform for networking.

Since 2009, Eco-Schools Malta has been under the direct patronage of three consecutive Presidents of Malta: HE George Abela (2009-14), HE Marie Louise Coleiro Preca (2014-19) and HE George Vella (in office). On 22 February 2013, Eco-Schools, managed by Nature Trust -FEE Malta, won the Waste Minimisation Award - Category B for NGOs and other Non-Commercial Entities.



"St Joseph School, Blata il-Bajda was one of the first schools in Malta to be awarded the Green Flag in 2004. From then on the school, which has both a Primary and a Secondary section, has never looked back. It has changed its outlook towards the environment and has become a true advocate for it.

Students and staff have become imbued with the love for the environment and are conscious of their duty to safeguard the environment in the school, at home and in the community. Separation of waste, enhancing the environment with plants, recycling, healthy eating, eliminating all types of pollution and many other measures have now become a regular part of school life. The newfound commitment towards the environment starts at school, but it is carried onto the students' families and the community. The school carried out work with the elderly and networked with other schools. Becoming an Eco-School has enhanced the ethos of our school. We can proudly proclaim that we are giving our share in safeguarding the environment for future generations."

# Maria Teresa Spiteri, Assistant Head and Eco-School Coordinator (2003-2014)

"As students, we feel very proud that our school has achieved and maintained the Green Flag status over several years. We feel that as students we are empowered to share ideas, to plan and act responsibly and to showcase our work. Over the years, looking after the environment and preserving it has become second nature. We sometimes remind the adults in our school and community how to live sustainably. Most of all we have learnt that we can make a difference by setting an example in our families and in our community."

# Alexandra Bartolo, Former Student, Mater Boni Consilii, St Joseph School Paola.

"I have followed the way Eco-Schools operate in our schools for many years and I have always been impressed with what they have achieved. The programme managed to motivate students and teachers to improve the quality of teaching and learning in schools, improve the quality of life in schools and the surrounding communities and empower students to be active citizens in society. Eco-Schools has proved to be a very effective programme that ensures the holistic development of students, promotes school development and successfully integrates Education for Sustainable Development into the curriculum."

Hon Evarist Bartolo, Minister of Education and Employment

Nature Trust Malta PO Box 9 1000 Valletta

"When we started in 2002, I confess I considered Eco-Schools to be a big challenge since the environment has always been quite low on the country's agenda. This was at the time when people did not bother or care and this attitude was reflected also in the students. We started as a pilot project with 6 schools, and the start was encouraging but what followed was indeed a wonderful experience. Throughout these 17 years, we have been running the Eco-Schools programme, it has become our main flag flier in all of the FEE programmes, 83% of the entire student population are active in this programme. Children are now speaking up. They are changing their parents' attitudes as well as their grandparents'. They take the issues seriously so much so that they are even speaking to our Members of Parliament to express their concerns about their future. The time when the Green Flag Jury visits schools, for me, is the most stressful period of the year, but I would not miss it for the world! Listening to the students explaining what they did, why they did it and their plans for the future fills me with great hope and determination. Seeing that finally, Eco-Schools is changing the way tomorrow's generation is engaging in improving the quality of life boosts my motivation. Finally, we have hope!" Vincent Attard, Nature Trust - FEE Malta Executive President

# **NATIONAL OPERATOR - REFLECTIONS**

Research results have repeatedly shown that Eco-Schools has been very beneficial to the Maltese formal education system. These benefits include the development of skills, improved citizenship, commitment to action, personal behavioural change and an increased commitment of schools towards sustainability. However, the implementation of Eco-Schools is still extra-curricular as there is no curriculum space for such action – even though ESD is a crosscurricular theme in the National Curriculum Framework. We are continuously striving to achieve this space as well as getting official accreditation for the work done related to Eco-Schools by teachers in schools.

I guess that the major feature of Eco-Schools Malta has been our tireless efforts to develop fora in which young people (children and youths) can voice their concerns about the quality of life. Throughout the years we managed to set up these fora not just within our internal structures, but also on a local, national, regional and international level. Various organisations have organised initiatives to promote the voice of youth, however, Eco-Schools Malta can confidently claim that it was the first to bring to the fore the need to listen to the voice of children – a need that is now acknowledged by many other organisations in Malta.

# Montenegro

Bureau for Education Services National Operator: Nevena Cabrilo

Country size: 13,812 km<sup>2</sup> Population: 620,000 Longest river: Tara 141 km Highest mountain: Bobotov Kuk 2,523 m National animal: Dalmatian pelican (Kudravi pelican) Joined Eco-Schools in 2016 Number of Eco-Schools: 60



# National tree: Molika Pinus peuce

Molika is called the queen of the flora of Montenegro.



### **National Legislation**

The National Strategy for Sustainable Development 2030 includes Education for Sustainable Development (ESD) as a part of its main goals, action plans and indicators for monitoring SDG 4 (target 4.7). It represents a long-term development strategy for Montenegro, which sets out solutions for the sustainable management of four groups of national resources: human, social, natural and economic. In terms of objectives and sustainability considerations, Montenegro has been one of the first countries in the world to fully embrace and integrate the United Nations requirements set out in the 2030 Agenda for Sustainable Development.

### **K-12 Education**

The national curriculum has been developed and implemented for all educational levels since 2012 and includes ESD as a crosscutting topic through mandatory and optional subjects, contents and extracurricular activities. Cross-curricular topics have been defined to aim at redirecting and implementing stronger models of ESD in preschool, primary and secondary school education, which contributes to an integrative approach of general education, as well as provide more correlation between the contents of different subjects and subject areas, thus enabling the development of learner's key competences.

The cross-curricular topics were defined in regard to Montenegrin priorities, traditions and commitments, with full respect of international strategy documents in the field of sustainable development such as the UNECE Strategy, Global Education Agenda 2030, and Global Action Programme for ESD.

Early and preschool age is the best developmental period for acquiring knowledge and skills on the preservation of nature and its resources, as well as for developing positive emotions and attitudes. Sensitising a child with respect to environmental issues in their immediate environment, in the community with other children and adults, leads to a long-term contribution positive change in child's immediate and wider environment. In accordance with fundamental principles in preschool education in Montenegro, ESD themes have been incorporated into all activities in the Curriculum for Activities in Preschool Education for children at the age of 3-6 years old.

General education curriculum in Montenegro has a general education core, optional subjects and cross-curricular themes. The general education core is combined by seven areas: languages, mathematics, natural sciences, technology, social sciences, physical and health culture and art. These seven areas are delivered gradually and continuously, commencing with preschool education, initially themebased. Within higher levels of education, it becomes more and more differentiated and subject-based. The role of optional subjects is to provide learners with the opportunity to satisfy different interests and profiles of general education in accordance with the personal needs and interests of each learner. The cross-curricular themes are defined in a way so they are compatible with a variety of objectives in other school subjects and they can, therefore, be used by teachers for direct instruction planning.

#### **Professional Development**

Training programmes for teachers and school management have been developed and executed. More than 35% of teachers and school management staff have passed the training courses. The methodology for quality assurance of educational work in the educational institutions has already included an indicator for ESD implementation.

Teacher training programmes proposed by different organisations, such as educational institutions and NGOs, have been accredited in the Catalogue of Teacher Training Programmes, which is approved by the Ministry of Education. The catalogue provides effective ways of continuous professional development (CPD). The importance of ESD is recognised by the Bureau for Education Services and it provides a budget that covers expenses related to developing of curricula and teacher training programmes, consulting services in schools, developing guidelines for teachers, as well as the participation in the Eco-Schools network. Municipalities, NGOs and international organisations have supported ESD through teacher training, development of didactic material, building green roofs, green gardens, green classrooms and similar activities. VET Centre and the Ministry of Education are partners in the implementation of the Eco-Schools programme.

Different international organisations contribute to teacher education. UNDP, for example, has in cooperation with the Ministry of Sustainable Development and Tourism, accredited four training programmes related to climate change. The training programmes were also accredited by the Bureau for Education for two school years, 2017-18 and 2018-19, and within the first school year alone in the first set of training organised for secondary school teachers, more than 200 teachers participated.

> **Bureau for Education Services** Vaka Djurovica bb, Podgorica

# THE STORY OF ECO-SCHOOLS

In 2016, a national coordination body for the implementation of ESD and the Eco-Schools programme was established with representatives from the Bureau for Education Services, Ministry of Education, VET Centre, Ministry of Sustainable Development and Tourism, UNDP, and the Environmental Consultancy of Montenegro (ECOM). This body meets several times a year and is directly responsible for the implementation of the Eco-Schools programme.

The first Green Flag award ceremony for acquiring the Eco-Schools status took place at the Eco UN building in Podgorica on 20 September. It was organised by the Bureau for Education Services of Montenegro in cooperation with the UN System in Montenegro. 17 schools were awarded.

# **KEY MILESTONES**

Starting up the programme, accrediting a number of schools and establishing close cooperation with key partners have been some of the most important milestones.

### **NATIONAL OPERATOR - REFLECTIONS**

This programme strongly contributes to and enhances the implementation of ESD in Montenegro. The establishment of a National Board for implementation and accreditation of Eco-Schools, as well as the motivation of educational institutions have been highlight moments for me.





"When I look out of the window and see the schoolyard, I feel the warmth and delight"

Rade Krivokapic, Principal of Elementary School Radojica Cizmovic, Niksic

"Eco-Schools will change Environmental Education " **Resad Sijaric, Bureau for Education Services Director**  "By joining the Eco-Schools network, the quality of teaching natural sciences and extracurricular activities related to ecology has been improved. Both students' and teachers' level of awareness about the importance of protecting the environment and combating climate change have been raised. This project improved the quality of teaching subjects such as nature, biology and physics. It increased the energy efficiency of the school and the level of care in the schoolyard. It also improved the attitude of students towards energy consumption in their environment and established a better relationship with the local community regarding environmental issues."

Bogic Gligorovic, Teacher at Elementary School Sutjeska, Podgorica



# Portugal 🔹

Associação Bandeira Azul da Europa - ABAE /FEE Portugal National Operator: Margarida Gomes

Country size: 92,212 km<sup>2</sup> Population: 10.2 million Longest river: Tagus River 1,007 km Highest mountain: Pico Mountain in Azores Islands 2,351 m Joined Eco-Schools in 1996 Number of Eco-Schools: 975



### National tree: Cork oak

The cork tree is internationally known as the only tree in the world that can survive after having all its bark removed from its trunk.

Less known is that this tree is also fireproof, waterproof and soundproof, thus making it resistant to changes in climate.

Additionally, it is interesting to know that the harvested oak cork trees store up to five times more carbon than the unharvested ones.

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#### **National Legislation**

The importance of the Eco-Schools programme at the national level has been recognised in a resolution adopted by the Assembly of the Portuguese Republic in 2018. According to the current legislation, Environmental Education (EE) is now part of the school curriculum under and is part of a discipline called "Education for Citizenship".

### **K-12 Education**

EE is one of the areas included in the new "Education for Citizenship" discipline, studied in all schooling levels.

#### **Professional Development**

Most professionals (teachers and technicians) who work with EE in Portugal hold university degrees in Biology, Geography, Environmental Engineering and Psychology. About five years ago, the Polytechnic Institutes in Santarém, Leiria and Lisbon started offering also bachelor and master degrees in EE. EE graduates find relevant jobs in non-profit organisations, municipalities and, in some cases, in private companies.



Project "Healthy and Sustainable Food", with Eco-Cookers and the Cantine Brigade



Project "Bio-gardens in School" which was implemented in 2012. 450 schools are involved

# THE STORY OF ECO-SCHOOLS

In 1996, Eco-Schools was launched in Portugal. The programme has been supported by the Ministry of Education and the Ministry of the Environment since its establishment. A pedagogic expert from the Ministry was sent to coordinate the programme.

The first Green Flag was awarded in 1997. Since then, a Green Flag award event is organised annually. The schools are awarded based on the result of an annual assessment, that always includes the Seven-Step methodology and specific work themes. In Portugal, there are 5 schools that have received 23 Green Flags, one per year since the launch of the programme. Since the first year, ABAE arranges two major events each year: a Green Flag Award Day in September or October for the Green Flag and teachers training sessions in January.

In the first year (1996-97) the theme was waste, in 1997-98 water and in 1998-99 energy. Since 2000, the three themes became mandatory in all schools applying to be Eco-Schools. In addition to the three themes, a different theme is introduced each year. As Lisbon will be the European Green Capital 2020, the theme of the current year is "Sustainable Communities and Outdoor Space".

In the early years, Eco-Schools was mostly funded by the European Environment Programme. Later, registration levies were introduced. These levies, in addition to financial contributions from partners or sponsors, ensure the financial stability of the programme at the national level.



# **KEY MILESTONES**

In Eco-Schools, the importance of creating a network for children and young people to share and evaluate their actions is emphasised. To encourage knowledge sharing and cooperation between schools, the concept of 'godmother schools' was introduced in 2018. Moreover, it is great to see that municipalities are more and more involved with Eco-Schools and work more closely with ABAE. In many municipalities, 80% of schools are Eco-Schools, and a growing number even has 100% of their schools participating in the Eco-Schools programme. Additionally, another milestone for ABAE was the implementation of EcoCampus concept in Portugal.

