



# Climate change is real. What governments do matters.

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DONATE

## Global Spotlight Report #23

### Theme: Climate Change Education

#### Introduction

In many countries, the effort to combat climate change is hampered by the lack of effective climate education programs. For Global Spotlight Report #23, we asked our Country Managers in leading greenhouse gas emitting countries to describe and comment on the status of their country's climate education programs.

Sadly, many countries do not prioritize climate education at either the primary or secondary school levels. At best, it is taught as a component of environmental or sustainable development education programs. Occasionally, it is found as part of science education courses. But rarely do you encounter a program that addresses the role that humans play in global warming and the steps that we can take to address climate change in our own lifestyles and as citizen advocates, or programs that emphasize how to be resilient and respond to extreme weather events and other climate related emergencies.

There are exceptions to this trend; for example, the Eco-Schools movement in several countries (Indonesia, Thailand, Turkey) and the climate education programs developed in certain cities and regions such as Hamburg, Germany, and Scotland. At a country level, Canada and Spain have gone the farthest in implementing climate change programs at all levels.

Our Country Manager for Indonesia describes a recent survey that points out the low level of knowledge and understanding about climate change among Indonesians and correlates it with the high percentage of Indonesian citizens who are categorized as climate change deniers. This same correlation between citizen climate change knowledge and engagement is true for quite a number of countries.

The table below highlights climate education materials in leading greenhouse gas emitting countries as recommended by our Country Managers. Climate education program descriptions for each country follow.

Ron Israel  
 Director  
 Climate Scorecard  
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Each country report is given an activity rating based on our 4 point rating system:

- \*\*\*\* Moving Ahead
- \*\*\* Right Direction (needs more work)
- \*\* Standing Still
- \* Falling Behind

Country	Recommended Materials and Programs
Australia	Cool Australia <a href="https://www.coolaustralia.org/">https://www.coolaustralia.org/</a>
Brazil	Examples on Ministry of Education Portal <a href="http://portal.mec.gov.br/component/tags/tag/35749">http://portal.mec.gov.br/component/tags/tag/35749</a>
Canada	Green Learning <a href="http://www.greenlearning.ca">www.greenlearning.ca</a>
China	STEM Cloud Materials on Air and CO2 <a href="http://www.stemcloud.cn/cloudclassroom/courses">http://www.stemcloud.cn/cloudclassroom/courses</a>
European Union	Kids4Future <a href="https://www.buildup.eu/en/news/kids4future-rainmakers-concept">https://www.buildup.eu/en/news/kids4future-rainmakers-concept</a>
France	Climate Collage <a href="http://climatecollage.org/">http://climatecollage.org/</a>
Germany	Hamburg Climate School Programme <a href="https://li.hamburg.de/klimaschule/">https://li.hamburg.de/klimaschule/</a>
India	Center for Environmental Education <a href="http://www.ceeindia.org">www.ceeindia.org</a>
Indonesia	INOVASI <a href="https://www.devex.com/news/lessons-from-indonesia-on-quality-education-in-the-wake-of-disaster-94473">https://www.devex.com/news/lessons-from-indonesia-on-quality-education-in-the-wake-of-disaster-94473</a>

Mexico	Education and Training Center for Sustainable Development
Nigeria	The Climate School <a href="https://savingourplanet.net">https://savingourplanet.net</a>
Russia	Energy and the Environment <a href="http://rusecounion.ru/ru/node/3017">http://rusecounion.ru/ru/node/3017</a>
Saudi Arabia	Bei'ati/ al-aalam al-Akhdar fi al-balad al-Akhdar" [My Environment/ the Green Flag in the Green Country]
South Africa	Keep It Cool <a href="https://www.vvob.org/en/programmes/south-africa-keep-it-cool-climate-change-education">https://www.vvob.org/en/programmes/south-africa-keep-it-cool-climate-change-education</a>
South Korea	International Climate and Environment Center Programs <a href="https://www.climateaction-korea.eu/actions/education-program-on-climate-change-tailored-to-regional-dynamics/">https://www.climateaction-korea.eu/actions/education-program-on-climate-change-tailored-to-regional-dynamics/</a>
Spain	Mandates for climate change education at primary and secondary school levels
Thailand	Eco-Schools <a href="http://www.wwf.or.th/en/project_in_thailand/eco_schools_programme/">http://www.wwf.or.th/en/project_in_thailand/eco_schools_programme/</a>
Turkey	Eco-Schools <a href="https://www.ecoschools.global/national-offices/">https://www.ecoschools.global/national-offices/</a>
United Kingdom	Outstanding programs in Scotland and North of Tyne Region
United States	Mandates in 40 states on teaching of climate science

# Australia

## Climate Education is Lacking in Australian Schools

Although there is an Article of the Paris Agreement entirely devoted to climate education, Australia has shown no interest in developing a coordinated, national education program. At the national level climate change appears in the curriculum for high school students only, and is limited to the basics: carbon emissions, their effects on global systems and scientific consensus. Throughout the past six years conservative Coalition governments have shown no interest in making climate change a key education issue, and have been vocal about keeping “activism” and “politics” out of schools.

Instead, climate education is left to a diverse coalition ranging from state governments to environmental NGOs. Cool Australia, Future Earth, Climate Watch & Scootle are just a handful of the groups providing top-notch resources for teachers and students: you can explore their programs below. The makers of the popular climate solutions film *2040* have created a special, student-friendly version of their feature film and offer a range of educational materials for teachers. Most state governments in Australia also have online resource libraries dedicated to climate change. Sustainability is a big focus of education departments, with school programs on waste management, energy use and horticulture very popular across the country. The 2019 school strikes were immensely popular with students and generally well received by schools and teachers, who made allowances for students to attend rallies during school hours, and helped organise student groups to travel safely to and from events.

### Activity Rating: \* Falling Behind

A wealth of easily accessible materials & ideas for climate education can't hide the fact that climate change exists only at the most basic level in the Australian curriculum. The highly politicized nature of the subject means that any discussion about giving climate change a more prominent role in schools is impossible. While the public reaction to the school strike was overwhelmingly positive, conservative MPs and media outlets went on the attack, denouncing the “radicalization” of students and arguing children should focus on basic learning. And, while federal politicians have no power to stop climate awareness being taught in schools, they have succeeded in creating an environment where climate change is controversial enough that most schools will simply shy away from causing a stir. Indeed, individual students who led the strikes & schools that were seen to be overly encouraging their students to attend were targeted by conservative commentators and newspapers. Australian students and teachers desperately want to become more engaged and empower the younger generation to combat the climate crisis, but sadly this must be driven by individuals on a case-by-case basis.

### Action Alert Message:

Dear Mr. Tehan,

*You've spoken a lot in 2019 about freedom of speech and the need for honest, constructive discussion on school campuses around the country. As half our country burns in the most serious early-summer fire emergency ever seen and climate impacts are clearly visible, would now not be the perfect time to promote student engagement in climate action and empower these children with the knowledge (and skills) to combat these crises? I'm sure you'd like "both sides" of climate change to be taught to schoolchildren, but let's be frank: when these kids are having their homes burnt down in December, when their towns are running out of water, and when they see so many of their peers marching in the streets to demand more climate action, do you really think your version of climate education is going to have any impact? Any responsible parent or teacher would encourage these students' participation in civil society and make them a part of the conversation around climate solutions.*

*Encouragement needs to come from the top. Federal funding would be great, but is not crucial. There an absolute wealth of resources and special climate education programs running around the country and organizations are out there in schools helping students. Climate change exists only at the most basic level in the Australian curriculum, but it is time to update that stance and teach climate damage, future forecasts and the role of fossil fuel (and other) industries driving carbon emissions. Empower the kids and get out of their way - it's an old teacher's adage but it rings especially true here. We're not asking you to endorse particular climate solutions or take sides: we're simply asking you to take simple steps to empower Australia's youth and fulfill your remit as Education Minister.*

**Contact**

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<https://www.facebook.com/DanTehanWannon/>

**Learn More:**

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<https://theconversation.com/ever-wondered-what-our-curriculum-teaches-kids-about-climate-change-the-answer-is-not-much-123272>

<https://theconversation.com/teaching-climate-change-to-the-young-13538>

<https://www.coolaustralia.org/>

<https://futureearth.org/>

<https://www.climatewatch.org.au/>

<https://www.scootle.edu.au/ec/p/home>

<https://whatsyour2040.com/schools-get-involved/>

<https://fuse.education.vic.gov.au/Search/Results?AssociatedPackageId=&QueryText=climate+c+hange&SearchScope=Teacher>

<https://climatechange.environment.nsw.gov.au/Education-resources>

<https://www.qld.gov.au/environment/climate/climate-change/resources>

<https://www.naturalresources.sa.gov.au/adelaidemtloftyranges/education/for-educators/climate-change>

<http://det.wa.edu.au/curriculumsupport/sustainableschools/detcms/navigation/climate-change/>

*This Post was submitted by Climate Scorecard Australia Country Manager Julian Atchison.*

## Brazil

### **Climate Change Addressed Superficially in Schools**

The Brazilian education system is divided into preschool, basic, intermediate and higher education, with basic education being compulsory for all children aged 6 to 14 and free at all public institutions. Universities provide higher education qualifications and promote extension activities to the community.

In Brazil, Climate Change Education and education for sustainable development both fall under the term “environmental education” (EE), with Brazil being recognized as an international leader in thought, policy and practice in the field. In the past years, a strong legal framework for Environmental Education has been established and there are a number of initiatives adopted by the Ministries of the Environment and Education relating to that. The Brazilian Constitution, National Policy on the Environment and National EE Policy provide the foundations for institutionalizing environmental education in Brazil.

Nevertheless, the impact of the programmes associated with environmental education is still rather limited, with climate change being addressed only superficially. Moreover schools-based environmental education policies do not reach all schools, since engagement is voluntary and dependent on state, municipal and schools’ political will. Initial and continuing in-service CCE training for teachers would be the way forward, but it does not seem to be likely in the recent

political scenario (with climate change deniability by important government actors and an overall rhetoric that does not make room for environmental agendas).

Putting that aside for the moment, in this text we will discuss the most important elements of existing policies related with CCE:

#### 1. THE EDUCATION DEVELOPMENT PLAN

The Education Development Plan for the 2011-2020 decade established ten directives for education that include promoting social and environmental sustainability. However, it does not explicitly mention EE, ESD or CCE among its objectives, actions and goals, which is very concerning.

#### 2. THE NATIONAL PLAN ON CLIMATE CHANGE

The National Plan on Climate Change (2008) on the other hand, talks about the Sustainable Schools Programme, which calls upon the Ministry of Education to increase the adaptive capacity and climate change resilience of schools. This includes introducing climate change into the curricula and learning materials. Nevertheless, the text falls short of expectations as regards the actual implementation of the policies. In the website of the Brazilian Ministry of Education (<http://portal.mec.gov.br/component/tags/tag/35749>), examples of government endorsed initiatives related with climate change that come as a direct product of the Sustainable Schools Programme can be found. It is very clear, though, how limited such actions are, with very few schools in Brazil having such initiatives implemented, and with very broad mentions of how to include climate change in the curricula.

#### 3. THE LET'S TAKE CARE OF BRAZIL/LET'S TAKE CARE OF THE PLANET CONFERENCES

At the school level, one interesting initiative that can be highlighted was the children and youth conferences *Let's take care of Brazil* and *Let's take care of the Planet* that involved millions of people debating CCE and sustainability in schools all over the country. This international project was initiated by the Brazilian Ministry of Education, in 2009, and culminated in the International Conference that took place in Brasilia, in June 2010, gathering over 400 youngsters of 47 different countries.

#### 4. CCE IN HIGHER EDUCATION

Several initiatives promote undergraduate and graduate programmers whose syllabi cover the need to lower carbon emissions, the protection of communities, etc. However, while acknowledged as important, green jobs and green skills is still not a focus area in Brazil, and very few degrees specialize in climate change adaptability.

#### 5. ON THE ROLE OF NGOS

In most countries, the government takes a pioneer role in promoting the so-called Climate Change Education. However, in Brazil, the model of action is less centralized and the state shares with many other social actors the leading role in this field

Many of the NGOs in Brazil have activities focused on inducing positive environmental behavior to mitigate climate change. For example, NGO's Amazon Environmental Research Institute (Ipam) and the Socio-Environmental Institute (ISA) are considered key in the dialog with populations living in the Amazon, by interpreting scientific knowledge to a local scale and demonstrating the impacts of climate change on the forest, while educating forest communities on the knowledge of the nature and the region.