FEE Portugal (ABAE) Edifício Vasco da Gama Bloco C 1350-355 Lisboa

"Being an Eco-School is rewarding! To involve students, teachers and non-teachers in a common purpose is to feel that we can act, propose, educate and contribute to sustainable development!" **Renata Santos, Teacher at the Abel Salazar school** 

"I participate in Eco-Schools and each day I tell myself that it was a good idea to enter the Eco-Schools Committee. I know that getting into Eco-Schools is like having a job and I have to have a lot of responsibility, but I feel I have it. I also have a side that makes me see that it is a bit of a game as well. I can mix it all up and reconcile my work." 12-year-old Student, Eco-School EB 2,3 of Terrugem

"Surviving twenty years in the environmental education area is an unusual and, therefore, meritorious feat.The Eco-Schools programme deserves special praise because it has always sought out a target audience who understood the importance of actions shared by students, teachers, parents and entities. We cannot, however, leave out the volunteerism and persistence of those, within ABAE, who have kept alive projects that never reach cruising speed, because working with schools is starting from scratch year after year. I always get emotional when I see a Green Flag hoist!

I would like to welcome the mentors of this environmental education project that does not age because its flame is always alive and well-fed by the enthusiasm and dedication of all."

Adelaide Espiga, Representative of the Institute of Environmental Promotion (IPAMB), the Institute of the Environment (IA) and part of the National Commission of the Eco-Schools programme

"25 years later, after 20,000 Eco-Schools editions, 750,000 Eco-Teachers and 11 million Eco-Students, Portugal got a new generation of citizens, more committed to sustainability, positive and proactive action and with a responsible attitude. Eco-Schools was recognised by the Portuguese Parliament as a reference in the educational system and as a programme with a transformative effect on the attitude and practices of the educational communities that participated in the programme. Eco-Schools plays an important role in the sustainable development of the local communities and contributes actively to the formation of responsible citizens!"

José Archer, ABAE/FEE Portugal President



# **NATIONAL OPERATOR - REFLECTIONS**

Some of the main challenges we face in the programme are maintaining the continuity of schools, the motivation of teachers and promoting the Eco-Schools programme to official institutions such as the Ministry of Education and Ministry of Environment, in order to reinforce its fundamental role in citizenship education. Another challenge for ABAE is to conduct two annual evaluations in February and July on to reinforce good practices and recommendations on the implementation of the Seven-Step methodology. Last but not least, the financial stability for the programme management, which depends on partners and the support of municipalities, is a continuous challenge.

For me, the 20th Anniversary Celebration was an emotional day. It was celebrated with the schools and the band XUTOS. This was also the last concert for one of the musicians, which made the day extra special.

To see the interest of the schools in the EcoCampus intensify over the last three years, the implementation of presidential visits to schools with the partnership of the Education Ministry and the awarding of some of the projects developed by ABAE in the Eco-Schools network (Healthy and Sustainable Food and Eco-Schools Brigade - Terre the Fame | Yves Rocher Foundation Award) were all great achievements of Eco-Schools in Portugal.



Green Flag Annual Ceremony

# Romania

Centrul Carpato-Danubian de Geoecologie (CCDG) National Operator: Razvan Dinca / Cornelia Dinca

Joined Eco-Schools in 1999 Number of Eco-Schools: 295 Country size: 238,397 km<sup>2</sup> Population: 19 million Longest river: Danube 1,075 km Highest mountain: Moldoveanu in the Fagarasi Mountains 2,544 m National tree: Oak



# National animal: Lynx

The population of Lynx in Romania has decreased in recent years, due to the shrinking of their natural habitat. The animal has now been declared protected in the country.

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#### **National Legislation**

Environmental Education (EE) is not mentioned in the official part of the curricula.

#### **K-12 Education**

In Romania, EE activities are at all levels regarded as extra-curricular and are therefore not incorporated into any specific subjects.

#### **Professional Development**

As EE is not a part of the curricula, teachers are teaching EE on a voluntary basis.

# THE STORY OF ECO-SCHOOLS

CCDG started the Eco-Schools programme with 10 schools in 1999. In 2002, Scoala Gimnaziala Ion Creanga in Suceava became the first school in Romania to receive a Green Flag. The programme was immediately a huge success and it grew rapidly. In 10 years, the number of Eco-Schools has already reached 420.



# **KEY MILESTONES**

In 1999, the programme was initiated with 10 participating schools. In spite of a lack of support from the government and the insufficient level of funding, less than ten years later, in 2008, the number of Eco-Schools had increased to 420 schools, the highest number of participating schools in the history of the programme in Romania. Today, there are 295 schools involved with the programme.

Centrul Carpato-Danubian de Geoecologie (CCDG) 8 Barbu Lautaru Street, District 1 **Bucharest** 

"The involved students have understood immediately that the Eco-Schools programme is proposing actions and themes close to their body and soul. They also realised that the responsibility of protecting the environment is transmitted from generation to generation". Liviu Hatnean, Coordinating Teacher

"Once connected with nature through the Eco-Schools programme, children and youth are becoming ambassadors of positive change and understand the impact that they have on the environment, while choosing a healthy lifestyle.

The Eco-Schools programme has had a huge impact on the Romanian educational system, especially in the rural part of Romania." **Cornelia Dinca, CCDG Eco-Schools Coordinator** 



# Russia

Keep Saint-Petersburg Tidy National Operator: Olga Madison FF

Country size: 17,1 million km<sup>2</sup> Population: 146 million Highest mountain: Elbrus 5,642 m National animal: Bear Joined Eco-Schools in 2002 Number of Eco-Schools: 473



# Longest river: Lena 4,400 km

The Lena is the only river in the world situated totally in the permafrost region. In spring when the snow melts the water level in the Lena river rises by 10-15 metres.

The river got its name from the Evenk language "Elyu-Ene" which means "Large River".



#### **National Legislation**

There are several documents issued at the national level concerning the development of environmental education. One of them is "Fundamentals of State Policy in the Field of Environmental Development of the Russian Federation until 2030" which came into force in 2012. The relevant regional and local documents have been developed accordingly.

#### **K-12 Education**

Although Russia does not have a specific national environmental education mandate, support for environmental education exists formally and informally at regional and local levels through the efforts of schools, teachers and both governmental and non-governmental organisations.

#### **Professional Development**

There are several specialisations at the university level for training students in the field of environmental education e.g. the Natural Sciences teachers, environmental engineering e.g. technosphere safety, etc. Several aspects related to environmental protection, such as waste handling for sustainable waste management, are mandatory for civil servants, staff of logistics companies, educational institutions, relevant businesses, associations of householders, etc.

Retraining and improving qualification courses in the field are provided by various training centres within the frame of various universities and private educational organisations which have such courses accredited by relevant educational authorities.

# National tree: Birch

The birch is a widespread tree in Russia. It is very beautiful in all seasons.

In ancient times almost all nations living in the area now called the Russian Federation considered birch trees to be sacred trees. Later it became one of the favourite symbols of Motherland-Russia reflected in world-famous paintings, novels and poetry.

# THE STORY OF ECO-SCHOOLS

In Russia, the Eco-Schools programme began with a project that took place in the academic year 2002-2003 in cooperation with Denmark. Five schools from Denmark and six schools from Russia participated in the project which was led by Henrik Norregaard. It was aimed at introducing Russian educational institutions to the International Eco-Schools programme and sharing experience of Eco-Schools implementation in the Danish schools.

Russia was represented by two schools #3 and #38 from Petrozavodsk, Annino school from the Leningrad region, school #637 from St. Petersburg and two supplementary education centres from Lomonosov and from the Vasileostrovsky district of St. Petersburg.

During a five-day study trip to Denmark, the Russian team visited two schools and the Danish Outdoor Council (Filuftsraadet). Russian colleagues attended lessons and attended meetings with Danish teachers to share experiences. Danish colleagues shared their ideas and teaching materials. After the trip the participating schools from both countries stayed in touch to discuss the progress. In May 2003, the Danish colleagues came to St. Petersburg to check how the seven-steps were implemented in the project-partner schools and were happy to see excellent results.

By the end of the project in June 2003, the first Green Flag in Russia was awarded to the secondary school #637 in the Moscowsky district of St. Petersburg. Shortly before the award ceremony, Jan Eriksen visited the school due to his mentoring role and was impressed with the high level of environmental consciousness of the students as well as with the commitment of the teachers and school administration. Four out of the six Russian schools that initially participated in the programme received Green Flags a year later.

The project leader Henrik Norregaard successfully took part in another joint project a few years later. One of the Danish members of the project team, Trine Jarloev, became our wonderful colleague for 15 years closely following the first Eco-Schools project in Russia. She acted as a partner in a number of joint projects related to the Eco-Schools programme, came with presentations to many international and inter-regional events held for Eco-Schools in various regions of Russia, and arranged study visits for the Russian teachers to learn more about Eco-Schools best practices in Denmark.

Peter Uhl Pedersen who hosted one of the project events in Denmark contributed further to the implementation of Eco-Schools in supplementary education and pre-schools in Russia sharing his best practices in arranging outdoor activities for children. In general, the programme development became possible in Russia thanks to our excellent mentors Jan Eriksen and Heiko Crost.

# **KEY MILESTONES**

In 2003 we received an application from kindergarten #69 'Marina' in the Krasnogvardeisky district of St. Petersburg to join Eco-Schools. We did not quite know what to do because the programme at that time according to our knowledge was only for schools, and in some countries also for supplementary education centres. We consulted with Sergio Santos who was the International Eco-Schools coordinator at that time. He was surprised as well but agreed that the kindergarten could join the programme as a pilot with the requirement of having to present a report at the Eco-Schools NOM the following academic year 2003-2004. The report was presented in the form of a very thick folder with a short text and a lot of drawings and photos illustrating seven-steps implementation. The issue of whether to award the Green Flag to the kindergarten was on the NOM agenda. After some discussion, all NOM participants voted in favour of awarding the kindergarten with the Green Flag, and since then it has been officially allowed for kindergartens to participate in the Eco-Schools programme. Today, Russia is the country with the highest number of kindergartens participating in the programme in the world, and the Republic of Tatarstan is the leading region in Russia on the matter.

At the same NOM, Keep Saint-Petersburg Tidy and Rafaella Riccobene from Italy also asked for permission to involve universities in the Eco-Schools programme, as we were going to submit the project on implementation of Eco-Schools in universities to TEMPUS. After a lively discussion, we received permission to run the pilot phase. Unfortunately, we did not get the project funding and the Eco-Schools implementation at the tertiary level was postponed until 2007.

In the meantime, a vocation school joined the programme in 2006 and got its Green Flag. However, the total number of participating organisations was still under 10. Eco-Schools in Russia really developed when about 20 educational establishments from the Siberian part of Russia joined the programme in 2007. In was initiated by Liudmila Koshkareva from Irkutsk the Baikal EcoWave NGO, and among the establishments, were two teacher training colleges and one university. In May 2008, they submitted their reports and were awarded Green Flags.

In 2012, the Green Flag was also awarded to an orphanage in Nurlat village in the Republic of Tatarstan.

As to the geographical scale of development, in 2003, the Kaliningrad Region joined the programme, in 2006, the Kirov Region joined, Siberia joined in 2007 and in 2009, the Republic of Tatarstan and the Bryansk region joined as well. After 2010, more and more regions began participating. There were six time zones between the ones based furthest to the West and the ones furthest to the East and in 2017 the time difference was increased to eight hours when a kindergarten from Ussuriysk began running the programme. Today, the total number of participating regions is 22.

With regard to best practices and activities, the unique annual event The Festival of Eco-Ideas that has been held in the Republic of Tatarstan in the middle of May since 2010 must be mentioned. It was initiated by the director of the kindergarten #11 Antoshka in the Zelenodolsk municipal region Rizida Gainullina. Within nine years it transformed from a small local activity into a significant event not only for the Republic of Tatarstan but for Eco-Schools all over Russia, as colleagues from several regions attend it to share best practices.

The most interesting event in the winter is the contest with artworks made of waste 'Live, Christmas Tree'. The contest is for Eco-Schools from all over Russia. The Christmas trees are made by children, teachers, technical staff, parents and grandparents and can be made by individuals, groups and families. They are exhibited in Eco-Schools, local libraries and local administration offices. The best artworks are presented to local authorities and social partners with slogans for waste separation, nature protection and tree cutting prevention. The contest makes for good cooperation between the Eco-Schools and the LEAF programmes, and in some regions the Green Key programme is involved as well since hotel staff participate in the juries.

'School of the Future' from the Kaliningrad Region now has 15 Green Flags. It is the most active in Russia in creating cooperation between the FEE programmes. Since the Radisson hotel in Kaliningrad got its first Green Key, the school and the hotel arrange at least three to four joint activities every year.

As for international cooperation, during the first eight years of the programme implementation, Keep Saint-Petersburg Tidy successfully cooperated with the Nordic countries and the Baltic States. In 2018, thanks to our colleague from Mongolia, Shinetsetseg Erdenebayar, and our Russian colleagues, Liudmila Koshkareva and Svetlana Marchuk, two visits from our Mongolian colleagues has been arranged. The Russian visit to Mongolia took place in October 2019.