Many things appear to threaten the work of those institutions in the current political scenario. During his campaign for presidency, Bolsonaro said NGOs were "useless". Not long after his appointment in January, the Environment Minister suspended all funding to NGOs days to "review" contracts and in May he said all the Amazon Fund projects presented irregularities. After the recent surge in deforestation and fires in the Amazon region, Bolsonaro also claimed that NGOs were to blame for the fires - without providing evidence - suggesting they started them in retaliation to their loss of funding and in a play to gather more money. It seems hard to believe, but such allegations lead to the Brazilian police raiding the headquarters of an award-winning Brazilian NGO that works with remote communities in the Amazon, and also the arrest of four volunteer firefighters, again accused of starting wildfires to raise international funding.

### Activity Rating: \* Falling Behind

Although in past Brazil has shown initiatives relating to climate change education, there were far from ideal and not enough. Very little has happened for climate change education in the past couple of years in Brazil for example. On that sense, there is a pressing need to promote more synergies between environmental education and science/technology. More importantly, the relevance of NGO's work with Climate Change education for different communities needs to be recognized. Undoubtedly, individual NGOs will never have the financial and logistical capacity to replace government action. However, without their contribution, environmental education in the country would have been practically inert in the last years. The government and the NGO's urgently need to start working together to make climate change education a priority, and to find more tangible means to include it on school's curriculum. Furthermore, the government should aim at encouraging young researches and professionals to see this field as a potential carrier path, and CCE training for teachers in the basic education is very much needed.

### Action Alert Message:

*Dear Mr. Weintraub,*

*Brazil is experiencing a serious and unprecedented environmental crisis, deeply related with climate change. As our minister of Education you should represent the interests of the*

*population that deserve to be educated on climate change and Brazil's role in it. You should be defending environmental education, and looking for means of creating synergies between the works of the NGOs and centralized government actions. Instead, you remain silent and complacent on this matter. You can revert the trend of climate deniability and contribute towards the much-needed inclusion of climate change on school's curriculum. Yet, you are not even addressing the matter and that is utterly disappointing.*

#### **Contact**

Abraham Weintraub

Mr. Abraham Weintraub, Minister of Education

Telephone: (61) 2022-7520 / 7540

Website to leave a message: [https://mec-cube.call.inf.br/auth-web/login?redirect\\_uri=http%3A%2F%2Ffaleconosco-mec-cube.call.inf.br%2Fauth%2Fcallback&requested\\_uri=http%3A%2F%2Ffaleconosco-mec-cube.call.inf.br%2Fbusca-avancada&token\\_aplicacao=e3lhqm5iVYbcOefxMMvpBw#/0](https://mec-cube.call.inf.br/auth-web/login?redirect_uri=http%3A%2F%2Ffaleconosco-mec-cube.call.inf.br%2Fauth%2Fcallback&requested_uri=http%3A%2F%2Ffaleconosco-mec-cube.call.inf.br%2Fbusca-avancada&token_aplicacao=e3lhqm5iVYbcOefxMMvpBw#/0)

<https://twitter.com/abrahamweint>

*This Post was submitted by Climate Scorecard Country Manager Luiza Martins Karpavicius.*

## Canada

### **Many Curricula Examine Human Causes of Climate Change**

Under the Canadian Constitution, education is regulated provincially. Climate change education happens at all grade levels in a variety of subject areas; frequently found in elementary lessons in science, social studies, languages and arts whereas in high schools more so in science, world studies, languages, social sciences, civic and career courses. The time given to it and way in which teachers present it varies across the nation.

a) Nearly all curricula examine human causes of climate change, including fossil fuel burning. Most ministries offer specialized Grades 11/12 courses in environmental science, sustainability, or resource development. Manitoba in particular has incorporated sustainability lessons into classes; Alberta has several courses such as environmental safety, forestry, water management, and environmental politics. British Columbia gives senior high school students optional specialized courses on sustainability, stewardship, restoration principles, and climate change. An example of learning goals in Saskatchewan is its Grade 10 Climate and Ecosystem Dynamics course outcomes: assess implications of human actions on the local and global climate and sustainability of ecosystems, investigate factors influencing Earth's climate system, include role of the natural greenhouse effect, examine biodiversity through analysis of interactions among

populations within communities, investigate role of feedback mechanisms in biogeochemical cycles and in maintaining stability in ecosystems.

b) Canada has several excellent independent climate resources for teachers, with storytelling and skill-based competencies to bring climate change closer to home. For example, [EcoSchools Canada](#), a third party school certification program for K-12 includes interactive exercises for the classroom and at home; and the [Climate Atlas of Canada](#) demonstrates mapping as well as actions involving cities, climate science, agriculture, forests and (soon) Indigenous knowledge. Outside resources offer students research and reasoning skills, new ways of thinking, planning, and acting in their communities.

Other examples of recognized well-designed curriculum resources include:

[Resources for Rethinking](#), a free online database of English and French K-12 curriculum-matched resources. Users can search by language, jurisdiction, grade, subject, curriculum unit, and sustainability theme.

[GreenLearning.ca](#), free online education programs on energy, climate change and green economy that engage and empower students to create positive change for our evolving world.

[Let's Talk Energy](#), offering an excellent selection of exhibitions, school programs and kits, lesson plans and infographics, social media programming, outreach, and engagement, and virtual tools.

c) The most important climate change education needs in Canada were recently identified in that Canadian science curricula isn't providing updated information on 'scientific consensus, consequences and actual solutions'.

Seth Wynes, a University of British Columbia climate researcher released a study in July 2019 finding curricula focus on climate change caused by humans, but lacking scientific consensus, impacts or solutions, from a review of high school science textbooks and curricula in Canada's 13 provinces and territories and curriculum designers' interviews.

Seth states 'curricula were rated on six core areas: basic knowledge of the physical climate system ("it's climate"); observations of rising temperatures ("it's warming"); warming is caused by human activities ("it's us"); scientific consensus ("experts agree"); negative consequences associated with warming ("it's bad"); and the possibility of avoiding worst effects through rapidly reducing greenhouse gas emissions ("we can fix it").'

The research found Saskatchewan with the most comprehensive coverage, teaching all six areas followed by Ontario. Nova Scotia (reviewing this year) and New Brunswick taught only one of the six, "it's climate" ranking last. In Alberta, Northwest Territories and Yukon, climate change is only covered in non-mandatory courses.

Wynes says ‘if climate change isn’t taught properly in schools, students will look to less-credible sources online and possibly come in contact with disinformation.’ He doesn’t think any curriculums are intentionally omitting information. Some are just significantly older than others and not caught up to the most current science. Educators should be supported in getting the latest scientific understandings of climate change. Wynes says he'd also ‘like to see more jurisdictions teaching students how to take action.’ Significantly, all provinces except Saskatchewan were missing any focus on “experts agree,” most missing solutions to the climate crisis.

### Activity Rating: \*\*\* Right Direction

Wynes’ report identifies students need to have the knowledge and skills to enable them to become environmentally active and responsible citizens, to identify issues and perspectives, be able to do research, and communicate their ideas meaningfully with current information.

### Action Alert Message:

To request action on curriculum updates, please contact the Council of Ministers of Education, Canada with the following message:

*Climate change touches all of our lives, especially impacting our younger populations. There are many kinds of meaningful choices we can make. Thanks to media, family, and previous teachers, many children now enter high school understanding climate change. However, climate change education in Canada requires immediate reform to accurately reflect scientific understanding and to support environmental citizenship in the next generation of Canadians.*

### Contact

Council of Ministers of Education, Canada,  
Email access on website, <http://cmec.ca>, Tel: 416 962-8100  
Mail: 1106 - 95, St. Clair Ouest / West Toronto, Ontario M4V 1N6

*For more information, please email Climate Scorecard Canadian Country Manager Diane Szoller at [Canada@climatescorecard.org](mailto:Canada@climatescorecard.org).*

## China

### Green Education Mandate

Education and awareness building regarding sustainable development have been part of China’s educational curriculum for over two decades. First policies regulating general

environmental protection and climate change education have been promulgated since 1994. In 2003, the Chinese Ministry of Education issued the first policy on environmental education for primary and secondary education: “Guidelines for Implementing Environmental Education in Elementary and Secondary School”. Additionally, provisions regarding education of the public in order to tackle climate change through emission reduction as well as energy and resource savings to ensure the sustainable development of China have found entry into past Five-Year-Plans. More recently, awareness and capacity building on “low carbon emission” behaviour have been inscribed into China’s National Climate Action Plan 2014 -2020. Moreover, the plan links public education and behaviour with fostering innovative thinking, solution seeking and knowledge sharing among industry, university and research to ensure future development and fast adoption of low-emission technologies.

Since the early 2000s, various organisations concerned with environmental education were set up: e.g. the Shanghai Environmental Education Center, a joint program between Shanghai’s Environmental Protection Agency and the Ministries of Education with the aim of fostering environmental education at all levels of schooling; UNEP and Tongji University founded the “Institute of Environment for Sustainable Development” to provide an interdisciplinary and international learning and research platform for sustainable development; China’s oldest NGO “Friends of Nature” which – among other tasks – has been engaging in teacher training on environmental topics.

Today, primary and secondary schools across China teach environmental topics as part of a “green education” mandate. Topics range from soil desertification, waste separation, biodiversity, the promotion of low carbon travel and responsible consumption, to recycling and behavioral guidance on good “low carbon behaviour”.

The primary school (Grades 1- 6) curriculum focuses on fostering young pupils’ curiosity for their living environment, i.e. animals and plants, how they feed and what they need to thrive. Classes called “Nature” with relevant teaching material are taught in some schools. Depending on teacher and school, topics like CO<sub>2</sub>, climate change, pollution etc. are taught as part of other courses. Some schools organize “Environmental Protection Days” or extra-curricular lectures.

Secondary school education (Grades 7 – 10) subsumes education on environmental matters including climate change into the overall science classes like “Chemistry”, “Physics”, “Geography”, “Life Science”. The general approach to the topic is a utilitarian one embedded in the argument that the environment has to be protected in order to continue the economic development of China and secure the well-being of its people, current and future generations.

Complementing the official curriculum where relevant resources and capacities are short, some schools partner with companies providing knowledge on science topics like chemistry and health, sustainable logistics, forestry or water hygiene. Or they work with organisations like STEM Cloud, a non-profit organisation dedicated to providing STEM (Science, Technology, Engineering, Math) education, to foster the next generation of engineers and scientists able to create innovative technologies to fight climate change. STEM Cloud materials on “air”, “CO<sub>2</sub>”

and science related topics can be downloaded for teachers from their website: <http://www.stemcloud.cn/cloudclassroom/courses>. The NGO “Friends for Nature” publishes a regular newsletter with information useful for campaigns on current topics like garbage separation:

[http://www.fon.org.cn/index.php?option=com\\_k2&view=itemlist&layout=category&Itemid=205](http://www.fon.org.cn/index.php?option=com_k2&view=itemlist&layout=category&Itemid=205).

Official materials do not seem to be publicly accessible through online sources, however, an online search shows up plenty of material tailored to children by concerned teachers or volunteers, as this example from Santang Primary School in Dalian’s Changxing Island Economic Area shows. It starts off explaining why environmental protection is important, what environmental labels and international environmental days are and then delves into a more practical section, which looks at protecting biodiversity and the natural environment and provides guidance on how to avoid pollution. Each chapter starts with highlighting the function of a certain environment, before it talks about the damage and everybody’s responsibility to avoid the damage. What is remarkable is that the material also asks the children to engage and influence their parents by sharing their insights and involving them into research for homework, thus exerting subtle pressure on parents to rethink their behavior:

<https://wenku.baidu.com/view/6a2d1400690203d8ce2f0066f5335a8103d26602.html>.

### Activity Rating: \*\*\* Right Direction

Education on climate change and environmental protection has existed in primary and secondary schools across China for over two decades, albeit in different levels of intensity and content depth. As part of the official curriculum, e.g. as part of other science-related courses, relevant materials are standardized. However, there appear to be no stand-alone courses specific to environmental topics. Teaching climate change and environmental protection beyond the official level seems to depend on the choice of individual teachers who also bring relevant material tailored to their class. Extracurricular environment or climate change related activities vary from school to school and region to region, depending on interest of teachers and willingness of the school management and parents to embrace such topics. While some schools appear to dedicate both curriculum time and extra-curriculum time to education on the impact of human behaviour on environment and climate, other schools seem to stick to the bare minimum.

### Action Alert Message:

*We commend China on having recognized early on the need to make knowledge on how to protect the environment and fight climate change available to the public. Policy support of the past 25 years has certainly contributed to fostering today’s generation of university students and young professionals keen on working towards a more sustainable China. At the same time, we believe that with the current climate crises, China can still step up its efforts in the education of its young generation and make dedicated courses on environmental protection and climate*

*change part of the standard curriculum, along with standardized textbooks and teachers' training. In addition, the government can consider tapping into all available resources and make it easier for NGOs or companies to access schools and supplement academic knowledge with hands-on practical examples on applied science to battle pollution, emissions or help save resources.*

### **Contact**

Ministry of Education of the People's Republic of China

Minster of Education: Baosheng Chen

[http://www.moe.gov.cn/jyb\\_hygq/hygq\\_bzxx/bzxx\\_wyly/](http://www.moe.gov.cn/jyb_hygq/hygq_bzxx/bzxx_wyly/)

*This Post was submitted by Climate Scorecard China Country Manager Annette Wiedenbach.*

## European Union

### **Plays a Limited Role in Climate Change Education**

EU Member States remain responsible for competence areas related to education and training. On the European level, European Union institutions play a supporting role. EU policies are designed to support action and to address common challenges, such as skills deficits, technological development and competition, at the level of Member States. For example, the EU has established the Education and Training Framework 2020. This is a strategic framework for European cooperation in education and training in the form of a forum allowing Member States to exchange best practices and to learn from each other.

Despite its neutrality in educational policies, the European Commission has been supporting a number of initiative and programmes which are related to climate change education such as:

- Kids4Future

The Kids4Future project is a European project, which was launched in 2007. The project was designed to educate kids on issues related to sustainability and energy efficiency. The concept of the project is based on the Rainmaker story; the platform of the project. Based on this common platform the project has launched a suit of pillars that help children learn climate skills related to their everyday lives. All tools and activities were parts of one integrated programme. More than 40 000 children and 1300 teachers in more than 600 schools benefited from the programme. Nine EU countries; Greece, Finland, Sweden, Belgium, Poland, Greece, Bulgaria, Slovakia and Slovenia; and Norway participated in the programme which was very well received by both teachers and children. It has supported to empower the young generation and to give them tools to make a difference while supporting improving the awareness of issues related to climate change and sustainability.

- Erasmus

The European Community Action Scheme for the Mobility of University Students known as Erasmus Programme is a European Union student exchange programme. Erasmus+, which was established in 2014, is combining all EU's current schemes for education, training, youth and sport. Erasmus+ is actively engaged in supporting efforts in adult education for citizens across the continent in matters related to sustainable ways of life and to raise awareness of environmental issues. For instance, Erasmus+ offers the Good Life and Sustainability, which is a programme, based on the UN 2030 Agenda for sustainability. It identifies factors of living well in different European regions and provides examples of good practices contributing to an emerging culture of sustainability. Climate literacy is another programme supported by Erasmus+. It provides interesting e-learning modules and quizzes to test knowledge and provides guidance and tips about topics related to climate change, ecological footprints, household energy and ways to maintain sustainable consumer behavior.

### Activity Rating: \*\* Standing Still

Despite its efforts to combat against climate change, the EU is playing a very limited role in climate change education. EU programmes designed in the field of climate change education mainly provide access to learning resources rather than learning activities that students and citizens can engage in to master climate related knowledge and skills.

Kids4Future is an exception to this trend and the EU develop more of these programs targeted to a broader age range of children.

Further platforms regarding the experience of the different EU Member States in the field of climate change education should be established to share experiences and to improve the overall awareness and engagement of the block's population in the fight against climate change. The educational systems in the European countries are characterized by their disparities. The EU is seeking to promote the harmonization of the different systems and to reduce their disparities. Creating a European wide programme for climate change education will strongly support those efforts and will enable new generations to better address climate change in their own countries and across the continent.

### Action Alert Message:

*Dear Mr. Frans Timmermans,  
Executive Vice-President and European Green Deal Commissioner*

*We would like to express our deep disappointment in the role the EU plays in climate change education. We understand the limitation in terms of responsibilities between EU institutions and*

*EU Member States in the field of education and training. Despite that, we believe that the EU can play a greater role in developing climate change educational programs for children at the different school levels and improving the sharing of climate education information and experience between its Member States. We strongly encourage the EU to give special attention to the initiatives taken by some of its Members States in introducing education on sustainability and climate change issues at school such as in Italy, and to engage other members of the block in doing the same thing.*

*We are looking forward to your response to these suggestions.*

*With our respectful and best regards,*

**Contact**

European Commission  
Rue de la Loi / Wetstraat 200  
1049 Brussels  
Belgium

*This Post was submitted by Climate Scorecard EU Manager Ibrahim El-Ati.*

## France

### **Climate Change Hardly Features in the French Education System, but a Reform May be on its Way**

Despite some improvements from the past, the role of climate change in national education in France is currently weak. The concepts of climate and climate change are rarely mentioned at all in national curricula or learning objectives.

National curricula outline the contents of a discipline for each level of education, which teachers may then freely organise according to their preferences. In the pre-primary school curriculum, climate change does not feature at all; in primary school, teachers could, at their own discretion, talk about the role of climate in the context of teaching about an environmentally friendly way of life or about the solar system. In secondary school, climate change may be included in the teaching of Life and Earth Sciences (Biology and Geology, SVT) and History-Geography, but the focus is indirect and approached through human activities, such as the exploitation of natural resources or global migration patterns. The depth and breadth of the issue will depend on the level of knowledge and interest of individual teachers, who may be offered little guidance on the matter.

Only the high school curriculum mandates teaching directly related to climate change in SVT and History-Geography. However, still in the first two years of high school, the focus is not on the phenomenon itself, but rather on its effects – for example, how climate change influences the spread of diseases or the development of sparsely populated areas. In the final year in high school, the mechanism of climate change is explained as a whole, including the role of human activity – albeit with limited focus on the latter. A minority of final year high school students is taught a more comprehensive understanding of the climate through an elective course entity exploring paleoclimate and climate science; around one quarter of the syllabus is dedicated to climate and climate change.

In addition to standard subject-related curricula, climate change education may feature in [education in sustainable development](#) (*éducation au développement durable*, EDD). This education is intended to help students grasp the balance between environment, the social world, economy, and culture. A vaguely law-imposed element in national education, EDD runs in a cross-disciplinary manner in teaching and in school activities from primary school to high school. Through EDD, sustainable development themes are introduced into standard lessons, projects, and teaching materials of existing disciplines, but schools also organise special EDD activities, such as “green class” outings or recycling initiatives. Climate change education may take place within EDD – indeed, it does feature in much of the EDD informational material – but this focus is not mandatory. In general, the role and practical implementation of EDD are very imprecise and school-dependent.

*Assessment: Little to Commend – but Progress May Be in Making*

Overall, [the ground for climate change education in France today is shaky](#). The topic of climate change is hardly mentioned in curricula, it is introduced very late, and there is lacking coordination and unclear allocation of responsibilities between different teachers and other actors. Consequently, there is a great risk of students’ knowledge on the subject remaining incomplete and incoherent. For students to grasp the magnitude and the different facets of the climate change phenomenon, the subject should be incorporated in national curricula, from primary school onwards, in a clear, consistent and comprehensive manner. Above all, a concrete introduction to the subject should be made far earlier than in the final year in high school.

Some efforts are currently underway for advancing climate change education. In June 2019, the Ministry of National Education and Youth requested the national curricular council (*Conseil supérieur des programmes*, CSP) to identify and propose ways to reinforce, especially in secondary school, curricula elements related to climate change, sustainable development, and biodiversity. The CSP handed over its [propositions](#) to the Ministry on 4 December 2019. The propositions were designed in cooperation with various scientists and other experts. According to the CSP, the propositions seek to ensure that by the end of their compulsory studies, all students will have gained an understanding of climate change and the impact of human activity thereupon, so as to be able to engage and take action accordingly.

While it does little to solve the current deficiencies in climate change education, one concrete and potentially helpful EDD measure to raise students' awareness and to help schools support climate action is the so called [E3D label](#). E3D (*Établissement en Démarche globale de Développement Durable*, "establishment on sustainable development track") is an honour awarded to schools who undertake decisive sustainable development and awareness actions in their daily activities. All staff and students, as well as students' families, are included in activities such as recycling and outings, in addition to which the school will modernise its heating and lighting systems and consider its acquisitions from a sustainability perspective.

In a similar vein, the [Cube.S](#) energy savings competition between schools aims to cut down the school's CO2 emissions as much as possible, while raising the awareness of staff, students, and students' families of the need to reduce national energy consumption, as part of the country's policy for combating global warming. Monthly 'badges' are awarded according to the school's performance, and throughout the competition's five-year duration, the school's emissions are monitored and registered at the competition website. As of December 2019, there were 243 participating schools around the country. The competition website estimates that schools will reduce their emissions by an average of 12% in their first year of participation.

Another good game that everyone can play is Climate Collage, where players retrace the reasoning and recommendations of the IPCC: <http://climatecollage.org/>

French teachers also have created an excellent free online textbook on climate change for high school students—*Les Changements Climatique Actuels et Passés*:  
<https://www.lelivrescolaire.fr/manuel/1331015/svt-cycle-4-2017/chapitre/1331197/les-changements-climatiques-actuels-et-passes/page/1333482/les-changements-climatiques-actuels-et-passes/lecon>

**Activity Rating: \*\*\* Right Direction**

The quality of climate change education in France appears insufficient today, but the country is moving forward in its efforts to incorporate the issue in national curricula in the near future. The quality of these efforts remains to be observed.

**Action Alert Message:**

Write to Minister of National Education Jean-Michel Blanquer:

*Dear Minister Blanquer,*

*Climate Scorecard congratulates you for taking the initiative to better include the topic of climate change into the national curriculum by requesting guidance from the Conseil supérieur des programmes. Climate change is the greatest challenge to our societies today and it is of critical importance that young generations are taught about it in a truthful, accurate and age-*

*appropriate way. We remain concerned about the fact that a systematic and comprehensive introduction to the topic is only presented as late as in high school. We urge you to take action so that our adolescents may learn about this phenomenon, which will profoundly influence their lives, rigorously at school, instead of having to rely on potentially unreliable and harmful sources.*

*With our respectful and best regards,*

### **Contact**

Send Action Alert Message through the website of the Ministry of National Education:  
<https://www.education.gouv.fr/pid33441/nous-contacter.html>

*This Post was submitted by Climate Scorecard France Country Manager Anna Savolainen.*

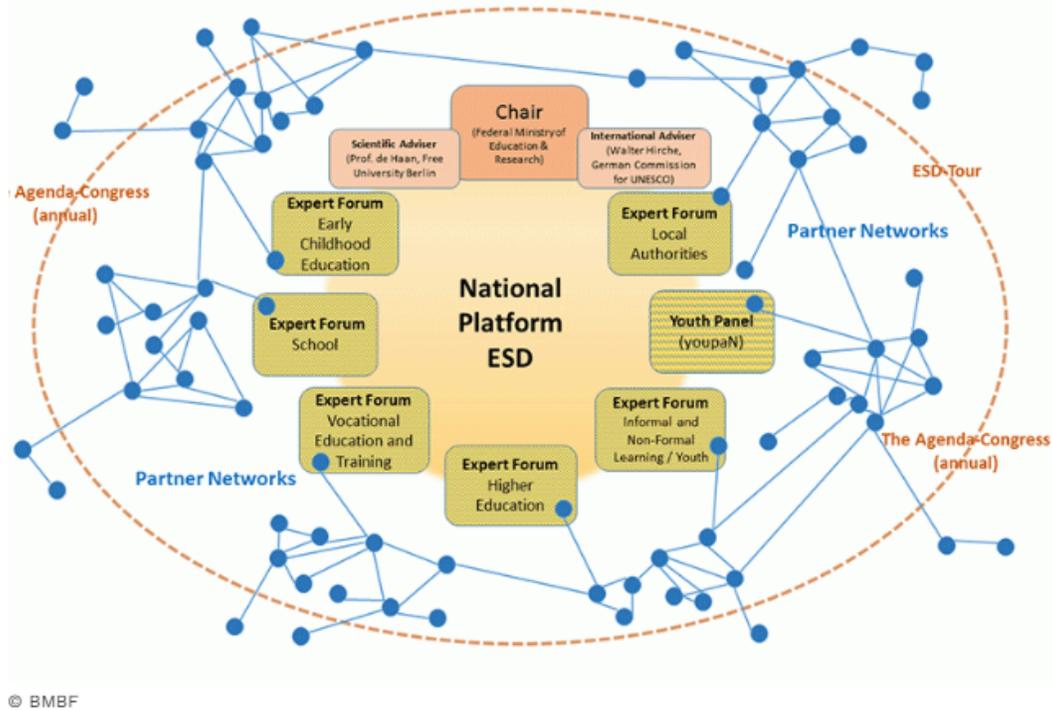
## **Germany**

### **Several states lead the way in climate education but more needs to be done at the national level**

Germany does not officially mandate climate change education as part of its primary or secondary school curriculum. Unlike other countries the education system in Germany is not set by central government with the exception of what is written in the country's framework law. Each state (*Bundesland*) has its own education standard and hence, the teaching style, the curriculum and set-up of schools are different.