The biggest challenge was to coordinate the work of schools and kindergarten from distant regions. Thanks to enthusiastic people, we have established the system of local Information and Methodological Centres (IMCs) for the programme in each region with more than five participating institutions. IMCs are based on the most active schools and kindergartens in each region willing to share their best practices with the colleagues.

The organisation received letters of gratitude from municipalities to the participating Eco-Schools and kindergartens.



"We were inspired to further develop our work for a sustainable future. The whole school became a united team working together to reach our environmental goals. Students became much more confident, able to make informed decisions, and taking responsibility for the decisions having been made. After a short while, the school became the pilot educational institution in St. Petersburg on active citizenship for sustainability. Many graduates of our school demonstrate leadership skills in the field they have chosen for their further education and career. It was a great pleasure to meet some of them at the celebration of fifteenth anniversary of Eco-Schools in Russia in autumn 2017 and learn more about their successes."

Galina Medvednikova, Former Director at Secondary School #637 in St. Petersburg

# **NATIONAL OPERATOR - REFLECTIONS**

A unique moment was when the first kindergarten joined the programme in 2003, thanks to the initiative of the Head of the kindergarten, Svetlana Marchuk.

"Environmental Education is a priority. It is gratifying that teachers and administrations of institutions pay special attention to the education of young environmentalists."

Igor Barinov, Vice-Head of the Government of the Kaliningrad Region. The quotation is translated from news on the Green Flag award, published on the official website of the Government of the Kaliningrad Region

"Eco-Schools is a great programme uniting children and adults to ensure global sustainability."

Galina Tsvetkova, Keep St. Petersburg Tidy Chairperson



Keep Saint-Petersburg Tidy 32-1-50, Prazhskaya street, 192241, St. Petersburg

# Serbia 🖷

Environmental Ambassadors for Sustainable Development (EASD) National Operator: Aleksandra Mladenovic

Country size: 88,361 km<sup>2</sup> Population: 6.9 million Longest river: Danube 588 km Highest mountain: Djeravica 2,656 m National animal: Brown Bear (Ursus arctos) Joined Eco-Schools in 2012 Number of Eco-Schools: 120



# National tree: Serbian spruce (Picea omorika)

Eco-package workshop with used cartoon beverag

Serbian spruce is not found in many places in the world. In fact, it can be so difficult to find that it took the famous Serbian botanist, Josif Pančić, several years to discover it.

In 1955, he heard about a specific kind of spruce in the Uzice region, but it took him three trips to find it and it was twenty years later in 1975 that he finally found this new endemo-relict species of coniferous trees in the little village of Đurići in Zaovine. He named the spruce Pančićeva omorika (Latin name: Picea omorika, common name: Serbian spruce).



#### **National Legislation**

Environmental Education (EE) is a subject of the Strategy of Education of the Republic of Serbia 2020, which refers to education in line with the Europe 2020 targets and SDGs. The Law on Environmental Protection also predicts the importance of EE as a key factor for a sustainable society and economic development at all levels.

#### **K-12 Education**

EE is present in the curricula for primary and secondary schools, mainly in biology as a mandatory subject, but also in several optional subjects. So, in the lower classes of primary school, for students between the ages of 7-10, the parents choose the subject which their kids will learn throughout the following year. In one of the subjects entitled Guardians of Nature, the students learn about main themes of environmental protection, how to deal with problems and solutions in the environment, etc.

For students at secondary level, there is no EE except for the reformed subject on Education for Sustainable Development (ESD), which is currently being taught to students in gymnasiums. This subject is mandatory in all four years of gymnasium where the students learn about different topics, such as water, energy, biodiversity, climate change, waste management as well as how to use practical methods and tools.

#### **Professional Development**

There is one two-day seminar called Eco Alphabet, officially registered under the Ministry of Education in Serbia, in which teachers can participate. The Eco-Schools Seven Steps and other activities explaining what to do when running EE is presented in the seminar, however, it is not free of charge.

# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme started in parallel with the Blue Flag programme in 2012. There were three educational institutions involved in the pilot phase, two pre-schools, one from Belgrade and another from Setonje village Municipality of Petrovac, and one primary school from Belgrade Drinka Pavlovic. All three schools are still in the programme. On 25 September 2013, the pre-school Cika Jova Zmaj and the kindergarten 1001 Radost became the first two schools to receive Green Flags in Serbia.

The Tetra Pak Company is the only company in Serbia that has supported the Eco-Schools programme from the beginning. The company already supported Eco-Schools in Slovenia, Croatia and North Macedonia, through the Eco Package project.

# **KEY MILESTONES**

Some of the biggest achievements in the history of the programme in Serbia has been the joint efforts of schools and local communities that support Eco-Schools in their own areas to improve the state of the environment. Support through competitions from different donors and sponsors to the programme and the Eco-Schools. Besides this, the involvement of Eco-schools from rural areas that do not have that many other opportunities to be involved in different actions and initiatives.

A big challenge is to run the programme when even institutional support is not enough. Since we do not have campaigns to attract new schools to be part of the programme, the schools themselves exchange examples of good practices and invite others to become Eco-Schools. Having 120 Eco-Schools in the programme, it is our ongoing challenge to prepare different and attractive projects for them.

EASD and the programme has received a letter of support from the Ministry for Education, Science and Technological Development of the Republic of Serbia, the Ministry of Environmental Protection of the Republic of Serbia, the Ministry of Health of the Republic of Serbia, and institutional support by the Secretariat for Environmental Protection of the City of Belgrade.



# **NATIONAL OPERATOR - REFLECTIONS**

I believe a unique factor of the programme is the great commitment of the Eco-Schools coordinators to fulfil all obligations in the best way, through voluntary work, in addition to their regular obligations as teachers in different schools. In addition, I believe that the good connections between teachers and students and the support that the teachers in Eco-Schools provide to the students to become pro-active in Environmental Education work are beneficial to all.



# All for the Planet, Planet for All!

Environmental Ambassadors for Sustainable Development (EASD) Jovana Rajica 5d/6 11000 Belgrade "In this accelerated and technologically evolving world that requires excessive use of resources, without thinking about the far-reaching consequences in the future, it is very important for young school children to view the world as a big picture, and from early childhood recognise and identify positive and negative examples of human activities. Only in this way can we achieve the SDGs and engage in actions.

Eco-Schools are most important in reaching these goals through Environmental Education, which helps them to think creatively, foster cooperation, acquire leadership qualities. Throughout the whole school year, students are engaged through various projects, actions for a cleaner environment, marking a project day, celebrating the international environmental days and even through competitions in knowledge about ecology and the environment. During these activities, students are learning to build themselves up as conscious citizens.

Being one of the Eco-Schools in our society is a prestige, one that sets us apart but also sets an example to other schools to become part of a large family of Eco-Schools. One school can do little, but the huge network of Eco-Schools to which our Drinka Pavlović belongs can create a better world with fewer problems than we have now.

In the end, we will greet you with our motto: All for the Planet, Planet for All!

Professor Marina Drndarski, Eco-Schools Drinka Pavlovic, Belgrade



"The Tetra Pak company started supporting the Eco Schools programme through a specific Eco Package project more than ten years ago. The aim was to raising awareness on beverage carton characteristics when it comes to waste sorting, collection, and recycling. The project was launched first in Slovenia, and soon after in four other Balkan countries: Serbia, Croatia, North Macedonia and Bosnia, and in each of them with equal success and incredibly positive feedback.

Through various activities, such as beverage carton recycling workshops and creative competitions in making beverage carton artworks, school children were educated on proper waste disposal, the concept of the circular economy, and the creation of a valuable new raw material out of the waste material from packaging.

For many years now, both teachers and pupils involved in the programme have shown a constant motivation to work on the improvement of the environmental conditions in their local communities, which makes the Eco-Schools programme a powerful social movement among school children and at the same time represents a solid and strong foundation for a more conscious society in the future.

And this positive influence of such a unique educational platform is particularly valuable and important in countries in which nature preservation and environmental issues are not among the governments' top priorities, which is the case in the Balkan region." Ljubica Naumović, Environment Executive, Tetra Pak South Eastern Europe Tetra Pak Production d.o.o.

"The Eco-Schools programme in Serbia has developed a respectable Eco-Schools network on the spectrum for sustainable development related activities under the umbrella of FEE Serbia as National Operator. The reputation of Eco-Schools is good, having in mind its continuity, constant upgrading, dedicated coordinators, teachers and professors, especially in an environment where a lot of networks are project-based and not sustainable.

In Serbia, the Eco-Schools programme is among the front-runners in SDGs promotion, influencing decision-makers to re-think education syllabuses. Some concrete outreach and successes have already been achieved with the inclusion of ESD and environment elements in different courses including the new ones."

Prof. Dr. Andjelka Mihajlov, National Mentor of FEE programmes in Serbia

# Slovakia .

Centre of Environmental and Ethical Education Zivica (CEEV Živica National Operator: Zuzana Gallayová

Country size: 49,035 km<sup>2</sup> Population: 5.4 million Longest river: Váh 403 km Highest mountain: Gerlachovský štít 2,654 m National animal: Bear Joined Eco-Schools in 2004 Number of Eco-Schools: 317

Custon



# National tree: Linden tree

The Linden tree is sometimes referred to as a lime tree. However, the tree has nothing to do with the lime fruit.



# THE STORY OF ECO-SCHOOLS

The Eco-Schools programme was first introduced in Slovakia under the name Zelená škola in 2004.

The coordination and methodology of the programme were implemented by the Center for Environmental Activities in Trenčín, in cooperation with the Network of Environmental Education Organisations Špirála. Rišo Medal became the 'father' of programme, due to the enthusiasm he put into Eco-Schools and how he transferred this enthusiasm to other team members. In 2005, the first Green Flag in Slovakia was awarded and, four years later, the administration of the programme was handed over to CEEV Živica, which has been organising it since.

# **KEY MILESTONES**

The key milestone for the organisation was the implementation of a peer-to-peer participative approach. CEEV Živica works so that students as well as parents, cooks, cleaning staff, etc. partner with teachers, and that these actors implement the Eco-Schools programme together.

In 2016, CEEV Živica was awarded a prize from the Minister of the Environment, for outstanding results and long-term activities in Environmental Education.



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"...Schools and teachers are the decisive factors that create a relationship with the environment..that shapes them for the future." Andrej Kiska, President of Slovakia, 2017

**Centre of Environmental and Ethical Education Zivica (CEEV Živica)** CEEV Živica, Búdková 22, 811 04 Bratislava

### **NATIONAL OPERATOR - REFLECTIONS**

In Slovakia, we have implemented the initiative called 'Heading towards the Eco-Schools Green Flag', which is for schools who are not able to fulfil the requirements to obtain the award within a given year. It is a nice intermediate step, which makes sure that the schools are not frustrated and we do not lower the Green Flag standards.

We have decided from the beginning, that we will visit all the schools in the Eco-Schools programme personally. We created posts for Eco-School consultants, who were assigned a certain number of schools and helped them with their questions, Action Plan etc. This started to become a real challenge with the growing number of schools in the programme. Currently, we have more than 300 schools and we use different specialists to do the assessment visits. Now we are able to visit all schools interested in applying for the Green Flag within a 2-year period.

Juraj Oravec, Former Eco-Schools National Operator





# Slovenia 🗗

Association DOVES - FEE Slovenia National Operator: Gregor Cerar

Country size: 20,273 km<sup>2</sup> Population: 2 million Longest river: Sava 221 km National animal: Lynx, honeybees and proteus National tree: Linden tree, Slovene tree of life Joined Eco-Schools in 1996 Number of Eco-Schools: 289



# Highest mountain: Triglav 2,864 m

Triglav - The legend of the Zlatorog, the white goat with golden horns.

Workshop for coordiantors 2016

Triglav represents a three-headed god who controls the earth, the sky and the underworld. In the areas surrounding of Triglav, once lived three good-hearted women. In the mountains, they grassed their herds which were led by a large white goat, ninamed Zlatorog, with golden horns. The horns were the key to a treasure.

To be continued...

I. DO DRAW THE REAL



#### **National Legislation**

In 2007, the Guidelines for Education for Sustainable Development from Pre-School to Pre-University Education were launched nationally. The document is intended to support the planning, implementation and evaluation of Education for Sustainable Development (ESD) in formal and non-formal education.

#### **K-12 Education**

Currently, there are no curricula in which Environmental Education (EE) is being defined as an independent lesson. However, the content is represented within different lessons.

#### **Professional Development**

At the university level, there is a specialised study course on environment protection and individual environmental programmes or programmes which include lessons on environmental subjects. Additionally, there is a four-year-long PhD interdisciplinary degree on environmental protection that allows students to combine topics from thirteen faculties at the University of Ljubljana.

# THE STORY OF ECO-SCHOOLS

In 1994, Slovenia joined FEE and initiated the Blue Flag programme. Two years later in 1996, Eco-Schools was implemented as the second FEE programme in Slovenia. In April the same year, Nada Pavser, Professor of Chemistry and Biology, was appointed the first National Operator in Slovenia and the first meetings and workshops were organised for the primary and secondary schools that showed an interest in environmental issues. In the following years, the Slovenian Ecological Movement, an environmental expert group led by the Eco-Schools programme, organised many workshops for teachers and principals in schools all across Slovenia to promote EE and the programme. As a result, more and more schools joined the Eco-Schools programme.

In 1998, one secondary school and fourteen primary schools became the first Slovenian schools to be awarded the Green Flag. They received their Green Flags on the 5 June 1998 by Sergio Santos, Eco-Schools Coordinator at the time.





### **KEY MILESTONES**

In 1996, the Slovenian Eco-Schools programme was presented at the FEE General Assembly in Cyprus, while in 1999, the first sponsors (partner companies) started to support Eco-Schools Slovenia. In the same year, the Slovenian Eco-Schools webpage was set up.

In 2002, the first kindergartens joined the programme, and in 2004, FEE Slovenia launched the first Eco Quiz project, which turned out to be one of the most successful projects, participated each year by approximately 2,000 students from primary and secondary schools from all over Slovenia. It is a yearly-based knowledge competition about three selected sustainability topics. Eco-Quiz for primary schools is organised for students in grades 6-8 and separately for secondary schools. In 2005, an agreement of cooperation between Association DOVES – FEE Slovenia and the Ministry of Education and the Ministry of the Environment was signed. In 2012, the Faculty of Education at the University of Ljubljana became the first Slovenian faculty awarded with Green Flag, which kicked off the launch of FEE EcoCampus in the country.

Association DOVES - FEE Slovenia was the first NGO in Slovenia recognised as an NGO in the field of environment and nature protection. Furthermore, the organisation received support and has cooperated with the private sector in developing projects on environmental responsibility and social responsibility. In 2018, the organisation received the Best Promotional Project on Energy Efficiency and Renewable Energy Award by the national newspaper 'Finance'.

> Association DOVES - FEE Slovenia Zavrti 2 1234 Menges

"Since we started participating in the Eco-Schools programme, there has been an increase in collective awareness, as well as involvement in activities in the field of protecting the environment, healthy living and sustainable development. We increased our cooperation with different external stakeholders and highlighted the importance of each individual and his or her responsibility to the community, present and future generations, and to a greater connection and transfer of knowledge and ideas within the Eco-Schools family. The Eco-Schools programme is a whole school project that touches all students, parents and the local community."

Janja Zupancic, Headmaster, Primary School Louis Adamic, Grosuplje

"I am glad that in Slovenian kindergartens, schools and faculties there are educators and teachers, headmasters and other workers who are willing to and capable of putting their work above the framework of the formal pedagogical process. Wherever and whenever it is possible they adapt the curriculum in a way to connect it with the stimuli of a child's environment and include the contents in a child's everyday life. The Eco-Schools programme proves that the pedagogical process is vivid and dynamic. Besides that, these sorts of initiatives have also other positive effects. They contribute to a higher reputation of the teaching profession, they encourage the interdisciplinary and intergenerational connecting, solidarity and cooperation of different groups in our society. Therefore, my congratulations to all collaborators in the Eco-Schools programme for their work so far, especially to the educators and teachers working daily with children, who are their eyes and their mirror at the same time. I wish that this programme successfully continues its journey." Jernej Pikalo, Ph.D., Minister of Education, Science and Sport

"We established Eco-Schools Slovenia over twenty years ago within the Association DOVES - FEE SLOVENIA - two years after introducing the Blue flag as the first FEE programme in Slovenia. From the very beginning, we have been putting the greatest effort into the programme's development. We immediately recognised the importance of Environmental Education and awareness for sustainable development and later on about circular economy for the youngest kindergarten children. Over the years, we have successfully utilised all possible synergies with other programmes, notably with Blue Flag and Young Reporters for the Environment. Although it is not always the easiest to develop and financially support the programme and all the activities that are necessary to keep at the highest level, we are continuously striving to set the path and maintain the achieved level. We are all very proud to be a part of the great FEE global family. We recognise that the knowledge and experience that is shared with other FEE National Operators is invaluable and helps support our work."

Fiorenzo Lupieri, Association DOVES - FEE Slovenia President



# **NATIONAL OPERATOR - REFLECTIONS**

The biggest challenge is staffing and financial sustainability with the constant development of the content and the projects within Eco-Schools Slovenia. We try hard to keep the network of sponsors, which have been supporting the programme for several years. We are facing an on-going challenge to develop the Eco-Schools programme on different levels, to connect institutions from all levels; kindergartens, primary schools, secondary schools and faculties, to create interesting environmental projects with different themes and teams, to run interdisciplinary projects, to encourage schools for international cooperation etc.

What inspires my work with the Eco-Schools programme is the excellent team of colleagues and coworkers that might differ in character, in the way they work and in their personal life, but who all are focused and dedicated to making the Eco-Schools programme in Slovenia interesting and growing. Active participation of 280 Eco-Schools with more than 80,000 students and over 8,000 teachers taking part in more than 4,000 environmental projects per year, makes our lives really interesting!

# Highest mountain: Triglav 2,864 m

Continued ...

In the Trenta Valley lived a young hunter who was raised by the three women. He loved a beautiful girl, and he brought her mountain flowers every day to slowly earn her love.

One day, a wealthy Venetian merchant gave the beautiful girl gold jewellery and claimed that if the hunter really loved her, he should bring her Zlatorog's treasure. The girl lost all interest in the hunter because of her new gold jewellery. The hunter got desperate, so he went out searching for Zlatorog. One morning, he found him and shot him. However, Zlatorog had miraculous powers and from the blood of the deadly wounded animal grew suddenly the most beautiful Triglav flowers. When the Zlatorog ate these flowers he came back to life. Then Zlatorog hit the hunter, blinded him with the light of his shining horns and pushed him down the mountain.

The animal and the three women left the mountains and the treasure remained hidden in the mountains of Triglav.

# Spain 🗖

Environmental and Consumers Education Association (ADEAC) National Operator: Idoia Arellano López

Country Size: 505,990 km<sup>2</sup> Population: 47 million Longest river: Tajo 1,007 km Highest mountain: Teide 3,718 m National animal: Lynx Joined Eco-Schools in 1998 Number of Eco-Schools: 530



# National tree: Holm oak

lador

The name of this tree has its origin in the Celtic language and means 'beautiful tree'. The Celts considered it a sacred tree, as its leaves are always green and it gives great shadow.

For thousands of years, the inhabitants of the Iberian Peninsula ate the acorns that holm oaks produce, as the trees could be found everywhere.



### **National Legislation**

At the legal level, the reference to Environmental Education (EE) can be found in the European Directives 2003/4/CE and 2003/35/CE which regulate the access to information, participation and justice regarding environmental issues. In Spain, 20 years ago, the Ministry of Environment launched the "The White Book on Environmental Education". The book has recently been reviewed and is used by NGOs, schools, universities and the private sector.

### **K-12 Education**

EE is a cross-disciplinary theme from kindergarten to secondary education. As a cross-disciplinary theme, it is implemented through several subjects and through extra scholar excursions. In primary education, natural sciences subjects are closely related to EE. Recently, EE was introduced in some University degrees as a subject e.g. in Education and Environmental Sciences, and as a PhD degree on Environmental Education.

#### **Professional Development**

Since the global and national financial crisis, EE in Spain has suffered constant cutbacks. Local, regional and national governments are not investing as much in EE. A position as an environmental educator is, therefore, usually a part-time job, that is not socially recognised nor very well paid. Some NGOs, including ADEAC, provide training for environmental educators from primary and secondary schools on different sustainability topics.

# THE STORY OF ECO-SCHOOLS

ADEAC started the Eco-Schools programme in Spain in 1998, in the regions of Andalusia and Madrid. Initially, the programme was supported by the Department of Education from the Andalusian Regional Government and in Madrid, several municipalities and local networks were involved. The first to support the programme in Madrid was the local network of Leganes, which has been a pioneer in many aspects of Eco-Schools. The second to provide support in Madrid was the network of Pozuelo de Alarcon.

Little by little, schools from all around the country joined the national network. In the first phase, ADEAC created educational materials, using the international materials as a reference and organised regional Eco-Schools meetings in Andalusia, Madrid and Guadalajara. In Madrid, a working group called Educa21 was created, involving a number of national EE stakeholders. Together, Educa21 and ADEAC organised conferences and created an exhibition that has moved from Eco-School to Eco-School in Spain.

# **KEY MILESTONES**

The key milestone was to create local networks supported by the municipality. The creation of Educa21 working group in Madrid was a key support to the National Operator of Eco-Schools and the passion we shared was also key to the success the programme has had since its beginning.

In 1999, 15 schools were awarded with the Green Flag at the same timeL C.P. Padre Marchena (Marchena, Sevilla), C.P. Virgen del Rosario (Totalán, Málaga), C.P. Juan XXIII (Marchena, Sevilla), I.E.S. Himilce (Linares, Jaén), C.P. El Faro (Mazagón, Huelva), I.B. PoetaGarcía Gutiérrez (Chiclana de la Frontera, Cádiz), I.E.S. María Zambrano (Leganés, Madrid), I.E.S. Siglo XXI (Leganés, Madrid), I.E.S. Julio Verne (Leganés, Madrid), I.E.S. Isaac Albéniz (Leganés, Madrid), C.P. Andrés Segovia (Leganés, Madrid), C. Franciscanas de Montpellier (Trapagarán, Vizcaya), C.P. Zubileta (Guetxo, Vizcaya), C.P. Larrazazubi (Guetxo, Vizcaya), I.H.P. Lateorro (Laudio, Álava).

Spain is a big country, thus of the challenges has been to visit every participating Eco-School. ADEAC has recently started using online means to communicate with support schools that do not belong to any regional network and continuously tries to also incorporate private schools in the national network.



"Eco-Schools has opened a window in our centre, and the air brings awareness towards the lack of respect we had for nature. Eco-Schools is now present everywhere, in its corridors, cafeteria, playgrounds and gardens. Since we started the programme, we reduced our electricity consumption, we do not buy plastic cups, each teacher uses a reusable bottle for water, we have forbidden aluminium foil and students bring mainly fruit for snacks. Fruit is also available at the cafeteria. We try to immerse Eco-Schools values in every activity we carry out, it is a matter of survival."

Ana Isabel Lara Castaño, Eco-Schools Coordinator at IES Rusadir, Melilla

"Being an Eco-School implies a conscious way of being a school: a school where the whole community is engaged, a school open to the world and a school were each action counts. A school with sense and feelings. The role of municipalities in the Eco-Schools Programme is key to support and facilitate school projects: projects related to waste management, fruit gardens, energy efficiency, etc. As Eduardo Galeano said: Many people doing small things in many places can change the world." Guiomar Romero, Education Councilwoman in Alpedrete, Madrid "Eco-Schools is a very inspiring programme that has recently opened the door for Young Reporters for the Environment. We are very proud of our national network. The programme is a reference in Environmental Education in Spain and has inspired other programmes in schools that also follow Agenda 21. We believe participation is a key tool for more sustainable communities and the Eco-Schools programme can lead this change."

Virginia Yuste, ADEAC Vice-President

"There have been many inspiring moments during my time as the National Operator, which I enjoyed together with the coordinators of the Eco-Schools programme in each participating school during the visits to schools, the regional meetings or the International Eco-Schools Meeting that was held in Spain. During those moments, I got the inspiration and strength I needed for the hard work I had at the office. In the beginning, the connection to the Eco-Schools team in Portugal was very important to me."

Jorge Navacerrada, Former Eco-Schools National Operator





### **Environmental and Consumers Education Association (ADEAC)** Calle General Lacy 3 portal 1 1°B Madrid

# **NATIONAL OPERATOR - REFLECTIONS**

"I think one of the main strengths of the Eco-Schools programme is that it can be applied to private, public schools, schools in urban or rural areas. I love the fact that it is nourished by people's thoughts and feelings, that is why participation is so important."

Carmen Fernandez, Acting National Operator

# Turkey C\*

Foundation for Environmental Education in Turkey (TÜRCEV) National Operator: Aynur Çimenci

Country size: 783,562 km<sup>2</sup> Population: 82 million Longest river: Kızılırmak 1,355 km Highest mountain: Ağrı 5,137 m Joined Eco-Schools in 1995 Number of Eco-Schools: 1,120



# National animal: Wolf

In old Turkish culture, the wolf is a divine creature that symbolises the spirit of the ancestors. It is often portrayed on emblems and flags from old turkish communities.

ENO Trie Pleating D

# National plant: Tulip

In Turkish culture, the tulip symbolises life and the abundance and heralding of spring. During the eleventh and twelfth centuries, the flower spread from middle Asia to the coast of the Black sea and then to Europe.



#### **National Legislation**

There are courses that are related to the environment in different areas, but there is no concerted environmental strategy or policy for Environmental Education (EE) in Turkey. Therefore, the schools apply for programmes like Eco-Schools and pursue the steps on their own initiative.

#### **K-12 Education**

EE in Turkey became known due to the efforts of NGOs and their environmental education programmes like the Eco-School programme which, with its Green Flag award, creates a way for both NGOs and the public educational institutions to work with EE. However, Eco-Schools is not the only EE programme oriented towards K-12 EE. There are multiple programmes operating in Turkey.

#### **Professional Development**

Professional development programmes in EE have been carried out mostly through initiatives developed by non-profit organisations. Some universities offer a degree in EE at the graduate level, which is mainly focused on teacher training.