With the UN Conference in Rio-de Janeiro in 1992, the idea of sustainable development and environmental education has been on the agenda of the central government for the first time. But it was not until 2004 after the introduction of the *UN-Decade "Education for Sustainable Development"* that the environment was embedded into action plans and resulted in the *"National action plan on education for sustainable development"*. The action plan was developed by the national platform on education for sustainable development (figure 1), which consists of representatives from the federal government, the states, scientists, youth representatives and international advisors from the UN and others.

Figure 1. Set-up of the national platform on education for sustainable development



Many of the states have endorsed programmes for education, focusing on sustainable development including environmental awareness and responsible consumption. Moreover, Bavaria has incorporated ‘environmental education’ into its regional law for education. The focus is set on the local and regional environment or surroundings first due to the limited capacity of young children to be confronted with the global perspective from the start.

Throughout the years, however, the focus and perspectives are broadened, and the effects of climate change are discussed and incorporated into the everyday lives. The staggered approach of becoming ‘aware’ leads to a strong personal engagement and responsibility towards nature and our environment. Also, in early childhood education, Bavaria has proposed projects, materials and programmes that allow focus on the topic of environmental awareness through interactive activities from an early stage. It is to be noted that Bavaria already incorporated the idea of environmental awareness into their state law in the early 1990s.

Other states like *Nordrhein Westfalen* have included sustainable development after the adoption of the Agenda 2016 of the United Nations. However, the measure is mostly focusing on the sustainable development goals and climate change is not the main focus. A comparison of the different state curricula for the ‘closest’ climate related subject “Geography” shows that apart from addressing the physical components and relating human influences to the changing climate, nothing else is being said about possible solutions or actions in relation to this topic.

From the above, it becomes quite clear that the topic of climate change is not one of the focus topics in the concurrent education system.

One programme of success is the programme ‘*Klimaschule*’ or climate school in the state of Hamburg. In 2009, under the UN Decade *Education on for Sustainable Development* discussed above, the city has proposed to come up with a certification scheme, that schools have the possibility to retrieve if they meet certain standards. The program focuses on how the school itself can become active, more sustainable and environmentally friendly to contribute to the reduction of fossil fuels. Each school has to come up with a master mitigation plan including how the school can reduce its carbon footprint and how the topic of climate change can be incorporated into the school curriculum. It focuses on the inclusion of everybody and gives students, staff and parents the right to give feedback and actively participate into the formulation of this plan. In 2019, 63 schools have so far been certified and the number is growing. A similar programme has also launched in the state of Schleswig-Holstein.

Given the large contribution that agriculture has on the global climate, another project, focusing on sustainable food consumption and a circular economy is presented here. In the state of Sachsen, the association for improved health “*Sächsische Landesvereinigung für Gesundheitsförderung*“ is working with schools to raise awareness on the question of climate change, our resource consumption and the connection between a good diet and human well-being. The big aim of the project is to come up for definite concepts on how to incorporate education on sustainable food consumption in the school curriculum on a national scale. To note, is the transboundary nature of the project as pilot schools on the border to the Czech Republic were selected. This further aims to strengthen the partnership between the two countries.

Due to the complexity of the German system in regard to the education system as a whole, the federal government has to take action and incorporate the topic of climate change and sustainable development into the national framework law. The government needs to set a sign on the importance of this topic, strengthen the public engagement and make people more aware on the local, national and global consequences that the actions of each individual can have. This could be in form of a new subject or through a set curriculum what is to be included in the states’ curricula.

### Activity Rating: \*\* Standing Still

Although the federal government’s actions on incorporating climate change into the federal framework law for education, it is inspiring to see and visit existing learning programmes that take action in local communities. Schools, early childcare centers and universities are all actively involved in coming up with own measures on how they can become more sustainable and reduce their carbon emissions. The idea of the *Klimaschule* is rather successful and encourages others to participate. Not only are these programmes beneficial for the climate, they also strengthen the relationship between staff, students and the government itself. The federal government needs to act more strongly and take responsibility to make sure that all institutions and education facilities engage in this topic. Where necessary, the government has to provide guidance and materials for the implementation of climate change in the education system.

Through active engagement of teachers, there are multiple learning forums online, where teachers can download existing teaching material for this and other sustainability related topics.

### Action Alert Message:

Dear Ms. Karliczek,

*Students marching on the street, demanding for more action from the side of the federal government in order to adapt and reduce the amount of global warming that we are facing. You, Ms. Karliczek as our current Minister for Education and Research are asked to act. It is under your ministry, that the framework law for Germany's education system falls and it is also your responsibility to include climate change education and sustainability into that law in the future. It is absolutely necessary that every child of our future generations is aware of the situation, its cause and potential solutions, in order to act accordingly and not be overwhelmed by it in a later period of life. Observing our society today, it is clear that general environmental awareness is not enough among the society. People throw their rubbish, waste their food, and are flying without any idea what their actions have on the environment. Education is required from a very young age to cope with and create a better understanding of the complexity of this world and the interconnectedness between nature and the human society, which in fact is part of earth itself. The Federal Ministry of Education and Research is asked to develop a national curriculum for a new subject that focuses on climate change and sustainable development that is to be included into every state's regional curriculum. Of course, all states are invited to provide input and feedback to the development.*

Sincerely,

#### Contact

The Ministry of Education and Research  
Ms. Anja Karliczek – Federal Minister of Education and Research  
Kapelle-Ufer 1  
10117 Berlin  
E-Mail: [bmbf@bmbf.bund.de](mailto:bmbf@bmbf.bund.de)  
Public Information: [Information@bmbf.bund.de](mailto:Information@bmbf.bund.de)  
Telefon: 030 / 18 57-0

#### Learn More :

Link to Bavarian guidelines for the incorporation of sustainable development into the education sector:

[https://www.isb.bayern.de/download/728/richtlinien\\_fuer\\_die\\_umweltbildung.pdf](https://www.isb.bayern.de/download/728/richtlinien_fuer_die_umweltbildung.pdf)

Link to National Action Plan for Education for Sustainable Development:

[https://www.bne-portal.de/sites/default/files/downloads/publikationen/BMBF\\_NAP\\_BNE\\_EN\\_Screen\\_2.pdf](https://www.bne-portal.de/sites/default/files/downloads/publikationen/BMBF_NAP_BNE_EN_Screen_2.pdf)

Link to study on comparison of state curricula of Geography:

<https://www.sowi-online.de/sites/default/files/weber.pdf>

Link to Climate School Programme in the city of Hamburg:

<https://li.hamburg.de/klimaschule/>

Link to Future School Programme in the state of Schleswig-Holstein:

<https://www.zukunftsschule.sh/start/>

*This Post was submitted by Climate Scorecard Germany Country Manager Berit Mohr.*

## India

### **Extreme Weather Sparks Interest in Climate Education**

Education in India is a shared responsibility of the central and sub regional governments. It is worth highlighting that there is a complete consensus between central and the sub regional governments on the importance of climate change education.

Climate change education recently has caught the attention of Indian schools at primary as well as secondary education levels. The focus on climate change education has increased as the country began to undergo extreme climate events ranging from acute rains, serious draughts, tsunami, flooding, bad to worse air quality and water issues.

Student interest in climate education in India increased when RK Pachauri, a noted Indian climate scientist and chair of the Inter-Governmental Panel on Climate Change, was awarded the 2007 Noble Price for Peace along with former US vice-president Al Gore.

Today, there are many schools in India both at the primary and secondary levels running climate change programs within subjects such as science and social studies. (See Resource Guide for Advanced Learning on Integrating Climate Change in Education at Primary and Secondary Level available at [https://www.unclearn.org/sites/default/files/inventory/resource\\_guide\\_on\\_integrating\\_cc\\_in\\_education\\_primary\\_and\\_secondary\\_level.pdf](https://www.unclearn.org/sites/default/files/inventory/resource_guide_on_integrating_cc_in_education_primary_and_secondary_level.pdf))

Students at the primary level (ideally in the age group of 8 to 10 years) are exposed to the following prescribed curriculum across India with some minor variations depending on local conditions:

5<sup>th</sup> standard: forests, herbs, trees, shrubs, water

6<sup>th</sup> standard: transport, rocks, land forms, introduction to climate, land breeze and sea breeze, temperature

7<sup>th</sup> standard: natural wildlife, vegetation, climate communication, satellite, life in temperate grass lands, life in the desert region, atmosphere, weather and climate (with detailed description), human settlements, understanding the earth, hydrosphere, life in tropical and sub tropical regions

The above areas of education are supplemented by field work including but not limited to study tours to at-risk communities, forests, walkathons, debate competitions, poster and painting competitions, model United Nations debates, participation in science and technology model competition focused on climate and environment subjects.

Sub-regional and national governments also offer students secondary and higher education scholarships to further encourage them to continue to develop their in climate and environmental subjects.

One of the new initiatives in Southern India started by farmers is to take students from primary schools to paddy fields during the harvest times and, in so doing, educate them about various climate and environmental issues. This experiment is attracting attention nationwide and there is a plan to expand it to other regions of the country.

Some of the well-known non-governmental organizations offer climate education programs including:

1. Centre for Science and Environment ([www.cseindia.org](http://www.cseindia.org))
2. Centre for Environment Education ([www.ceeindia.org](http://www.ceeindia.org))
3. The Energy Resources Institute ([www.teriin.org](http://www.teriin.org))
4. Climate Reality Project ([www.climatereality.org.in](http://www.climatereality.org.in))
5. World Wide Fund for Nature ([www.wwfindia.org](http://www.wwfindia.org))
6. Wildlife Trust of India ([www.wti.org.in](http://www.wti.org.in))
7. M S Swaminathan Research Foundation ([www.msrf.org](http://www.msrf.org))
8. Ladakh Ecological Development and Environmental Group ([www.ledeg.org](http://www.ledeg.org))
9. Development Alternatives ([www.devalt.org](http://www.devalt.org))
10. Shakti Sustainable Energy Foundation ([www.shaktifoundation.in](http://www.shaktifoundation.in))

11. Navdanya Trust ([www.navdanya.org](http://www.navdanya.org))

Activity Rating: \*\*\*\* Moving Forward

### Action Alert Message:

Dear Mr. Javadekar,

*Climate Scorecard would like to congratulate the Indian government for continuing its action on climate change. We would also like to suggest that the government undertake a periodic review of climate education curricula and materials to insure that it is relevant to current climate change knowledge.*

### Contact

Mr. Prakash Javadekar

Union Minister of Environment, Forest and Climate Change

Indira Paryavaran Bhavan, Ali Ganj, Jorbagh Road, New Delhi, Delhi 110003, India,

Telephone (off): +91-11-23384340, 23384784, 24695132

Email: [mefcc@gov.in](mailto:mefcc@gov.in) / [prakash.j@sansad.nic.in](mailto:prakash.j@sansad.nic.in)

*This Post was submitted by Climate Scorecard India Country Manager Pooran Chandra Pandey.*

## Indonesia

### Innovation for Indonesia's School Children (INOVASI)

During the peatland fires of this previous summer, thousands of Indonesian schools had to close to limit the exposure of students to the particulate matter in the haze. In September 2019, 46,000 schools were affected by poor air quality. The fires in Kalimantan and Sumatra put nearly 10 million children at risk.

Indonesia's government is designed to promote local and regional autonomy, with the federal government directing a large development vision for the country. The Ministry of Education and Culture helps set a national curriculum, accommodate the many languages spoken, and reduce barriers to accessing education such as connecting rural, remote people with schools. The government requires Pancasila, the state ideology, to be taught in schools to promote national unity and allegiance. It provides little to no life-applicable knowledge or skills. There does not exist a national primary or secondary school curriculum on climate change. This fact plays out in

public opinion; compared to other nations, Indonesia has the most climate denialists (18% do not believe humans have role in climate change, followed by 16% of Saudi Arabians and 13% of Americans).

National programs for climate change education are severely lacking. There are several local-level programs that show promise. One of the few programs, INOVASI, a partnership between Australia's Department of Foreign Affairs and Trade and Indonesia's Ministry of Education and Culture, aims to reconnect children with schools following disasters. The program is still in its early stages and operates at the district-level. However, given Indonesia's decentralized and highly variable administration of education, programs like this can be powerful in educating about climate. Disasters – increasing in severity due to climate change – are acutely felt by students. A program like INOVASI, which reconnects students with education following disaster, has an opportunity to influence the curriculum, drawing links between how humans affect their environment and the lived experience of many students facing climate disasters. It is especially necessary to ensure children understand disasters and why they are intensifying in order to reduce trauma and increase awareness and resiliency knowledge.

Climate change education needs to focus on resiliency. Recently, on January 27, 2020, flash floods in Jakarta killed 67 people. The national disaster agency reported 1,322 natural disasters in Indonesia. The country experiences landslides, floods, land fires, and ever intensifying storms. Students must be educated on why these climate events are intensifying and what can be done to mitigate them. Most importantly, students must learn how they can adapt to an ever-changing environment. Resiliency strategies, adaptation, and disaster preparedness must be required subjects for all students. Education also has a crucial role to play in repairing community unity upset and sometimes devastated by disaster.

#### Activity Rating: \* Falling Behind

Although the government announced a 30% increase in education spending to improve basic education and Indonesia over the last decade has spent 20% of its state budget on education, large gaps and inequities still exist. A significant amount of this budget goes to paying the huge teacher population of around 3 million and paying for their certification. Many argue that this certification program is not rigorous. Many teachers get their jobs through involvement on local or regional political campaigns, earning contracted staff positions through these non-performance based selections. The average score of those 3 million teachers on an ability test was 53%. The World Bank estimates that 20% of teachers often miss school. In a PISA exam survey, 65% of students said they rarely received direct feedback. Indonesian teachers should be chosen based on merit. Without decent teachers, students are unlikely to learn about crucial environmental or climatic problems.

Many Indonesian students suffer under the national education system's inflexible schedule. Students in urban areas can accommodate the morning to afternoon schedule and some farmers, such as rice farmers in Java, can follow the morning to afternoon schedule. For farmers and other remote people who live in areas with less reliable irrigation and are less beholden to

monsoon winds or seasonal agriculture, the education system discourages attendance. In Mukekuku village in East Rote, Rote Ndao regency, students help parents in the morning tap nira from the lontar palm tree. They often miss the beginning part of school. If it is the season to harvest, students in the village will not go to class at all. Education must be adapted to local conditions.

A new environmentally focused version of Pancasila could be created to teach about Indonesia's diverse environment, how its people live and relate to it, and how to adapt to a changing world. Indonesia's diversity is one of its greatest assets, in terms of its culture, language, people, environment and the unique ways its people engage with their environments. These different forms of engagement with the environment make communities united and resilient. An environmental Pancasila could celebrate Indonesia's diversity by providing a framework for educators to adapt programs to local needs and bolster local practices with sound science and climate awareness. Additionally, this Pancasila could also lay out how to teach resiliency and disaster preparedness. Capable teachers would be needed to create a local curriculum from this framework.

The Ministry of Administrative and Bureaucratic Reform is responsible for recruiting civil servants. The ministry should try to build human capital in provinces, provide resources so they can implement locally tailored curricula, increase the quality rather than quantity of teachers and create a rigorous certification system.

**Action Alert Message:**

*Education in Indonesia needs major reform to prepare Indonesia's young people to the realities of their changing climate and world.*

*The Ministry of Culture and Education needs to create an environmental Pancasila. Pancasila should create a framework for educators to teach about adaptation, environment and resiliency in the terms of the communities in which they teach. Communities in Indonesia have highly variable climates, environments and disaster risks. Teachers should celebrate their local community's practices, the beauty of the surrounding natural world and teach students disaster preparedness and resiliency. These foci would create greater community unity and prepare students for a changing world.*

*To create locally adapted, robust curricula, the central government needs to empower provinces and districts by providing high quality educators and sufficient resources. This will require reforming the certification system for teachers and better distributing funds.*

*Indonesian students will feel the impacts of climate differently. Students in Jakarta must be prepared for floods from monsoon rains, students in Kalimantan must be prepared for forest fires during the dry season, and coastal communities must be ready to handle inundation during storms. Education has important role to play in educating students about climate and*

*environment at local and global scales, bringing communities together, and preparing the country for the impacts of climate change.*

### **Contact**

Ministry of Education and Culture: [pengaduan@kemdikbud.go.id](mailto:pengaduan@kemdikbud.go.id)

### **Learn More:**

INOVASI: <https://www.devex.com/news/lessons-from-indonesia-on-quality-education-in-the-wake-of-disaster-94473>

Eco-schools (another successful local education program):

<https://en.unesco.org/greencitizens/stories/indonesian-eco-schools-educate-youth-environmental-issues>

NIRA harvesting and local education needs:

<https://www.thejakartapost.com/academia/2020/01/13/one-size-education-policy-doesnt-fit-diverse-lives-across-indonesia.html>

Educational reform: <https://www.eastasiaforum.org/2019/10/18/indonesias-teachers-need-a-smarter-education-system/>

*For more information contact Climate Scorecard Indonesia Country Manager Tristan Grupp: [Tristan@climatescorecard.org](mailto:Tristan@climatescorecard.org)*

## **Mexico**

### **International Initiative to Promote Environmental Education**

Mexico has made big steps regarding the dissemination of the importance of environmental education. One example is the establishment of the Education and Training Center for Sustainable Development (CECADESU, as in Spanish), which since 1994, is the responsible instance for managing and evaluating education and training programs and projects for sustainable development, in support of the activities of the Ministry of Environment.

Besides this, there are 59 Environmental Education and Culture Centers certified by the government, in recognition of the quality of the environmental education services they provide to society through natural conservation and the improvement of the communities' life quality they attend.

The country has also made a reform in its National Constitution to include the obligation of environmental education. Currently, Mexico and Colombia are the only countries in LATAM to include this in their national laws.

However, at a school level, education in Mexico does not include the environment as a basic subject. Elementary schools haven't formally established this subject in their programs, in fact, environmental studies are only for people who want to specialize in this topic through diplomas, careers or postgraduate courses, proving that Mexican children are not receiving a comprehensive education that recognizes environment as a priority issue.

In addition, according to a Report from UNESCO, the lack of environmental education in Mexico represents "a serious detriment, as students will not have the right preparation to face a future with climate change, poverty and other associated risks" (UNESCO, 2014).

Due to this, civil society in Mexico has been working with the government to promote better environmental education at all school levels. Such is the case of the Initiative "Educación Ambiental Mundial" a collective of 20 organization hosted in Mexico.

This Initiative presented at the COP 25 is a proposal to have an international agreement that commits countries to include in their legal frameworks the obligation of providing environmental education starting with elementary school.

The proposal had a good response and the support, at a national level, from the Ministry of Foreign Affairs and representatives of the Legislative, and at international level from Patricia Espinosa, UNFCCC Executive Secretary, the Foundation For Environmental Education, and Educate Global, as well as backing from the governments of Italy and India.

The next step of this Initiative is to present an official agreement at tCOP 26 in Glasgow for countries to sign it and commit.

**Activity Rating: \*\*\*\* Moving Ahead**

We applaud the Mexican civil society for promoting this initiative at an international level and the Mexican government for supporting the process. This is a big step in terms of participation, governance and including environmental issues in the national agenda.

Environmental and climate education is critical to help address climate change and related issues issues like poverty, inequality and human rights.

**Action Alert Message:**

*The support of the Mexican government will be essential to foster this initiative and implement environment education as a priority matter. If Mexico is able to get the agreement signed by a good number of countries, this will enhance its international climate change leadership role.*

### **Contact**

Iñigo Orvañanos  
Fundación Educa México A.C.  
<http://www.educa.org.mx/>

*This Post was submitted by Climate Scorecard Mexico Country Managers Aline Nolasco Escalona and Valeria Lopez-Portillo.*

## **Nigeria**

### **Students Learn About Climate Change by Studying Weather Patterns**

Climate change is one of the most pressing problems facing us today. Our whole future is at stake here, it is extremely important to study climate change in the school system in a way in which students can see its relevance.

At the moment the main way in which Nigerian students learn about climate change is through their study of weather patterns. Changes in weather are currently at the center of daily life for most people.

Nigeria does not have climate change education as part of its primary and secondary school curriculum. At university level the subject is briefly covered. In a recent study a majority of the graduates from Nigerian universities demonstrated a basic awareness of climate change but reported that the subject was only briefly covered in lectures on other subjects (CCNN 2018).

Early learning of our environment helps one to access, develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions to protect and thereby benefit from the environment. It also provides important opportunities for students to become engaged in real world issues that transcend classroom walls.

Thus the establishment of The Climate School – an awareness and solution program for both children and adults as proposed by Climate Change Network Nigeria in partnership with Saving Our Planet based in France. A program with a course outline for children, teachers and students working side by side with primary and secondary schools aimed at: mobilizing hearts, minds, and hands to fight climate change via workshops; teaching the teachers; and offering psychological assistance in handling loss, grief, and sorrow, and on how to transform inaction and helplessness to action.

## Activity Rating: \*\*\* Right Direction

These recommendations are made in terms of making the teaching of climate change explicit in the curricula and moving beyond a basic understanding of how the climate system works. To creative problem solving approach in tackling today's complicated environmental challenges The importance of periodical curriculum change in order to be abreast of the latest developments in climate change. Which will also address education managers, planners, curriculum reviewers and policy makers in Nigeria. Considering the fact that, Illness, natural disasters, displacements, etc. are often explained in terms of climate change, especially at the beginning of rainy season and dry season linking with patterns of temperature, precipitation (rain), humidity, wind and seasons.

### Action Alert Message:

Write to Malam Adamu Adamu and Abdulkadir Binta:

*Dear Sir,*

*You are commended for the climate change policy, reports, hubs, etc. established so far in the country to tackle climate change issues but most importantly, education regarding the effects and management of climate change should be embarked on vigorously by including them in the primary, secondary, and tertiary school curriculum. Here, the government can support the move by Climate Change Network Nigeria partnering with Saving Our Planet to establish - The Climate School – program in Nigeria. The Nigerian citizens, where this program is focused, shall be sensitized toward climate change and the havoc it inflicts on people, property, and crops. Going beyond hitherto, the school curricula touching only on topics related to weather change in the subject of social studies to an intense, focused, decisive approach in solving climate change issues from primary, secondary to tertiary institutions in the country.*

### Contact

The Honorable Minister for Education  
Federal Ministry Of Education  
Federal Secretarial Phase III, FCT, Abuja  
900211

&

The General Director,  
Department of basic and secondary Education,  
Ministry of Education,  
Federal Secretarial Phase III, FCT,  
Abuja  
Email: info@education.gov.ng

## Learn More:

<https://savingourplanet.net>  
<https://theclimaticinema.org>

*This Post was submitted by Climate Scorecard Nigeria Country Manager Priscilla Offiong.*

## Russia

### An Absence of Climate Change Education

In Russia, there is no mandatory climate change education in primary or secondary schools on a national or federal level. School children are taught about environmental protection on some level. Primary schools have a subject called “The World Around Us” and it explores topics relating to respecting and caring for nature, however issues pertaining to climate change are not touched upon. In secondary schools, geography classes deal with climate, but climate change as such and the anthropogenic reasons for it are not discussed. On a regional level, schools have the right to include this component. One such textbook was developed in 2013 by Bellona, an ecological organization with an office in Murmansk, and passed all the necessary requirements of the ministry of education (a rather difficult process in Russia). As far as Bellona knows, this textbook is available in every school in Murmansk Region and is sometimes used by teachers when they need to cover environmental issues in class.

The Russian education system also has elective subjects for older students. There is an elective course in the 9<sup>th</sup> grade titled “Me, the Future and Energy” that has been approved by the Department of Education of Primorsky Krai. There are only several schools in the entire country that still teach an experimental course about ecology from the late 1990’s on an elective basis. There are also a number of textbooks for the subject of Ecology for older children but, again, the topic of climate change is absent from the curriculum. The Russian education system has a so-called “integrated” approach, where ecological and environmental topics are included in the main subjects (for example, ecologically-themed problems in math class, talking about sources of energy and energy consumption in physics class, in geography climate change can be discussed, etc.).

There is extracurricular education about topics like climate change that are mostly confined to after school arts and crafts classes. Each teacher comes up with his or her own educational program. Other extracurricular programs that teach about nature, climate and sustainable development exist on a local level but are not always easy to find.