# THE STORY OF ECO-SCHOOLS

In 1995, two years after the Blue Flag programme was implemented in Turkey, TÜRÇEV decided to start EE in schools by implementing the Eco-Schools programme. For the first year there was only one school involved with the programme, Göktürk Primary School, which in 1996, also became the first school in Turkey to receive a Green Flag. Year by year the programme became known by teachers, students and school principals and today it is known all over Turkey.

# **KEY MILESTONES**

The national teacher seminars, the Eco-Schools festivals, exhibitions and award ceremonies are all great achievements in the programme and have helped make the programme extensively known in Turkey.



Working in and with the Eco-Schools programme is not just beneficial to nature. It is also good for developing the personality of the students. The most important advantage for the students is that they know that they are having fun when they work for the benefit of the environment. They learn about nature and how strongly we are connected to it. Then they take on the responsibility for it. They are more motivated, stronger and happier.

# Ayşegül Özgiresun Ünal, Coordinator Teacher, Maltepe Secondary School

"It is a privilege and an indescribable joy to be a member of the Eco-Schools family. It is a splendid feeling to teach the students about the importance of the environment and see them grow with this wisdom. We succeeded in doing this with the help of the Eco-Schools programme. It gave us a way to follow and we did it. So, thank you to everyone who did the work and set the milestones and made the programme so efficient and through it connected millions of people."

Nazik Betül Aydoğan, Teacher running the programme since 1997, City Coordinator of Eco-Schools Ankara

"I've been in charge as General Manager at FEE Turkey for nearly four years now and I think the Eco-Schools programme plays a significant role, as from the beginning it is in touch with the youngest generations in the community, even when they are at kindergarten and makes them and their families more environmentally conscious in the following years. And of course, to run the other four FEE programmes, which are also invaluable, is really great. You know that each new generation knows how important it is to save our environment and they continue to do so! " Murat YiĞiTOL, TÜRÇEV General Manager





# **NATIONAL OPERATOR - REFLECTIONS**

In a National Eco-Schools Seminar, listening to a speech from an environmental engineer who was once a member of the eco-team in his school, was a real highlight for me. He said he decided to do this job and protect nature every single day of his life after he became a member of the Eco-team.

Having a letter from the Ministry of Education that says the protocol between TURCEV and the Ministry was no longer valid has been the biggest challenge for the programme, as a lot of schools stopped running it. However, after visiting the Ministry several times and preparing a lot of documents the issue was, fortunately, solved in the end.



**Foundation for Environmental Education in Turkey (TÜRÇEV)** Mutlukent Mah. 2026. Sokak No:3 Beysukent/Çankaya/Ankara

## Ukraine

Ecological Initiative (EI) National operator: Victoria Radchenko

Country size: 603,600 km<sup>2</sup> Population: 41 million Longest river: Dnipro 1,121 km Highest mountain: Goverla 2,061 m National animal: Nightingale Joined Eco-Schools in 2016 Number of Eco-Schools: 5



### National plant: Guelder-rose/ Viburnum opulus

Mentions of the viburnum can be found throughout Ukrainian folklore.

Its berries symbolise one's home and native land, blood, and family roots and today, a berry cluster is an insignia of the Ukrainian National Guard.

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## STATUS OF ENVIRONMENTAL EDUCATION

#### **National Legislation**

Modern Environmental Education (EE) is a systematic component of the national education system, which operates on the basis of the current law on education, the National Strategy for the Development of Education of Ukraine for the period up until 2021. It has been approved by the Law of Ukraine on the Fundamental Principles of the State Environmental Policy of Ukraine until 2030. A characteristic feature of modern EE is its focus on harmonising the interaction between society and nature, solving environmental problems and implementing sustainable development in the society. The goals and objectives of EE are determined and taken into account in the goals and objectives of national environmental policy.

#### **K-12 Education**

Modern EE is a continuous integrated process of mastering knowledge about the laws of functioning of ecological systems and about the role of people in the conservation of thenatural environment; a process of ecological education and training, development of professional knowledge and skills necessary to be engaged in any human environmental activities. The basics of ecology are taught in almost all educational institutions in Ukraine.

#### **Professional Development**

The training and education of specialists in the field of ecology is carried out in more than 110 universities in Ukraine.

## THE STORY OF ECO-SCHOOLS

The Eco-Schools programme started as an initiative from an international school in 2016. Later, Ecological Initiative (EI) received support from the French Embassy to participate in the Eco-Schools National Operators Meeting in 2017.

## **KEY MILESTONES**

The biggest milestone in the development of Eco-Schools was the involvement of private national schools in addition to the initially involved international schools.

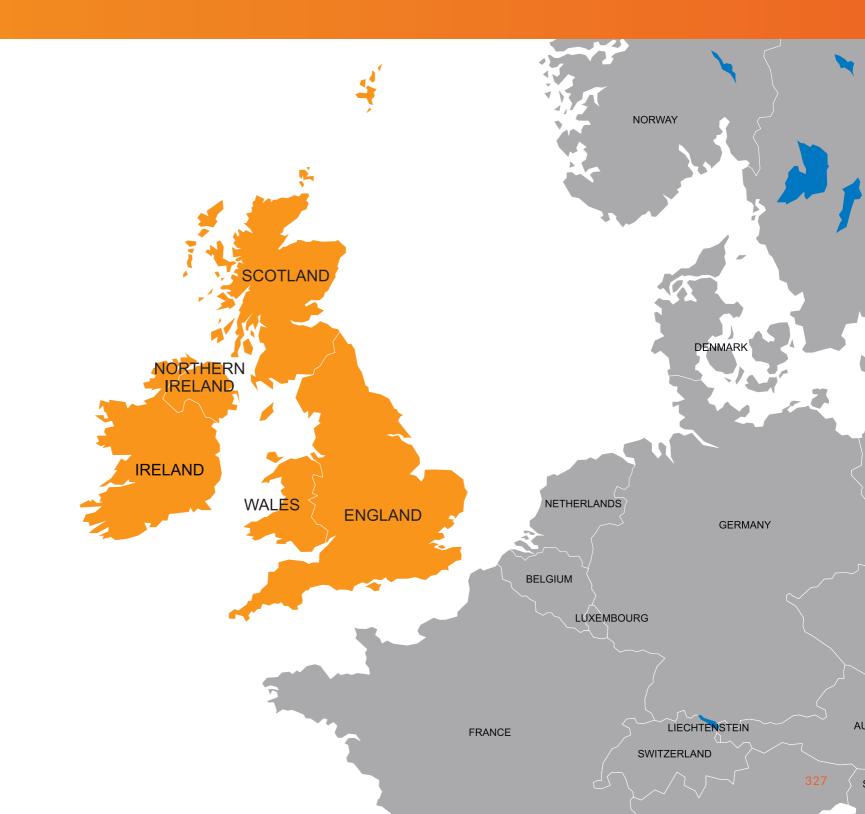
Ecological Initiative (EI) Mayakovskogo 4b, off. 85, 02217 Kyiv



President Michael D Higgins at GS Expo 16, Eco-Schools Ireland

## **United Kingdom & Ireland**

England, Ireland, Northern Ireland, Scotland & Wales



## England -

Keep Britain Tidy (KBT) National Operator: Lee Wray-Davies

Country size: 130,395 km<sup>2</sup> Population: 55.6 million Longest river: The Thames 346 km Highest mountain: Helvellyn 978 m National animal: Lion National tree: Oak Joined Eco-Schools in 1994 Number of Eco-Schools: 19,631



#### National plant: Rose

The Tudor Rose is the traditional floral heraldic emblem of England and takes its name and origins from the House of Tudor, which united the House of Lancaster and the House of York. The Wars of the Roses were a series of battles fought in medieval England from 1455 to 1485 between the two houses. The name Wars of the Roses is based on the badges used by the two sides, the red rose for the Lancastrians and the white rose for the Yorkists. The Tudor rose now consists of five white inner petals, representing the House of York, and five red outer petals to represent the House of Lancaster and its superiority to the House of York.



## STATUS OF ENVIRONMENTAL EDUCATION

#### **National Legislation**

Neither Environmental Education (EE) nor the Sustainable Development Goals (SDGs) are compulsory in the English curriculum, however, elements of environmental issues and management are covered briefly in subject areas, such as geography and science.

#### **K-12 Education**

Throughout the Key Stages (KS), students cover elements of EE, with a more specific focus from KS5 onwards. Eco-Schools England has recently mapped the entire Eco-Schools programme and topics to KS1-4 to integrate EE through the wider curriculum in areas such as history, music and maths.

#### **Professional Development**

There are a wide variety of environment-based professional development courses available, some accredited nationally and some delivered in-house by environmental organisations. KSB currently offers bespoke Eco-Schools teacher training.

### THE STORY OF ECO-SCHOOLS

England was amongst the first countries to launch and pilot Eco-Schools back in 1994 and the Tidy Britain Group ran the Eco-Schools programme for all UK countries. The organisation was and is to this day based in Wigan. The project was promoted and supported by the Going for Green Campaign. The Going for Green Campaign was a public awareness campaign that asked people to 'think green' and make a few simple environmental changes in their daily lives.

At the time, all supporting Eco-Schools materials were written and developed by Robert Stephenson and Cherry Mares. Professor Ashworth was the Chief Executive at Keep Britain Tidy in 1994, with Sue Rigby the first Eco-Schools Manager (UK).

Local authorities across the country supported the launch of Eco-Schools, linking the programme to initiatives such as Local Agenda 21 and in 1996, two years after the initiation of the pilot phase, the first Green Flag in England was awarded to Canon Burrows Primary School.

During devolution, each of the UK nations took over the management of their countries' Eco-Schools programme.



## **KEY MILESTONES**

Since the launch in 1994, the programme has gone through some defining moments such as the devolution of the programme in 2004 with other UK nations taking over the management of the Eco-Schools programme in their own nations. In 2014, government funding for the Eco-Schools programme stopped, which resulted in the introduction of a charge to schools when applying for a Green Flag. In 2018-2019, changes to the order of the Seven Steps where made and the new topic 'Marine' was introduced. Eco-Schools England also hosted the first UK & Ireland regional network meeting in Wigan in 2017.

As EE is yet not compulsory in the English national curriculum, the Eco-Schools programme is an optional programme for schools. It relies on the goodwill and support of a network of thousands of volunteers to keep the programme running whilst they work towards compulsory educational benchmarks such as inspection criteria, league tables and examination results.

#### **NATIONAL OPERATOR - REFLECTIONS**

Having been a geography teacher for over 16 years and having seen so many changes to the English national curriculum in that time, it always amazes me that for an entire generation every Eco-School, no matter where in the world, has followed the same simple Seven-Step framework to Green Flag success.

No school in England has to be an Eco-School, and yet 19,200 Eco-Coordinators have given their valuable time (some for over 20 years) to manage and run the programme in their schools, on top of the additional pressures and responsibilities they face within an ever-changing education sector. The maturity and determination of their students to make an environmental difference is a testimony to these inspiring individuals and the Eco-Schools programme as a whole. We are the largest educational programme on the planet and I don't doubt will continue to be for another generation.





"When a child gets actively involved with Eco-Schools, they enhance their development further. They build upon their previously acquired knowledge and learn to use these skills. They understand that they have a voice and that they have a safe platform to use it. They become minute makers, organisers, planners and influencers. Projects are inspired from their imagination, success is seen in a non-academic form, things get done and if they don't there is the understanding."

#### Jayson Taylor, Learning Mentor and Family Liaison St Catherine Junior School, Leicester

"In 2019, award-winning eco uniform provider David Luke school wear, were thrilled to renew their 6-year long relationship with Eco-Schools, strengthening their sustainability programme further. This year's partnership saw David Luke take ownership of Eco School's new 'Marine' topic. Ambitions for the project included working with the school wear brand's collective of youth environmentalists known as '16 Under 16' to produce a series of school resources with a plastic pollution and marine focus, including lesson plans and engaging assembly formats." Bryony Pestell, David Luke Clothing, Corporate Sponsor

"At Leicester City Council we are very proud to promote Eco-Schools as the model for accrediting our schools as they become more sustainable. The Eco-Schools programme is a fantastic framework which has enabled all types of schools to engage in the environmental agenda. It is accessible for children and staff from infants, primaries, secondaries and special schools. The Green Flag award visit is a great step for schools to celebrate their hard work and share their projects with others. What I admire is that the Eco-Schools programme is a journey, not a destination. This means that schools can always make further progress. As part of the climate emergency, our schools have been able to use the framework as a mechanism to reduce their carbon emissions and monitor their impact. This has been reflected in their informing and involving, working in their extended communities, and with their families and friends. We have high aspirations for all our schools to become Green Flag Eco-Schools." Lee Jowett. Environmental Education Coordinator Leicester City Council (Local Government supporter)

"England was amongst the first countries to launch and pilot Eco-Schools back in 1994 and since then Keep Britain Tidy has overseen phenomenal growth in the programme, with over 19,200 schools now registered – representing over 80% of all schools in England. Feedback from Head Teachers and Eco-Coordinators indicates that the programme not only enables pupils to develop greater awareness of and take action on the environment, but it also helps foster the key skills of leadership and team-working which are so critical to today's sustainability agenda. We are proud to be leading this programme in England and building the knowledge, skills and values in our next generation who will lead the transition to a more sustainable and healthier world." **Richard Mcllwain, Deputy Chief Executive at Keep Britain Tidy** 



## Ireland

An Taisce EEU - The National Trust for Ireland National Operator: Cathy Baxter

Rathleague National School celebrates ten years of National WOW day during Walk to School week in 2018

Country size: 84,421 km<sup>2</sup> Population: 4.7 million Longest river: River Shannon 360 km Highest mountain: Carrauntoohil 1,038 m National animal: Red Deer Joined Eco-Schools in 1997 Number of Eco-Schools: 3,952



#### National plant: Shamrock

The name Shamrock comes from the Irish name seamróg which translates to young clover. There is actually no individual plant species which is positively identified as a shamrock. The name is used for many small three-leaved clovers! According to folklore, St Patrick used the shamrock as a tool to help bring Christianity to Ireland. In many myths and legends, it is mentioned that St Patrick used the three leaves on one plant as a metaphor for the Christian concept of the Trinity. The number three was already an important figure in Ireland as the Celts had believed it was a powerful number and included it in their art so it is possible that shamrocks were an important symbol in Ireland dating back thousands of years.