Aside from the official school curriculum in Russia, there are international organizations that are quite active in the climate change education.. For example SPARE Russia (<http://rusecounion.ru/ru/spare-russia>) published a textbook for secondary schools titled “Energy and the Environment” (<http://rusecounion.ru/ru/node/3017>) and for primary schools “Energy and Me” (<http://rusecounion.ru/ru/spare-publication-3>). Climate change problems in relation to energy use are described very systematically, as well as how each and every one of us can solve these problems. Another textbook called “The Climate’s Ambassadors” created by an organization called “Friends of the Baltic” also provides lectures/lessons about the reasons for and solutions to climate change. In 2015, UNDP launched an educational program about climate change in 8 countries of Eastern Europe and Central Asia, including Russia. It’s called “Climate Treasure Box”, is aimed at school children between the ages of 7 and 16 and has been specially developed to teach the youth how to lead their lives in a way that’s safe for the climate and the environment. Russia was the pilot country and between 2015 and 2019, more than 500 teachers and 11,300 children from 157 schools took part.

Almost all environmental NGO’s in Russia work with school children in one way or another. WWF Russia published a textbook for older children called “Climate Change”. This NGO also has a club called “The Young Friends of WWF”. Bellona also works closely schools and conducts open classes on a wide range of ecological topics. Oftentimes, schools and universities ask Bellona to come and speak about a particular environmental problem.

It appears that the Ministry of Education (as well as the entire country) does not really understand the problem of climate change. Despite various government decisions such as the climate doctrine and the ratification of the Paris Agreement and reports from the Federal Service for Hydrometeorology and Environmental Monitoring, the media leans towards presenting climate-skeptic views. Although climate policy mentions education, it has not become law and is generally not enforced. Education experts call for legislation that would require the curriculum to make some sort of mention of climate change, as well as for a mandatory and freestanding subject called “Ecology”. That said, experts praise children in Russia these days for being much more interested in climate change and environmental protection and cite the Internet as the main reason for better awareness despite these topics being largely absent from classrooms in Russia.

**Activity Rating: \* Falling Behind**

**Action Alert Message:**

*Dear Olga Vasilieva (Minister of Education),*

*It is absolutely imperative that the school curriculum across the entire country starts to take the subject of climate change – and more importantly the anthropogenic causes of it – more seriously. Russia is one of the biggest polluters and contributors to global greenhouse gas emissions and thus has a responsibility to the world to tackle climate change. One of the main*

*ways to do that is to raise the next generation to be more environmentally conscious, and with a much more responsible attitude toward their own actions. We cannot achieve that without taking the subject of ecology more seriously and making anthropogenic causes of climate change (as well as the solutions) a mandatory field of study in every Russian school.*

*This Post was submitted by Climate Scorecard Russia Country Manager Maria Stambler.*

## Saudi Arabia

### **Some educational focus on the environment but little in the way of climate education**

Saudi Arabia mandates and implements several environmental education programs in schools and universities in cooperation with civil society organizations as part of its education system. King Abdullah bin Abdulaziz Public Education Development Project involves programs that focus on the environment and sustainable development concepts, teachers training projects, youth skills building for the 21<sup>st</sup> century, and fostering of the concepts of good citizenship and social responsibility.

One of the best climate education learning programs is “Bei’ati/ al-aalam al-Akhdar fi al-balad al-Akhdar” [My Environment/ the Green Flag in the Green Country]. This environmental awareness Program was launched by Saudi Environmental Society in 540 schools, in collaboration with the Ministry of Education and UNESCO. This program aims at nurturing the environmental awareness and education values through implementing clean policies inside and outside schools like energy saving, water rationing, and garbage disposal and recycling. The program covers all schools in the Kingdom at all levels and will last for five years.

The most important aspect that Saudi Arabia climate change education program needs is to shift the focus of the current general environmental education from the general environmental education to climate change and sustainable development education to develop the environmental learning skills of students and encourage the adoption of a multilevel approach that address the social, economic, and political aspects of climate change.

### **Activity Rating: \*\*\* Right Direction**

The fact that there are widespread environmental awareness programs across Saudi Arabia schools indicates that there is a strong sense of duty to the environment that is being instilled into children at a young age across the country. Water rationing, energy savings, and similar activities do instill a sense of personal responsibility in children. But perhaps what is more important is educating children about the seriousness of global modern climate change, and specifically Saudi Arabia’s major role in contributing to it by being one of the world’s largest

producers of crude oil. A focus on sustainable development should also be implemented by talking about how the country can move towards renewable sources of energy, and how the country's infrastructure can become more energy efficient and climate resilient.

### Action Alert Message:

*We congratulate The Ministry of Education on implementing environmental programs to educate the country's youth on their environment, and what they can do on an individual basis to become more environmentally responsible. We encourage the Ministry of Education to work with the Ministers of Energy and Environment, Water, & Agriculture to develop education curriculums that focus on Saudi Arabia's major role in increasing carbon emissions, as well as big steps the country is currently implementing and plans to implement in order to decrease its carbon footprint. Students should also learn about big steps other countries are taking to tackle climate change that Saudi Arabia can learn from and implement themselves.*

#### Contact

Hamad Al Sheikh

Minister of Education

Submit Action Alert at <https://tawasul.moe.gov.sa/>

*This Post was submitted by Climate Scorecard Saudi Arabia Country Managers Abeer Abdulkareem and Amgad Ellaboudy.*

## South Africa

### New policy mandates climate education

In South Africa, the education system is categorized into primary, secondary and higher education, and technical and vocational education and training (TVET). Non-formal or community-based education is also an essential form of education, especially in relation to climate change.

The National Climate Change Response White Paper was released by the Department of Environmental Affairs (DEA) in 2011, which set the parameters on how climate change needed to be addressed and also states that Climate Change Education (CCE) should be part of the broader Education for Sustainable Development (ESD) framework. It particularly states that climate change knowledge needs to be mainstreamed into education and training curricula, under the responsibility of the Department of Basic Education (DBE), and the Department of Higher Education and Training (DHET). Although, there is no coordinating mechanism between

the two government departments focusing on CCE, and none of them have, as yet, developed a strategy to coordinate or implement CCE in a cross cutting manner.

Furthermore, the White Paper addresses climate change in TVET, but there is not yet a clear national strategy to meet the skills needed for greening South Africa's economy. Allocation of funds for green skill development remains ad hoc, as there is no nationally established governmental fund allocation for green skill development programmes.

### Activity Rating: \*\* Standing Still

In the TVET sector, some programmes have been initiated to engage TVET institutions in short courses to build capacity for sustainability and climate change to develop skills for the green economy, but still there are shortages of crucial skills. Also at the higher education level, a number of South African universities are demonstrating trans-disciplinary research and trans-disciplinary teaching, guided by the Global Change Grand Challenge National Research Plan. There are also other projects that aim to attract young students to earth system sciences and sustainability science studies, however more work need to be done to expand CCE.

The 2010 National Curriculum Statement has some elements of environmental education and CCESD. Different concepts of climate change are found in different curricula but are not necessarily linked. Learning support materials used for climate change reflect a wide range of orientations and approaches, but not a clear synergy with national policy.

### Action Alert Message:

*Dear Honourable Minister Angelina Motshekga,*

*There is great diversity in the orientation and approaches to Climate Change Education in South Africa. This diversity needs to be appreciated as it displays the different contexts and issues being faced by communities in relation to climate change. Nevertheless, much more can be done to strengthen and intensify Climate Change Education. The role of education, or CCESD, is not adequately demonstrated in major national climate change policies.*

*The National Climate Change Response White Paper includes a strong focus on education, but this is yet to be implemented via a strong partnership with the DBE and DHET. Similarly, environment and climate change are not effectively reflected in education policies, and this makes it difficult to ensure curriculum consistency. Curriculum development should take into account that knowledge related to climate change is constantly evolving.*

*South Africa needs to mainstream climate change into its education system through the national systems of quality assurance and their associated programmes. Despite some progress in this regard, more needs to be done. An explicit conceptual framework is required for CCE in*

*South Africa that can develop progressive knowledge and demonstrate the full scope of the policy and context in which environmental learning is to occur.*

### **Contact**

Department of Basic Education  
222 Struben Street  
Pretoria Central  
Pretoria  
0001  
Tel: +27 12 357 3000

### **Learn More:**

Some climate change education material or curriculum in South Africa:

#### **1. Teacher Education Workbook for Environment and Sustainability Education.**

This is a 'workbook' that teachers can work through in their own time, or as part of an environmental education course or programme (such as Eco-Schools), and a 'resource for a course' which a course developer or lecturer can use to design and support a short or long course for student - or in-service teachers.

(Rosenberg, E. 2009. *Teacher Education Workbook for Environment and Sustainability Education*. Rhodes University Environmental Education and Sustainability Unit, Grahamstown.)

<https://www.sanbi.org/wp-content/uploads/2018/03/conservation-ed-teacher-ed-workbook-environment-and-sustainability-education.pdf>

#### **2. South Africa - Keep It Cool: climate change education**

Keep It Cool creates a coherent policy environment in which the education sector is fully utilized as a strategic resource in South Africa's transition towards a more climate resilient society.

The project is built around 4 main pillars:

- Addressing climate change education (CCE) in education policy, guidelines and materials
- Overcoming the fragmentation of knowledge, policy and practice of CCE between key actors
- Implementing innovative, curriculum-aligned CCE projects, involving students and communities
- Collecting data on teacher professional development and implemented CCE projects for dissemination

<https://www.vvob.org/en/programmes/south-africa-keep-it-cool-climate-change-education>

#### **3. Pioneering climate-change curricula in Southern Africa**

The University of Cape Town's (UCT) [African Climate and Development Initiative \(ACDI\)](#) is at the forefront of curriculum development for climate change and sustainable development studies in southern Africa.

<https://www.news.uct.ac.za/article/-2019-02-26-pioneering-climate-change-curricula-in-southern-africa>

*This Post was submitted by Climate Scorecard South Africa Country Manager Tabana Mailula.*

## South Korea

### **NGOs Play Leadership Role in Climate Education**

The Environmental education curriculum in Korea is not limited to 'climate change education' but rather an integrated education called 'environmental education'.

Environmental education in Korea is divided into elementary school, middle school, and high school courses in connection with the national curriculum. In elementary schools, environmental content is included in general courses such as Korean, social studies, and science. In middle schools, environmental subjects can be selected at the discretion of the principal.

High school is the time when environmental education is provided as an independent subject. During this period, environmental education is provided under the subject of 'Environment and Green Growth'. Following is the explained goal of the subject; 'This course is designed to overcome the global environmental and energy crisis and to realize sustainable development and low-carbon green growth for humankind.' In other words, the purpose of the course is to improve the quality of life by allowing students to understand the environment, economy and society in an integrated way and to learn the value of symbiosis.

In Korea, there is no mandatory environmental education time for the curriculum. According to a survey conducted by the Ministry of Environment in 2018, only 1% of the total training hours were operated under the name of 'environmental education'. Of course, considering the environmentally related education that is being distributed in many different subjects, the opportunities and hours of environmental education will increase, but it can be seen that the time that independently operated environmental education is very small. The adoption rate for environmental subjects dropped from 20.6% in 2007 to 8.4% in 2018, and environmental teachers have never been hired since 2009.

Currently, environmental and climate education in Korea is led by non-profit foundations, research institutes and local communities rather than the regular curriculum. ICEC

(International Climate and Environment Center) in Gwangju provides climate education programs tailored to local characteristics for all ages, from infants to adults. Especially, ICEC is developing a new educational program using virtual reality (VR) recently and it will contribute to effectively recognizing the seriousness of the climate change crisis. The center also carries out 'Bringing climate school' by visiting elementary schools and community children's center to raise children's awareness on climate change. The program is provided to over 20,000 children each year and includes understanding of climate change, how to practice low-carbon green lifestyle, reducing food waste and water footprint.

Asia Climate Change Education Center (ACCEC) in Jeju Island also runs a climate change education program. Educational programs are offered not only to students and the public, but also to foreign officials and overseas organizations that require climate change expertise. The program seeks to improve the target group's capacity to address climate change. Also, the Korea Research Institute on Climate Change (KRIC) develops thematic teaching tools and programs along with training climate change instructors. Additionally, KRIC also tries to provide information to a wider range of people by providing hands-on training in connection with local festivals.

As the need for expansion of environmental education in the regular curriculum was raised, the Ministry of Environment voted in November to amend 'the Act on the Activation and Support of Environmental Education'. The contents of the law are as follows. 1) Designate environmental education cities by city unit to encourage regional-specific environmental education. 2) Every year, the Minister of Environment conducts an environmental education survey. 3) Include daycare center in the scope of environmental education so that values and habits can be formed from infancy. 4) Administrative and financial support for exemplary schools, such as setting up the environment in the curriculum. 5) Support training and research costs to increase the professionalism of teachers

The most important climate change education that Korea needs now is 'adaptation', especially appropriate response to fine dust. In the survey conducted by the Ministry of Environment among students all over the country in 2018, the finest dust (22%) was the first image that emerged when it came to 'environment'. Moreover, the National Assembly declared fine dust problems as a 'social disaster' in March 2019 and public schools require air purifiers and fine dust meters.

For students, the best way to reduce the damage caused by fine dust is to do nothing except control outdoor activities and wear masks. However, many students are reluctant to wear masks because they overlook the importance of wearing masks or are uncomfortable. Fine dust response education is needed to protect themselves in a high concentration of fine dust. The easiest and most accessible method of education is visual education through video or media. For younger lower grade students, it may also be helpful to send information to parents by sending home correspondence from schools or public agencies.

Activity Rating: \* Falling Behind

## Action Alert Message:

*Dear Ministry of Education,*

*At present, there is a lack of absolute education time for the environment and no common education on climate change. Former UN Secretary-General Ban Ki-moon also highlighted the need for curriculum revisions in November at the Global Leaders Forum, saying early education on environmental issues is necessary. Climate change education is now a necessity, not a choice. In cooperation with the Ministry of Environment, please implement an education program to raise citizens who can achieve 'environmental literacy'.*

### Contact

Ministry of Education  
Government Complex-Sejong, 11,  
Doum 6-Ro, Sejong-si, 30103, Republic of Korea

### Learn More:

#### ***Education Program List:***

International Climate and Environment Center  
<https://www.climateaction-korea.eu/actions/education-program-on-climate-change-tailored-to-regional-dynamics/>

Asia Climate Change Education Center (ACCEC)  
[http://www.jeju-accec.com/pages\\_e.php?p=5\\_1\\_1\\_1](http://www.jeju-accec.com/pages_e.php?p=5_1_1_1)

Korea Research Institute on Climate Change (KRIC)  
<http://www.kric.re.kr/assets/comn/en/html/business/education.html>

### **VIDEO:**

Climate Change Education Project in Elementary School  
[https://youtu.be/\\_C21znpJzus](https://youtu.be/_C21znpJzus)

EBS Documentary: 'Environmental lessons you didn't know so far'  
(A documentary about an environmental education recently conducted in middle and high schools)  
<https://youtu.be/WaNz0SJLYiE>

Save the Earth! (Pollution prevention animation)  
<https://youtu.be/gYN4gwDLIOA>

The Earth Hurts! (Environmental Fairy Tale animation)  
<https://youtu.be/QRXHTOgTuY8>

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<https://news.bloombergenvironment.com/environment-and-energy/south-korea-declares-social-disaster-over-fine-dust-in-air>

*This Post was submitted by Climate Scorecard South Korea Country Manager Ellie Jimin Kim.*

## **Spain**

### **Spain mandates climate change curriculum at primary and secondary school level**

Spain's Ministry for Ecological Transition has made a specific effort to educate upcoming generations on the impacts of climate change as well as mitigation efforts to curb these same effects. The Ministry, known as MITECO, has taken charge of mandating the national climate change curriculum in the primary and secondary public-school systems. According to two laws put into effect during 2014, 126-2014 and 1105-2014, respectively, basic climate change curriculum is to be expressly included in the three pillar areas of Applied Sciences, Geography, and Geology, as well as in other courses such as Ethics, Scientific Culture, and Environmental Science. Some of the major themes studied include climate, hydrography, natural vegetation, and graphic content about weather and climate.

The current Minister of Education, Isabel Celaá, has been in her position since June 2018 and has actively advocated for scientific research-based education. This is particularly important for climate change and speaks well for her ministry on the matter. The aforementioned programs, however, were long in effect before Celaá came into office, creating an easy pathway for continued growth and development in the area.

The programs have proven to be especially useful as they are things that children can do in the home and share with their family, creating an impact that extends further than the individual level, now translated to the household level. Whether these actions are extended into neighborhoods and overarching communities is unknown. Nonetheless, as research shows, the more people that know about these issues, the more likely they are to share this knowledge with others either through word of mouth or physical action, effectively diffusing the information into the necessary channels for regional and national change.

With the recent COP hosted in Madrid, a lot of attention has been put on climate change mitigation efforts and has also created momentum for a strong start for the new decade of 2020 and beyond. Hopefully, and despite the lack of discernable climate policy agreement at this year's conference, Spain's role as COP25 host will incite further public climate change education programs to be created.

For more information and resources, visit MITECO's education page [here](#).

### Activity Rating: \*\*\*\* Moving Ahead

Spain is clearly aware of the problems they face, as well as the solutions needed to work toward them. As younger generations are increasingly involved in climate movements, especially in Europe, primary and secondary educational programs focused on climate change are expected to expand, respectively.

### Action Alert Message:

Please send the following message to the policymaker below, to incite helpful action on the part of the Spanish citizens:

*Dear Ms. Celaá,*

*Among other important educational advances, I would like to thank you for your work with Spain's climate change education program. While the programs were already instated in 2014, it is important to continue monitoring and thinking of ways to improve the curriculum. With the recent COP25, especially concerning younger generations' contributions to the COP and the climate arena in general, this is the perfect time to further tweak the education program. Piggybacking off the current high energy in the region is key to pushing climate-related policy forward, including education policy.*

### Contact

Ministra Isabel Celaá  
Ministerio de Educación y Formación Profesional  
Calle Alcalá, 34, Madrid 28014.  
[prensa@educacion.gob.es](mailto:prensa@educacion.gob.es)

+34 91 701 80 98

*This Post was submitted by Climate Scorecard Spain Country Manager Samantha Pettigrew.*

### **Actividad destacada: Educación sobre el cambio climático en España**

*El Ministerio para la Transición Ecológica de España ha hecho un esfuerzo específico para educar a las próximas generaciones sobre los impactos del cambio climático, así como los esfuerzos de mitigación para frenar estos mismos efectos. El Ministerio, conocido como MITECO, se ha encargado de ordenar el plan de estudios nacional sobre el cambio climático en los sistemas de escuelas públicas primarias y secundarias. De acuerdo con las dos leyes puestas en vigencia durante el año 2014, Decreto 126-2014 y Decreto 1105-2014, respectivamente, el plan de estudio general sobre el cambio climático se incluirá expresamente en los tres pilares de ciencias aplicadas, geografía y geología, así como en otros cursos como la ética, la cultura científica y las ciencias ambientales. Algunos de los temas de estudio principales incluyen el clima, hidrografía, vegetación natural y contenido gráfico sobre el tiempo y clima.*

*La Ministra de Educación, Isabel Celaá, quien ha estado en su cargo desde junio de 2018, ha apoyado activamente la existencia de la investigación científica. Este tema tiene una mayor importancia para el cambio climático y habla bien por su ministerio al respecto. Sin embargo, los programas mencionados empezaron mucho antes de que la Sra. Celaá asumiera el cargo, creando una vía fácil para el crecimiento y desarrollo continuo en el área.*

*Los programas han tenido éxito en demostrar su utilidad, ya que muchas son cosas que los niños pueden hacer en el hogar y compartir con su familia, creando un impacto que se extiende más allá del nivel individual, ya traducido al hogar para compartir. Se desconoce si estas acciones se extienden a vecindarios y comunidades generales. Sin embargo, como se demuestra la investigación, cuantas más personas tengan conocimiento de estos problemas, más probabilidades tendrán de compartir este conocimiento con otros, ya sea por boca a boca o mediante acciones presenciales, difundiendo efectivamente la información en los canales necesarios para el cambio regional y nacional.*

*Con el COP organizada en Madrid recién terminado, se ha dado la oportunidad para darle mucha atención a los esfuerzos de mitigación del cambio climático. También ha creado un impulso para un comienzo sólido para la nueva década de 2020 y más allá. Con suerte, y a pesar de la falta de un acuerdo discernible de política de cambio climático en la conferencia de este año, ojalá el papel de España como anfitrión de la COP25 incite a la creación de más programas públicos de educación sobre el cambio climático.*

*Para obtener más información y recursos, visite la página de educación de MITECO [aquí](#).*

### **Calificación de la actividad: Avanzando**

*España es claramente consciente de los problemas que enfrenta, así como de las soluciones necesarias para resolverlos. A medida que las generaciones más jóvenes participan cada vez más en los movimientos climáticos, especialmente en Europa, se espera que los programas educativos primarios y secundarios centrados en el cambio climático se expanden, respectivamente.*

### **Tomar Acción:**

*Envíe el siguiente mensaje al político a continuación, para incitar acciones por parte de los ciudadanos españoles:*

*Estimada Sra. Celaá:*

*Entre otros avances educativos importantes, me gustaría agradecerle por su trabajo con el programa de educación del cambio climático para su país. Si bien los programas ya se instalaron en 2014, es importante continuar de monitorear y pensar en formas de mejorar el plan de estudios. Con el COP25 recién terminado, especialmente con respecto a las contribuciones de las generaciones jóvenes a la COP y al escenario climático en general, ahora es el momento perfecto para modificar aún más el programa educativo. Aprovechar la alta energía actual en la región es clave para impulsar la política relacionada con el clima, incluida la política educativa.*

**Envíe el mensaje de alerta de acción a:**

*Ministra Isabel Celaá*

*Ministerio de Educación y Formación Profesional*

*Calle Alcalá, 34, Madrid 28014.*

*prensa@educacion.gob.es*

*+34 91 701 80 98*

## Thailand

### **Eco-Schools an important climate-based education program in Thailand**

During the year 2018 the “Eco-Schools” learning program was launched in Thailand. The “Eco-Schools” program was launched by WWF-Thailand and IKEA Thailand. Under this program, 21 schools across Thailand in Bangkok, Samut Prakarn, Nonthaburi, and Phuket have joined. To recognize the best performing schools for excellence in environmental education, Eco-School awards granting ceremony and prize distributions were hosted where top 3 schools in Thailand were awarded. The three schools have also received the Eco-Schools Green Flag Award. The schools include Klongratumratutit School, Rattanakosin Sompotch Bang Khen School and

Ritthinarongron School. Furthermore, the Eco-Schools Program in Thailand offer “a framework for learning and action around nine topics- biodiversity, energy, global citizenship, health and well-being, school grounds, transportation, climate change, waste management and water resources.”

The core objective of the Eco-Schools Program in Thailand is “to educate sustainable environmental management in school, to motivate children’s learning progress through school’s environmental development activities, and to improve analytical thinking, problem-solving, teamwork, and leadership skills”. The Eco-Schools Programs aims to “help enhance student’s active learning and build up strong participation for school development.”

Another core objective of the Eco-Schools Program is to enhance climate change education amongst the students. With respect to climate change education in Thailand, eco-schools provide learning curriculums, in which the students are equipped with research and project-based opportunities in the field of climate change. Eco-Schools ensure that students acquire in-depth knowledge about climate change through in-class simulations, field-based practical activities and through the usage of climate friendly technologies in schools. In addition, the eco-schools program in Thailand is facilitating and promoting climate education curriculums and initiatives through which, students can be proactive in mitigating climate change. Finally, climate education curriculums provided by the Eco-Schools in Thailand in-turn focuses on different topics like climate change vulnerability and resilience in Thailand, climate change adaptation and mitigation measures in Thailand, along with the scope of climate change in the national and global scale.

With respect to the immense success of the Eco-Schools program in Thailand, Mr. Gordon Congdon, Conservation Program Manager of WWF-Thailand stated, “This is the second year that WWF-Thailand represents the Foundation for Environmental Education (FEE) to operate Eco-Schools programme in Thailand. And this year, there are 3 schools recognized for excellence in environmental education and receiving the Eco-Schools Green Flag Award, which shows their progress in environmental management. Most of all, the students leading the program can also practice project management skill to prepare to be responsible and protect our world’s natural resources and environment in the future”. Similarly, Mr. Lars Svensson, Sustainability & Communication Director, IKEA Southeast Asia commented about the Eco-Schools Program in Thailand by saying “Apart from the schools receiving the Eco-Schools Green Flag Award, it is a pleasure that many other schools were also recognized the Silver Award and Bronze Award, reflecting their potential in environmental education”. Ms. Sutthawee Laowkae, student from Rattanakosin Sompotch Bang Khen School, commented about the Eco-Schools Program by saying “At first, it was not easy. The problem of garbage is close to us but we have to be creative to solve it and 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 help us to inform this issue like my teacher in Art & Music class composed a new song to raise awareness of the student about waste segregation. The success is our pride; now we know we can do it and we will maintain it for long”.