## STATUS OF ENVIRONMENTAL EDUCATION

#### **National Legislation**

The National Strategy on Education for Sustainable Development (ESD) guides the status of Environmental Education (EE). This was developed by the Department of Education and outlines how environmental education and ESD should be implemented from early years to tertiary and adult education via formal and non-formal education and with support from various government departments and relevant bodies.

#### **K-12 Education**

In preschool education, ESD is incorporated into two frameworks – the curricular framework and the national quality framework. This ensures that environmental education is incorporated at an early age. At the primary and post-primary level, ESD is a component of several core subjects including Geography, SESE, Civic Social and Political Education, History and Environmental and Social Studies. In addition, both primary and secondary schools have key ESD principles incorporated into their guiding frameworks which direct environmental education principles to be incorporated throughout school life. In secondary schools, the framework governing the new Junior Cycle includes directions which promote environmental principles, for example, a statement that "the student has the awareness, knowledge, skills, values and motivation to live sustainably".

#### **Professional Development**

The National Strategy on Education for Sustainable Development found that initial teacher training carried out in many colleges, universities and institutes of technology around the country is lacking in the area of ESD. However, there are opportunities for Continued Professional Development (CPD) for teachers involving environmental education. CPD is funded by the Department of Education and is mainly organised through the Professional Development Support Service for Teachers (PDST) and the Education Centre Network. The network provides a number of short courses during the school summer holidays including several related to ESD, e.g. one titled 'Supporting Sustainable Development'. The City of Dublin Education and Training Board's Curriculum Development Unit has also initiated a number of small scale CPD projects focusing on resource development.

#### THE STORY OF ECO-SCHOOLS

Eco-Schools started in 1997, when the former Eco-Schools Director, Dr Patricia Oliver, who had seen the success of the programme in other countries through the FEE network, encouraged one of our local authority partners to support the programme. Other local authorities soon followed and the programme opened to registrations shortly thereafter. Elizabeth Arnett, the Green-Schools Manager, was tasked with establishing these partnerships with local authorities and guiding the very first schools through the seven-step process.

The first local authority partners supported the running of the programme in schools in their areas by assisting with recruiting schools to the programme, organising a venue for schools to attend an introductory seminar which provided teachers and coordinators with initial training and support to begin working on the programme, providing information to the schools on local resources and assessing the work done by schools.

Already in 1997-98, Roxboro National School, Roscommon; Cranford National School, Donegal and St. Michael's Boys National School, Galway became the first schools to get awarded Green Flags in Ireland.

#### **KEY MILESTONES**

In 1997-98, Ireland awarded the first Green Flags, while in 2003 An Taisce held the Eco-Schools NOM for the first time in Dublin. In 2007, the organisation launched the Green-Campus programme, and 1,000 schools were awarded the Green Flag. A year later, An Taisce rolled out the Green-Schools Travel programme, which aims to increase the number of students walking, cycling, scooting, using public transport or carpooling to school. In 2009, University College Cork was awarded the first Green-Campus Green Flag, and An Taisce reached the 2,000 Green Flag awarded schools milestone.

In 2013, An Taisce held the FEE General Assembly in Dublin, and in 2016 it held the Green-Schools Expo, where the Water Ambassadors and the Marine theme were launched. Later in 2017, An Taisce's Climate Action Programme was launched and in 2018 the organisation held the first Green-Schools Global Goals Conference. In November 2018, the Eco-Schools NOM was held in Cork, with participants from over 55 countries.

**An Taisce EEU - The National Trust for Ireland** Environmental Education Unit, 5a Swifts Alley Dublin 8 "The whole experience of the Green-Schools programme has benefited our school in more ways than we can ever imagine. We have engaged with this programme for such a long time (16 yrs - 6 Green Flags)that staff, in particular, cannot imagine life in St Joseph's without the Green Flag culture! Not only has the project raised awareness of environmental issues among the pupils, but it has also fostered a change in attitude towards respect for our world, among all members of the wider school community.

Being part of the Green-Schools project has helped promote a culture of proper waste management, energy reduction, water conservation, sustainable travel, an understanding of biodiversity and heightened awareness of global citizenship that was never there before. We are extremely proud of this culture and continue to encourage it through good behaviour practice. Pupils learn by example and what better way to show this than by older pupils showing the young through healthy and positive environmental behaviour practices.

We have learned huge amounts about our environment, how it works and how to take good care of it. This knowledge we will carry with us forever. By continuing the good practice in relation to waste management, our school will remain a cleaner and greener place in which to learn. This, in turn, promotes a positive, happy and healthy atmosphere for everyone. One of the main benefits of our recycling endeavours is our effort to support charities and people less well off than ourselves. Also, by working together towards reducing energy costs in the school, we have managed to reduce domestic bills, thereby saving money from school funds. This money can then be channelled elsewhere.

Another really positive aspect of the programme has been our regular access to the Green-Schools website. This website has proven an invaluable resource for committee members and coordinators while working through the projects. It is well laid out, very teacher-friendly with a myriad of ideas, advice, case studies and pictures of various other schools ideas. As well as the educational benefits, there has been an element of fun, which has permeated each aspect of the programme. We have thoroughly enjoyed various tours/trips/visiting agencies already outlined in previous questions. We have experienced new activities such as gardening and the planting of trees, shrubs and daffodils in areas outside of the school. We have derived immense joy through the building of our Bug Hotel and Ladybird House!

Our Celebration of Cultures Day in February proved to be one of the most successful Green-School endeavours to date! Such was the success of this day that we intend continuing to celebrate our cultural diversity every other year going forward!

Furthermore, we have been lucky enough to have the experience of six Green Flag-raising ceremonies at St Joseph's and have been able to enjoy the parties that followed! These memories will remain with each and every one of us long after we have left the school system.

St Joseph's proud tradition of green issues doesn't stop at the school gates. One of our previous challenges, the Green Home Project involved assignments, which were carried out in the home with our families. Through this, we are enabled to pass all the information we learn at school into our homes. This raises awareness within our households on all issues green and helps us to reduce household bills and make the environment a healthier and safe place for generations to come.

Our local newspaper, The Tipperary Star has been extremely supportive in raising publicity for the school. The newspaper has, on a regular basis, printed articles and pictures relating to Green-Schools' issues. This publicity raises the profile of our school and helps us act as an example to others. As we are recognized as an established and experienced Green-School, we have been approached by certain schools in the locality for advice and ideas in relation to the setting up of their Green-School project.

Furthermore, certain external agencies have used our projects to further promote Environmental Education in the wider community through their websites: eg tipperarycoco.ie (Artist in the primary school scheme)

Finally, our most recent theme, Global Citizenship-Litter & Waste, presented us with many challenges along the way, but we rose to each one and are extremely proud of our achievements. We hope to continue passing our "green" culture to all pupils at St Joseph`s for many years to come! "Mol an óige & tiocfaidh siad"

Ann Marrie Mason, Teacher, St Josephs Primary School, Templemore

"As the Minister responsible for marine environmental policy in Ireland, Minister of State Damien English is delighted to fund and support An Taisce's world-leading Green-Schools Global Citizenship Marine Environment Module. In acknowledgement of the vital role that education and raising environmental awareness have in influencing behavioural change across society, the Government have included this Module as a key measure in Ireland's official Programme of Measures set out under the Marine Strategy Framework Directive.

Ireland is very proud to have one of the first, if not the first, dedicated Eco-Schools modules in the world dealing specifically with the marine environment. At the UN's "Our Oceans Conference" hosted by the European Union in Malta in October 2017, Ireland formally committed to continuing to fund and develop this programme under the UN Sustainable Development Goal 14: Life below Water."

Minister of State Damien English, Minister for Housing and Urban Development in the Department of Housing Planning and Local Government



#### The Green-Schools Woodland

The Green-Schools Woodland is in Cork, where over 3,000 trees have been planted to signify all the schools in Ireland who have been awarded a Green Flag. A group of students visited the woodland in 2015 for a day of Biodiversity themed workshops.

A student holds a "Thanks Pat" sign to acknowledge former Education Unit Director, Patricia Oliver, on her retirement in 2015.

#### **NATIONAL OPERATOR - REFLECTIONS**

I have met some truly inspiring students and teachers throughout my time as National Operator. The highlight for me is listening to teachers tell me what a positive and powerful impact the programme has had on a young person in their lives. The collective impact of the programme worldwide is something so unique and precious. We have been incredibly lucky in Ireland to have such strong support both at the local and national government level and with our other sponsors.

I think the biggest challenge for schools and teachers is to find the time to fit the programme into their school lives, which are incredibly busy. I have the utmost respect for all the Green-Schools coordinators who make the programme the success that it is.

# Northern Ireland

Keep Northern Ireland Beautiful National Operator: Ruth Van Ry

Country size: 14,130 km<sup>2</sup> Population: 1.8 million Longest river: River Bann 140 km Highest mountain: Slieve Donard 850 m Joined Eco-Schools in 1994 Number of Eco-Schools: 1,192

## National plant: Flax

The flax flower appears as the emblem of the Northern Ireland Assembly at Stormont, the badge of the Supreme Court of the United Kingdom and some one pound coins minted between 1986 and 1991.





## **STATUS OF ENVIRONMENTAL EDUCATION**

#### **National Legislation**

The curriculum in Northern Ireland is managed by the Council for Curriculum, Examinations and Assessment (CCEA). In 2007, they formed a new curriculum for the different Key Stages (KS) - Foundation (4-6 yrs) through to KS4 (14-16yrs). Though Environmental Education (EE) is currently not included in any national legislation, Eco-Schools is specifically referenced in the Northern Ireland Curriculum Non-Statutory Guidance for Teachers, and Eco-Schools Northern Ireland (NI) tries to encourage schools to teach EE in all subjects.

#### **K-12 Education**

EE is not mandated in K-12 nor in the new 2007 curriculum. However, this is an overarching objective. It is taught in a variety of subjects; in Primary School KS1-2 it features largely in the World Around Us subject and in KS3-4 it is mostly taught in the science subjects and somewhat in Learning for Life and Work.

#### **Professional Development**

During teacher training, teachers look at the Curriculum Objectives and how to deliver them. One of these objectives is "to develop the young person as a contributor to the economy and environment". EE in Continuing Professional Development (CPD) is entirely at the individual school's discretion - some schools encourage Eco-Coordinators to train in programmes such as Forest Schools. Eco-Schools Northern Ireland provides Cluster Group meetings to train and inform teachers involved in the programme, although this is not formalised CPD, i.e. no points are awarded.

## THE STORY OF ECO-SCHOOLS

Eco-Schools launched in the UK in 1994 and the Northern Ireland programme at that time was administered by Keep Britain Tidy. The same year the first Green Flag in the world was awarded. The receivers of this very first flag were Downpatrick Nursery School in Northern Ireland.

TIDY Northern Ireland was formed as an independent charity in 2000 and in 2008, with the arrival of a new CEO, Dr Ian Humphreys, they became the National Operator of the Eco-Schools programme in Northern Ireland.



## **KEY MILESTONES**

In 1994, the first Green Flag (anywhere in the world) was awarded to Downpatrick Nursery School, Northern Ireland.

In 2014, TIDY Northern Ireland rebranded itself as Keep Northern Ireland Beautiful, and by 2015 every school in Northern Ireland was registered as an Eco-School. In the same year, Eco-Schools NI celebrated its 20th Anniversary with an event attended by 125 schools, 300 teachers and 1,500 pupils. Bríd Conneely, former International Eco-Schools Director, and Daniel Schaffer, FEE CEO, also attended along with the Minister of the Environment, Mark H. Durkan. Later in 2015, Eco-Schools NI hosted the NOM in Belfast. In 2017, the 1,000th Green Flag was awarded, while in 2019 the Marine topic was launched to mark the 25th anniversary. Currently, the international Green Flag standard is held by 28% of all schools in Northern Ireland.

Keep Northern Ireland Beautiful received the North American Association for Environmental Education (NAAEE) Outstanding Contribution to Environmental Education in 2018, the European Week of Waste Reduction NGO/Association Category 2012 and 2013, and the North American Association for Environmental Education (NAAEE) EE Under 30: Game Changers for the Planet 2007 award to Nicola Fitzsimons, a member of the Keep Northern Ireland Beautiful team.