For more information about the Eco-Schools Program in Thailand, please visit:  
<https://www.ecoschools.global/news-stories/2018/6/21/thai-schools-reached-the-global-standard-for-environmental-education>

Further information about Eco-Schools Program in Thailand can be accessed from:  
[http://www.wwf.or.th/en/project\\_in\\_thailand/eco\\_schools\\_programme/](http://www.wwf.or.th/en/project_in_thailand/eco_schools_programme/)

### Activity Rating: \*\*\* Right Direction

The Eco-Schools Program in Thailand is certainly a step in the right direction and it is a significant step for enhancing climate-based learning curriculums in schools across the country. The Program in-turn increases student's active involvement for addressing climate change issues in the country. Most importantly, the Eco-Schools Program equips Thai school students with the necessary skills, exposure and knowledge so that they can be well prepared to tackle the climate change issues in the country more effectively.

### Action Alert Message:

To encourage and promote the growth of the Eco-Schools Program in Thailand, you can send the following action alert message to Mr. Nataphol Teepsuwan, the Minister of Education, Thailand:

*We congratulate you and the Government of Thailand for collaborating with WWF-Thailand and IKEA Thailand to facilitate the Eco-Schools Project in the country. The Eco-Schools Project is certainly vital for enhancing the growth of climate-based learning curriculums in the country. In order to continue with the expansion of Eco-Schools Program in Thailand, your role will be critical. As a prominent member of the Ministry of Education, Thailand, I kindly request you to consider two recommendations for expanding Eco-Schools Project in Thailand. One recommendation is to facilitate regular Eco-Schools awareness raising workshops in different schools across Thailand. The increased awareness will allow more schools to enroll and join the Eco-Schools Program. Finally, another recommendation is to allocate specific funding for Eco-Schools Program. Funding allocated to the Program will help in implementing more Eco-School curriculums in the country.*

### Contact

Mr. Nataphol Teepsuwan  
Minister of Education, Thailand  
139, Ratchadamnoen Nok Rd, Dusit  
Bangkok 10300, Thailand  
Phone: +662-280-0306  
Email: [website@moe.go.th](mailto:website@moe.go.th)

For more information please contact Climate Scorecard Thailand Country Manager Neebir Banerjee: [Neebir@climatescorecard.org](mailto:Neebir@climatescorecard.org) or [neebirban@yahoo.com](mailto:neebirban@yahoo.com).

## Turkey

### **Climate education is taught at private schools and through the Eco-Schools movement**

Republic of Turkey does not mandate climate change education as part of its primary or secondary school curriculum. However, some private schools have been organizing awareness-raising activities for children. For example, 32 thousand students from 40 schools affiliated to the Turkish Education Association (TED) participated in the global climate strike for a livable world and a clean future.

Turkey is involved in the Eco-Schools programme which is an opportunity for schools to participate its all-inclusive approach involving students, teachers and local communities to improve their environmental footprint for a more sustainable and responsible school environment. Eco-Schools provides schools with a guiding program on environmental education. The school can be awarded with a Green Flag if its students achieve outstanding success.. The Green Flag is an internationally recognized and respected eco-label symbolizing an environmentally sound school.

In the 2018-2019 academic year, schools from 47 provinces applied for the Green Flag, and as a result of the examinations-school visits, 445 more schools received the Green Flag. At the end of the 2018-2019 academic year, number of schools with Green Flag in Turkey increased to 814.

Apart from that, many other NGOs have been organizing educational events. The TEMA Foundation (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats) has volunteers training on climate change.

Turkish schools also can participate in the Think Clean Green Schools Project, which is supported by the Presidency. Topics related to energy saving, environmental protection, water saving methods, climate change, energy types, renewable energy, recycling are discussed.

### **Activity Rating: \* Falling Behind**

Since the start of the Friday protests, students in Turkey have not been able to participate in almost any action. This can be due to the fact that the climate crisis was not included in the curriculum of public schools and not discussed in the classrooms. Although many private schools have informed their students about the Friday protests and encouraged students to

take action against climate change, the participation of young people has been less than expected.

### Action Alert Message:

*Dear Mr. Selcuk,*

*The main reason for low participation of students in student climate actions is that young people no longer see themselves as part of their environment and as part of the World. When it comes to education, it is very important that children should grow up with a global vision. Considering the national and global importance of the topic, subjects under climate change and sustainable living should be a compulsory topic in the curriculum. Students also should be encouraged to participate in community environmental efforts, such as waste cleanups.*

#### **Contact**

The Ministry of National Education

Contact Person: Ziya Selçuk

Phone: +90 312 4132680

#### **Learn More:**

<https://www.ecoschools.global/national-offices/>

[http://www.tema.org.tr/web\\_14966-2\\_2/index.aspx](http://www.tema.org.tr/web_14966-2_2/index.aspx)

*This Post was submitted by Climate Scorecard Turkey Country Manager Ozlem Duyan.*

## United Kingdom

### **Outstanding Model Programs in Scotland and North of Tyne**

The UK Education System is based upon the National Curriculum; a set of public standards that every school must oblige by. The Curriculum differs for each school year, and is divided by Key Stages, with the youngest students being in Key Stage 1. There is currently no obligation for Key Stage 1 or Key Stage 2 students to study Climate Change. Instead, they look at the uses of different materials and they begin to have an understanding of natural habitats. In Key Stage 3, a discussion begins on the effects of CO<sub>2</sub> on the Climate, and later in Key Stage 4 the anthropogenic causes of Climate Change are studied. For reference, Key Stage 4 is aimed at students who are between 14-16 years old. It is important that Climate Change is in the curriculum, but there is definitely room to introduce elements of Climate Change Action from a younger age. For example, when looking at different materials, the dangers of plastics could be studied to encourage sustainable behavior from a young age.

Outside of the public sector, climate-learning programs are being introduced in the UK by private organizations in the third sector, such as by WWF or SEEd. These programs can help deliver the resources necessary for teachers to understand the issues and how they can be incorporated into the national curriculum. In particular, Oxfam has a learning program aimed at 7-11 year olds that explores climate change through tools like Consequence Wheels, assessing the impact community-level actions have on the planet. This type of learning enables children to understand how they can have a greater impact on the world around them and helps to develop an understanding of climate change from an earlier age.

A region in England called North of Tyne has taken a stance on the issue of climate education by ensuring that every school in the area, including both secondary and primary schools, has a teacher with accreditation from the *United Nations Climate Change Teacher Academy*. The Academy focuses on Climate Change impacts across a range of disciplines and looks at mitigation and adaptation measures, so in this region students will likely have a more comprehensive understanding of Climate Change across the board with an equal education for every student in the region. In order for the region to be able to do this they first had to declare a climate emergency, highlighting the benefits of the climate emergency discourse in creating greater acceptance for greater action. Although not mandatory, other teachers have also been voluntarily attending the academy across the UK with the support of *Harwood Education*, a company that delivers Climate Change training but is offering free support to teachers in the UK. Harwood Education also provides an online forum where teachers can share their lesson plans and learn from one another. This signifies an increasing call for climate education.

In Scotland this has gone one step further, with the Scottish Parliament maintaining that children should have the right to learn about sustainable politics and climate change, using an entitlements-based argument. They are trying to take on a whole systems approach to incorporate Climate Change into each discipline through a policy called Learning for Sustainability that helps to develop the skills and values necessary for a sustainable lifestyle. This includes a strategic plan for schools to adapt to recommendations by 2030. The recommendations include education infrastructure, such as school grounds, also being compatible with Learning for Sustainability values. The core value is that of Equality. Scotland is trying to make sure that every child has an equal right to live sustainably in a more sustainable world. This type of policy needs to be mirrored across the rest of the UK to provide similar advantages to all children. The UK needs to embed a multidisciplinary approach to climate change with a focus on sustainability skills into the national curriculum so that every child has the opportunity to learn about an issue that will be vital across all industries in the future. At the moment, the system we have is inadequate, and reaffirms the inequality of school standards in the UK.

**Activity Rating: \*\* Standing Still**

**Action Alert Message:**

Please send the following message to the policymaker(s) below.

*Dear Mr. Williamson,*

*After evaluating the National Curriculum from Key Stage 1 through to Key Stage 4, I believe there is a need to place a greater emphasis on Climate Change in Key Stages 1 and 2. It is important children have an understanding of their community within a greater global context, realizing their power for change in the world. By introducing consequence cycles from an early age, children can learn how to make a difference with their actions and this will encourage sustainable behaviour in the future, before unsustainable habits occur.*

*For greater information on the type of learning we should see, I recommend seeing the Oxfam Climate Change learning platforms, which specifically targets children aged 7-11 years old. The whole of the UK should view Scotland's progress as a model in this endeavor to make the right to learn about climate change a fundamental entitlement for children. This will put all UK children at a similar advantage when learning about sustainability and the skills required to have sustainable lives. I believe this needs to begin by amending the national curriculum to place a greater emphasis on Climate Change from a young age, and sustainable behavioral changes throughout.*

*Thank you for taking the time to consider these actions.*

**Contact**

**Secretary of State for Education**

**Name: Gavin Williamson**

**Address: Jubilee House, 59 Wolverhampton Road, Codsall, South Staffordshire, WV8 1PL**

**Telephone: 01902 846 616**

**E-mail: [gavin@gavinwilliamson.org](mailto:gavin@gavinwilliamson.org)**

*This Post was submitted by Climate Scorecard Country Manager Zara Holden.*

## United States

### **States take the lead in requiring climate education, mainly in science classes**

The United States has no federally mandated climate change education requirements, because education standards are maintained by the states. However, there are some common standards adopted by large numbers of states, which include requirements to teach the science of climate change and how humans are contributing to it through the burning of fossil fuels.

Scientific American [reported last year](#) that 40 states required some form of climate education - with 19 states following the [Next Generation Science Standards](#) and 21 states following

standards based on “A Framework for K-12 Science Education.” The 10 remaining states have no formal requirements to teach the science of climate change, leaving it up to the discretion of the individual districts in many cases.

A survey published by the National Center for Science Education in [2016](#) found that climate change is taught in 75 percent of science classrooms in the U.S. - including such topics as the greenhouse effect, carbon cycle, severe consequences of climate change, and in many cases, practical solutions at the individual and political level. However, the survey also found that 30 percent of teachers in these classrooms also present politically motivated information doubting the scientific consensus that climate change is caused by human activities.

Finally, the survey found that many teachers are less proficient in the science of climate change than in other areas, and therefore prioritize less relevant sub-topics over more relevant ones. Additionally, fewer than half of all science teachers were aware of the scientific consensus on human-caused global warming.

To make up the gaps in climate change education across the country, many NGOs provide free resources to teachers and school districts to aid in creating curricula and lesson planning. These include the North American Association for Environmental Education and Climate Classroom (part of the Years of Living Dangerously project), among others.

The U.S. Department of Education highlights [Green Ribbon Schools](#) around the country for excellence in environmental and sustainability education. A 2019 recipient of the award was St. James Academy in Solana Beach, California. The school makes climate literacy and action a priority throughout many areas of education, not just in the science classroom. Among the school’s program to foster sustainable gardening and responsible energy use, the award emphasizes:

“St. James’ holistic and spiritual approach to environmental and sustainability education cuts across all STEM disciplines, as well as social studies, religion, and community service. Students study Pope Francis’ 2015 encyclical on climate and justice, *Laudato si’*: On Care for Our Common Home, in which the pope urged all people of faith to care for the Earth and the poor.”

Based on the 2016 NCSE survey, it is clear that more training for teachers is needed on the scientific consensus on the causes and consequences of climate change. In many classrooms, teachers are presenting climate change as a political issue with multiple sides and allowing doubt over the role of humans in causing global warming to pervade their students’ perceptions of the problem. This delays action and reduces the priority of the global climate emergency.

**Activity Rating: \*\*\* Right Direction**

While the education system in the U.S. is far from coordinated across states, it is clear that the quality and reach of climate-related instruction is increasing as more states adopt standards requiring science teachers to teach the science of global warming causes, consequences, and effects. However, further development is needed to better train teachers on the scientific consensus of global warming and to improve their proficiency in teaching scientific concepts.

Despite abject hostility on the part of the federal government to climate change research, education, and action, climate education at the state and district level has continued to improve due to the work of climate literacy NGOs and statewide education standards.

### Action Alert Message:

*Dear Secretary DeVos,*

*Climate change is an existential threat to the health, safety, and wellbeing of our children's lives, both now and in the future. We need to empower them with the facts about climate science so they can be more prepared for the coming climate change impacts and can make informed decisions in their daily lives and future voting choices.*

*Please expand funding for climate literacy training by providing grants to states for teacher training and curriculum development on the science of global warming.*

*Sincerely,  
[name]*

#### **Contact**

U.S. Secretary of Education Betsy DeVos  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202

*This Post was submitted by Climate Scorecard US Country Manager Stephanie Gagnon.*