"I feel it is a great programme, not only for helping to save our environment but also for developing children's thinking skills and personal capabilities. Our Eco-Committee works very hard throughout the year. Our pupils thrive when given extra responsibility. Each stage of the process has been a learning opportunity for our pupils. The whole school community are now more aware of how we can be more ecofriendly. The Eco-Schools programme gives the children an opportunity to communicate with our local council and engage in lots of cross-curricular activities. I would highly recommend this programme to any school." **Principal St John's Primary School, Armagh, Green Flag application** 2018-19

"By capturing the hearts and minds of pupils and teachers, Eco-Schools is making a real, tangible and positive impact on our environment in Northern Ireland. The Department of Agriculture, Environment & Rural Affairs is a long term and ongoing supporter of Eco-Schools in Northern Ireland, and recognising the programme makes an important contribution to this goal. The programme is engaging our young people, who will be the next generation of citizens, business leaders and politicians, in developing eco-friendly behaviours that help our environment and our economy. It is encouraging to see the programme going from strength to strength in this its 25th anniversary year. We would encourage every school in Northern Ireland to get involved and engrain the ethos of Eco-Schools into their everyday actions."

Dave Foster. Department of Agriculture, Environment & Rural Affairs

"Cookstown Textile Recyclers are delighted to support the Eco-Schools Waste topic. Our Cash for Clobber scheme teaches pupils the benefits of recycling and raises valuable funds for schools. Investing back into our schools and community is an important link in our recycling chain and Eco-Schools plays an important part in that." Billy Conway, Cookstown Textile Recyclers

"Eco-Schools was the main reason I applied for the job as CEO of Keep Northern Ireland Beautiful. Eco-Schools continues to provide a vibrant richness to experiential education; something that has been gradually eroded from the curriculum with its sole focus on cramming content for exams. I think this is the reason for its success - it is filling a real and fundamental need for both young people and teachers.

One of the real highlights for me was being able to host the NOM in 2015 when over 50 nations visited Northern Ireland, saw some of our Green Flag schools and met some of the inspirational students and their teachers. Meeting operators remains a key strength of the programme, enabling the sharing of good practice, exchange and testing (in a supportive environment) of embryonic ideas and building a confidence that all those small actions really are part of something much bigger.

Getting every school involved in 2015 took a lot of work and this feat remains a huge success. Reaching this platform readied us for the next and bigger challenge of making the most of the opportunity that Eco-Schools provides. For all the brilliant work I see, for all the budding young leaders I meet and for all the amazing committed teachers going the extra mile that I have the honour of knowing, Eco-Schools is still only achieving 10% of its true potential. And its potential is this: it can provide the framework for developing collaborative, critically-thinking, creative young people who can lead society in transforming the way we value and impact on our environment. Young Eco-Schools 'graduates' will know how to communicate effectively and will take positive, practical action as second nature.

Ultimately, Eco-Schools gives me hope that we can yet turn the curve on the big-ticket environmental crises facing humanity." **Dr lan Humphreys, Keep Northern Ireland Beautiful Chief Executive** 



## **NATIONAL OPERATOR - REFLECTIONS**

I began working for Eco-Schools in 2012 and became National Operator in 2016 - that in itself was a huge achievement for me and made me very proud. I remember the Eco-Schools NOM coming to Belfast in 2015 and the excitement and buzz around that. Our schools were delighted to receive international visitors and we were so proud to be able to showcase them. Watching the programme grow year on year is really rewarding and inspiring. The amazing teachers and pupils spur me on to make the programme as good as I can and as helpful to them as possible every year.

A big challenge which we overcame in 2015 was to get every school in the country to register in the programme. This was a landmark moment for us but really only the beginning of the process of keeping schools engaged and participating in the programme and awards system. The programme is voluntary and schools continued interest in it is remarkable when they are facing budget cuts and diminishing resources. It is a testament to the value schools have for the programme and the benefits it gives to the pupils and the planet that it continues to grow each year despite the challenges.

> Keep Northern Ireland Beautiful 2 Paulett Avenue BT5 4HD, Belfast

Scotland X

eeo

Keep Scotland Beautiful (KSB) National Operator: Daniel Barrie

Aultmore Park Primary School, 2014

Country size: 78,789 km<sup>2</sup> Population: 5.4 million Longest river: River Tay 188 km Highest mountain: Ben Nevis 1,344 m National plant: Thistle Joined Eco-Schools in 1994 Number of Eco-Schools: 3,741





## National animal: Unicorn

Eco - Schools

According to Celtic mythology, the Unicorn of Scotland symbolised innocence and purity, healing powers, joy and even life itself. It was also seen as a symbol of masculinity and power.



## STATUS OF ENVIRONMENTAL EDUCATION

#### **National Legislation**

Learning for Sustainability (LfS) is a cross-curricular approach which enables learners, educators, schools and their wider communities to build a socially-just, sustainable and equitable society. An effective whole-school and community approach to LfS weaves together global citizenship, sustainable development education and outdoor learning to create coherent, rewarding and transformative learning experiences.

LfS is an important component of Curriculum for Excellence, an entitlement for learners and a core part of teachers' professional standards. It supports the development of knowledge, skills and the values at the heart of the curriculum's four capacities and provides a mechanism for promoting and working towards the UN's Sustainable Development Goals (SDG).

LfS has always been part of Curriculum for Excellence and there are fantastic examples of how the exploration of social, environmental and economic sustainability continues to deliver outcomes across the curriculum. Details on how LfS can be promoted and supported are available on Education Scotland's National Improvement Hub.

#### **K-12 Education**

LfS has been developed and informed by the work of both the 'One Planet Schools Working Group' and the 'Learning for Sustainability National Implementation Group'. This work culminated in the 2016 publication of the 'Vision 2030+' report which recommended that:

- All learners should have an entitlement to LfS
- In line with the GTCS Professional Standards, every practitioner, school and education leader should demonstrate Learning for Sustainability in their practice
- Every school should have a 'whole-school' approach to LfS that is robust, demonstrable, evaluated and supported by leadership at all levels
- All school buildings, grounds and policies should support LfS
- A strategic national approach to support for LfS should be established.

A new Learning for Sustainability Action Plan (2019) sets out how the Scottish Government will implement the recommendations of the Vision 2030+ report over the next 3-5 years. It has been informed by consultation with a number of relevant stakeholders and delivery partners. The Action Plan is a living document and will be amended as appropriate as further opportunities to promote and deliver LfS become apparent.

#### **Professional Development**

Taken as a whole, the action plan aims to act as a catalyst to support the increased prevalence of LfS. However, lasting progress will only be achieved by the efforts of practitioners in our early-year settings, schools and colleges. Practitioners in those establishments and colleagues at local authorities and other relevant organisations are therefore encouraged to renew their commitment to LfS.

### THE STORY OF ECO-SCHOOLS

Twenty-five years ago in 1994, Keep Scotland Beautiful (KSB) was formally in association with Keep Britain Tidy. When Keep Britain Tidy joined FEE and introduced Eco-Schools to England, the National Director of KSB, the late Douglas Wright, was enthusiastic about introducing the programme to Scotland and secured the support of the government in Scotland, local authorities and the independent sector. After Douglas retired, the programme was rapidly and enthusiastically developed by John P Summers, the new National Director. In 1995, Lunnasting Primary School, Shetland, was awarded Scotland's first Green Flag.

A consequence of the devolution for Scotland in 1999 was that the formal association with Keep Britain Tidy was dissolved, although the two organisations continue to co-operate on a cordial basis. All stakeholders in Scotland were particularly keen to maintain and develop the Eco-Schools Scotland programme and, on behalf of the Board of Charity Trustees of KSB, John P Summers applied to FEE for KSB to be the member of FEE for Scotland. FEE very kindly accepted the application and KSB continues to be an enthusiastic and committed member of FEE.

## **KEY MILESTONES**

In June 2004, the 100th Green Flag in Scotland was awarded to Whitelees Primary School, North Lanarkshire. In September 2007, the 500th awarded to Rhu Primary School, Argyll & Bute. In May 2010, the 1000th awarded to St Joseph's Primary School, East Dunbartonshire. In June 2012, the 1500th awarded to Mearns Castle High School, East Renfrewshire and in March 2017, the 2000th Green Flag was awarded to St John's RC Academy, Perth & Kinross. Scotland was the first member nation to have awarded 2000 Green Flags. And by that, 98.5% of Scottish schools had registered with the Eco-Schools programme. In May 2014, an independent review by Learning for Sustainability Scotland and Edinburgh University concluded that the Eco-Schools programme has been particularly successful in Scotland. It has a very high take up with over 98% of local authority schools registered, and the Green Flag is a respected and sought-after award. A key strength is its breadth of coverage of Sustainable Development Education combined with its whole-school and learner-centred approach. It can link well to Curriculum for Excellence and its international dimension is valued.



"The Eco-Schools programme has made the pupils more aware of their actions and how they affect the environment and their wider community. It has made them aware of how important their actions are on a wider scale."

**Eco-Coordinator, Lunnasting Primary School, Shetland** 

"I am delighted to present St John's Academy with its Green Flag and congratulate all of the pupils and school staff on becoming our 2000th Eco-School, making Scotland an international leader through all their hard work. It is especially impressive when you learn about how the Eco Group built up its numbers, encouraging children from nursery through to secondary, as well as school staff, to think more about their impact on the environment and how they could make positive changes within their school.

Eco-Schools is a fantastic initiative that lies really at the heart of demonstrating the elements of our curriculum which are so important to ensure young people are equipped for the modern world." John Swinney MSP, Deputy First Minister and Cabinet Secretary for Education and Skills

"For more than two decades Keep Scotland Beautiful has committed to supporting our children to develop an understanding of the global and local environmental issues they face now and in the future. More than a million young people have benefited from environmental learning through Eco-Schools Scotland."

Bruce Robertson, Keep Scotland Beautiful Charity Trustee

## **NATIONAL OPERATOR - REFLECTIONS**

In Scotland, it can be a challenge to respond to changing priorities at a local and national level, but the programme provides a fantastic opportunity for our students to target the entitlement to Learning for Sustainability which is embedded within our Curriculum for Excellence framework. As a result, Eco-Schools Scotland provides a lens for pupils to explore local, national and global issues and supports the development of a range of interdisciplinary skills through enquiry framed by these topics.

In Scotland, we were the first Eco-Schools National Operator to engage with the United Nations Sustainable Development Goals and to bring them into the assessment criteria for the Eco-Schools Scotland Green Flag Award. For pupils, establishing the connection their work has to global issues and innovations supports the development of a rights-based approach within schools. We are lucky in Scotland that there are no financial barriers to participation and the flexibility of the Eco-Schools framework supports education establishments for pupils from all ages and stages to adapt and engage with the programme in their context, be that rural or urban, small or large, early years, primary, secondary or an additional support needs context.

Each individual establishment's journey towards attaining the Green Flag is tailored to their own context and provides a great opportunity for pupils to engage with the highs and lows of project planning and management. The passion this opportunity inspires in pupils also develops life skills, resilience and an insight into future sustainability careers.

## Wales

Keep Wales Tidy National Operator: Julie Gile

Country size: 20,735 km<sup>2</sup> Population: 3.1 million Highest mountain: Snowdon 1,085 m National Flower: The daffodil Joined Eco-Schools in 1994 Number of Eco-Schools: 1,463



Food growing project at Mount Street Junior School, Powys

### Longest river: The River Towy 120 km

The River Towy has a total length of 120 km and is the longest river flowing entirely within Wales.

The river is well known for its sea trout and other fish species, it provides a home for many water and wetland birds, and also supports otters and other more common mammals. Grey seals are found in its lower reaches.



## STATUS OF ENVIRONMENTAL EDUCATION

#### **National Legislation**

The Well Being of Future Generations Act 2015 requires public bodies in Wales to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change.

The Act is unique to Wales and has attracted interest from countries across the world as it offers a huge opportunity to make a longlasting, positive change to current and future generations. The Welsh Government launched Education for Sustainable Development and Global Citizenship (ESDGC) – A Strategy for Action in September 2006 to highlight actions driving the ESDGC agenda forward and to ensure the principles of ESDGC are built into every aspect of dayto-day life. It also launched the ESD & GC Common Understanding documents in July 2008 to support the delivery of ESDGC in schools.

#### **K-12 Education**

More recently in Wales the new school curriculum is being developed and will be compulsory in 2022, although many schools are already introducing elements of the curriculum. The concept is a much more experiential and pupils-led way of learning that will be delivered through themes. This gives huge scope for a more embedded approach to Environmental Education (EE), especially with the increase in media coverage of environmental issues, which is inspiring so many young people. By the end of their schooling, all pupils will have worked towards four core goals in their education - most importantly for EE is the goal: "All our children and young people will be ethical informed citizens who:

- find, evaluate and use evidence in forming views
- engage with contemporary issues based upon their knowledge and values
- understand and exercise their human and democratic responsibilities and rights
- understand and consider the impact of their actions when making choices and acting
- are knowledgeable about their culture, community, society and the world, now and in the past
- respect the needs and rights of others, as a member of a diverse society
- show their commitment to the sustainability of the planet and are ready to be citizens of Wales and the world

#### **Professional Development**

The Welsh Baccalaureate, a qualification for 14 to 19 year-old students in Wales, offers opportunities for students to be involved in ESDGC topic areas to varying degrees.

A variety of EE courses are offered in a number of Welsh Further Education Colleges and Environmental Education degrees are accessible in Welsh Universities. Environmental Science degrees are also available.

A few organisations, like Keep Wales Tidy, offer environmental training for teachers. This however is an area we would like to see expand in Wales as a real opportunity for professional development.

### THE STORY OF ECO-SCHOOLS

Wales has been involved in Eco-Schools from the very early years, initially as part of Keep Britain Tidy and with FEE support from 1994. In 1994, one of our community group volunteers, Gerry Taylor, an ex-teacher with a huge amount of environmental knowledge, was employed as Eco-Schools Manager. Awareness of the programme was raised and schools started to show great interest and registered to take part. In 1995, Wales' first Green Flag was awarded.

As the programme grew and school numbers increased, more staff were needed to support them. In 2000, Keep Wales Tidy established itself as a separate charity and the Eco-Schools programme received support from the Welsh Government which enabled it to expand and develop.

The Eco-Schools Wales team now supports schools in a variety of ways including school visits and workshops, annual national Eco-Committee events, new coordinator training and, more recently, Eco-Schools and Curriculum Linked training. Resources have been produced to give guidance to schools about various topic areas and days of action. Information from other projects or initiatives that assist Eco-Schools are passed on through a regular newsletter.

Eco-Schools Wales takes pride in the development and history of the programme in our country. To ensure continuity of this support, funding the programme is a challenge that needs regular investigation and development.

Eco-Schools Wales has been partly funded by the Welsh Government for many years, which has been invaluable in maintaining the programme. However, Keep Wales Tidy continues to investigate other funding sources to ensure long-term sustainability.



Maintaining and supporting the large percentage of schools in Wales, as well as encouraging them to progress through the programme, is a challenge in itself. Awareness of national school priorities, producing resources and developing ongoing training is something we do regularly, where over 90% of schools are now part of the Eco-Schools programme. More than half of these schools are Green Flag status holders with many of these being long-term (four flag plus) Platinum status holders.

### **KEY MILESTONES**

The Welsh Government recognises the value of the Eco-Schools programme, regularly mentioning the work we do. We work closely with Welsh Government officials to deliver school activities closely linked to government priorities. Over 90% of the schools in Wales are on the Eco-Schools programme. 53% of Welsh schools have achieved the international Green Flag status. 52% of Welsh Green flag schools are at Platinum level (long-term commitment - four flags plus level). Wales runs the National Eco Committee (NEC) event annually, inviting Platinum level schools. NEC events often link to Welsh government priorities. Senior Eco-Committee events are held annually, inviting senior school pupils, the last event being the Big Schools Day at the Volvo Ocean Race. In September 2013 the Keep Wales Tidy ambassador Michael Sheen visited Cwmnedd Primary school.

## **NATIONAL OPERATOR - REFLECTIONS**

As National Operator I am always truly amazed and so proud of the young people taking part in the Eco-Schools programme here in Wales and around the world. At every school I visit I learn something new. I am constantly inspired by the enthusiasm and commitment shown, the growing strength of pupil voice and the changes being achieved by schools on the programme.

In Wales, one of the purposes of the new school curriculum states "All of our children and young people will be ethical informed citizens who are ready to be citizens of Wales and the World" - this gives me great hope that Eco-Schools is here to stay!

### National animal: The Welsh Dragon or yr Ddraig Goch

The Welsh Dragon is used to identify all sorts of things Welsh. However, the flag has a fascinating history and has long been a symbol of Welsh culture and identity. The leek vegetable was the original symbol of Wales. Legend has it that it originated from a great battle against the Saxons. St. David (some sources say the 7th King of Gwynedd, Cadwaladr) advised the Welsh to wear leeks in their hats to show which side they were on. It must have worked well, as the battle was won.



"The school has been involved in many projects over the years, including raising money for projects in Southeast Asia, raising awareness of recycling and working with Chester Zoo and the RSPB. Over the years our Conservation area has developed, grown and evolved. It has become our Forest School area now and is used daily. We have also worked with North Wales Wildlife Trust to plant a new Orchard in our school grounds. Eco-Schools has become so embedded in our school and the curriculum it is sometimes difficult to draw out the specifics of what we do and, in this age of global pollution and youth awareness, we hope our pupils have been better informed and more responsible citizens because of the Eco-Schools ethos which runs through our school"

Mrs Mel Williams, Assistant Head Northop Hall CP School Flintshire

"In my role as Keep Wales Tidy ambassador, I've had the opportunity to experience first-hand the fantastic work carried out by Eco-Schools students. It's inspiring to see young people working together, feeling empowered and driving change in their schools, communities and on the global stage. Eco-Schools is a vital programme that I hope will continue to go from strength to strength over the next 25 years."

Michael Sheen, Actor and Keep Wales Tidy Ambassador

"Since 1994, the Eco-Schools programme in Wales has grown in size and significance - 90% of schools are now registered on the programme, with a team of nine officers helping young people to take positive action. The programme is valued at a national level by the Welsh Government, whose ongoing support enables us to work with schools at every step of their eco journey. It has allowed us to carry out a diverse range of practical projects with pupils; from planting for pollinators and reducing flood risk through improving drainage, to creating food growing areas and tackling water pollution. We've also been able to bring Eco-Schools together at large-scale events, such as the 2019 Volvo Ocean Race, giving ministers the opportunity to hear directly from young people about the Wales they want. Thanks to the enthusiasm and commitment of Eco-Committees across the country, environmental awareness has become an intrinsic part of the life and culture of our schools. It is so inspiring to see young people rising to the challenge and working together to achieve a sustainable future."

#### Lesley Jones, Keep Wales Tidy Chief Executive

#### Keep Wales Tidy

Keep Wales Tidy, 33-35 Cathedral Road, CF119HB Cardiff, Wales





#### PRIME MINISTER . PREMIER MINISTRE

#### Statement from the Prime Minister of Canada

It is with great pleasure that I congratulate the Cousteau School on becoming Canada's first certified Eco-School.

The Government of Canada is committed to promoting clean economic growth, reducing greenhouse gas emissions, and positioning Canada to take advantage of the opportunities presented by a low-carbon economy.

We are unwavering in our commitment to fight climate change and support clean economic growth. Canadians, and people from around the world, need to take decisive and collective action to tackle the many harsh realities of our

changing climate. I would like to applaud the Cousteau School for taking action and becoming a trailblazer for all academic institutions across Canada.

As we gather here today to celebrate Cousteau School's achievement, let us reflect on the incredible work that the school's staff and students have done over the years. We must remember their tireless efforts and let them inspire us in the years to come.

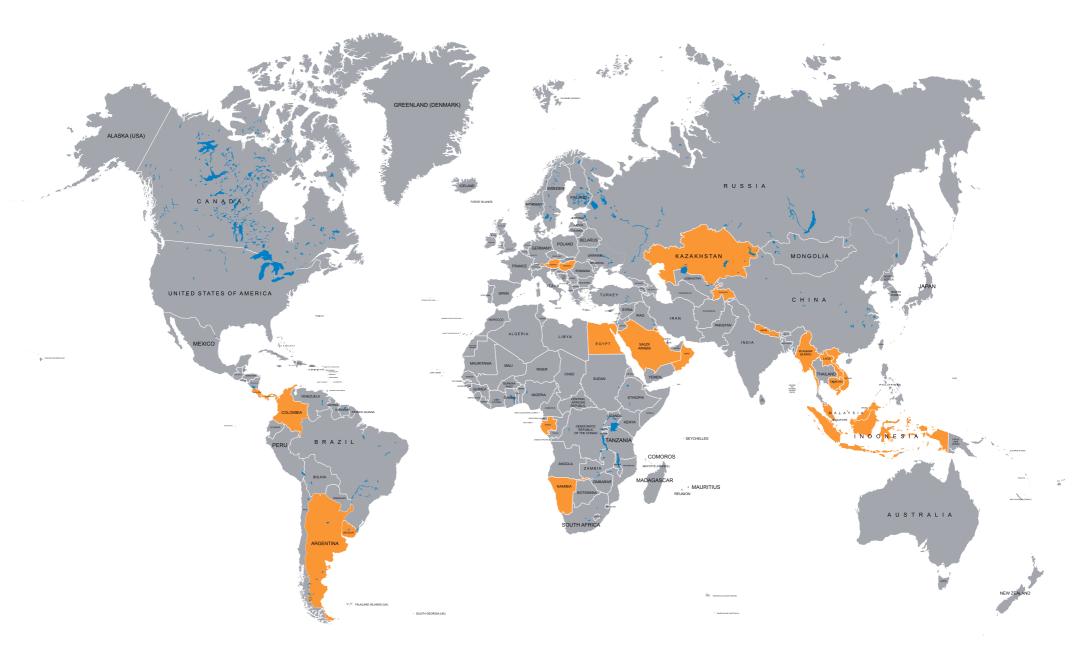
Once again, congratulations on this significant achievement. Please accept my best wishes for a memorable ceremony!

Ottawa 2019



## **International Schools**

Argentina, Austria, Bahrain, Brunei, Cambodia, Colombia, Costa Rica, Egypt, Gabon, Georgia, Hungary, Indonesia, Kazakhstan, Kuwait, Laos, Myanmar, Namibia, Nepal, Oman, Panama, Saudi Arabia, Taiwan, Tajikistan, Uruguay & Vietnam



## Eco-Schools for International Schools (#)

International Coordinator: Nicole Andreou

Registered International Schools in Argentina, Austria, Bahrain, Brunei, Cambodia, Colombia, Costa Rica, Egypt, Gabon, Georgia, Hungary, Indonesia, Kazakhstan, Kuwait, Laos, Myanmar, Namibia, Nepal, Oman, Panama, Saudi Arabia, Taiwan, Tajikistan, Uruguay & Vietnam.

> Eco-Schools for International Schools Scandiagade 13 2450 Copenhagen, Denmark

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## THE STORY OF INTERNATIONAL ECO-SCHOOLS

The Eco-Schools programme is designed to suit all schools whether they are a nursery, primary school, secondary school, further education college, university or a school with special status or special education. There is a difference in the Eco-Schools structure when it comes to International Schools. This adaption, dated back in 2015, makes it possible for International Schools with an internationally accredited curriculum in countries without a National Operator to join the Eco-Schools programme and be managed directly by Eco-Schools Global.

The project started with a handover of British International Schools in countries with no National Operator from Eco-Schools England to Eco-Schools Global. To date, there are 44 registered Eco-Schools in 22 countries, out of which 8 have achieved the Green Flag standard. It is important to note that when/if a country with an International School/s acquires a member organisation, those schools will then be taken over by the new member organisation in consultation with Eco-Schools Global. Performance indicators, as per the 2019 review, suggest that students are the driving force of the Eco Committee, baselines and endlines are established in the Environmental Review, a curriculum audit shall be carried out, a SMART Action Plan shall be reflected in a school's activity calendar, findings from Monitoring and Evaluation help inform activities, the whole school community is involved in the programme, and finally an Eco Code reflects the programme and the school's ethos.

Assessment is carried out through online reporting and an onsite assessment as part of the Green Flag application. Certified Green Flag Assessors within a country or in a nearby location conduct the assessment.



## **KEY MILESTONES**

In 2017 and 2018 Green Flag Assessor training sessions were held to certify Eco-Schools Coordinators and other interested volunteers, while in 2019, Eco-Schools Global reviewed the Green Flag performance indicators and has developed a self-assessment rubric to be launched in 2020.

Five countries, Canada, Chile, Qatar, South Korea and Thailand, have had International Schools as part of Eco-Schools before a member organisation joined FEE. This resulted in a smoother kickstart of the programme in the countries, as participating schools were already familiar with the programme and processes.

#### **NATIONAL OPERATOR - REFLECTIONS**

In the four years of implementation, this project has developed drastically and exponentially, with a high-level engagement coming from International Schools, their student populations, teaching and management staff. As sustainability is a core element of the various international curriculum accreditation systems, such as International Baccalaureate, Council of International Schools, etc., working with the Eco-Schools programme has become a natural choice for many International Schools. I admire the enthusiasm, but most importantly the deep commitment I have witnessed - a commitment to a better physical and social environment, to sustainability, and a commitment to each other.





Eco-Schools has provided us with a framework that is also enriched through the United Nations Sustainable Development Goals (SDGs). We believe that children around the world should all be able to start their journey for sustainability education through a sound and relevant programme. It provides a challenging and stimulating foundation, which invites students to initiate and be involved in active projects that define the journey of each school. Students feel proud of belonging to a community of people who care about and seek to improve the current conditions of our planet.

Peter Murphy, Principal, Vienna International School, Austria

Eco-Schools has had a particularly beneficial impact on student learning. In each area of learning we incorporate a sustainability element to ensure the students understand the impact of humans on the environment. For example, in a Y3 topic, students were tasked to look at the impact of meat production on the environment, and also the impact of travel and carbon footprint. Within senior classes, students have not only developed greater awareness of the environment locally, but are monitoring air quality, and looking at measures to improve this.

Luke Chaeter, Head of Campus, Dulwich College Yangon, Pun Hlaing campus, Myanmar



## Foundation for Environmental Education (FEE)

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