



Press release

Munich, August 2, 2023

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Badin Borde Siemens Stiftung badin.borde@siemens-stiftung.org Earth Overshoot Day: Climate Change Education encourages responsible action to "Move the Date"

Today is Earth Overshoot Day, in 214 days in 2023, we have already devoured a year's worth of carbon, food, water, fiber, land, and timber. Our demand for natural resources and services has exceeded what our planet can regenerate this year. Changed consumption patterns could "Move the Date of Earth Overshoot Day" significantly. Raising awareness and knowledge lies at the heart to stimulate this transition. Siemens Stiftung, <u>Office for Climate Education</u> (OCE), and their partner organizations worldwide recognize the importance of education and training to make informed decisions and act to address climate change.

The ongoing heatwave and wildfires in southern Europe, Canada, and the USA as well as the torrential rains and floods in South Asia are just examples of how each year the global community has to brace up for freak weather conditions. Climate anomalies have brought science, technology, engineering, and math (STEM) subjects to the fore amongst younger generations – mobilizing millions of youths globally, asking the world to "unite behind science". Though an essential component of STEM education, climate change education demands a comprehensive understanding of scientific, mathematical, and technical principles, as well as an exploration of the diverse repercussions of climate change.

Education is a critical agent in addressing the issue of climate change as it encourages people to change their attitudes and behavior as well as develop necessary skills and competences. Particularly starting at their most impressionable age, children can be taught the impact of global warming and learn how to adapt to climate change in schools. To unpack this multidisciplinary field for teachers and students, Siemens Stiftung has formulated the "<u>STEM + Climate</u>" approach that empowers young people to engage in shaping a sustainable future actively.

"Earth Overshoot Day reminds us about our collective responsibility to act now! Understanding the causes and effects of climate change is the first step in shifting mindsets, establishing new ways of limiting its impact and adapting to its unavoidable repercussions. This is why climate change education is more important now than ever before", says Dr. Nina Smidt, Managing Director and Spokesperson of the Board of Directors at Siemens Stiftung.

Along with our partners, the approach has been piloted through three complementary steps in climate-vulnerable regions in Latin America:

- OCE and Siemens Stiftung conduct regular teacher training workshops for STEM school teachers to unravel the complexities of climate change both from a scientific and pedagogical point of view. Teachers learn hands-on approaches to carry out real-world experiments with students and test predictions inside and outside classrooms and gather conclusions.
- Access to OCE's high quality and free <u>Open Educational Resources</u> (OER) on climate change and its impacts, as well as solutions. Hosted on an open platform, the resources can be easily adapted for local contexts and downloaded in areas with low to no internet connectivity.

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Phone: +49 / 89 / 54 04 87-0 Fax: +49 / 89 / 54 04 87-4 40 • Encouraging partnerships and networks both at regional and international levels along with organizing conferences in collaboration with academia, civil society, and policymakers to integrate climate change education into national school curricula.

David Wilgenbus, Director of OCE, explains: "Climate change education demands a holistic and cross-disciplinary approach. Our experts train teachers by providing climate change education materials based on the IPCC (Intergovernmental Panel on Climate Change) reports. Teachers also receive substantial professional development opportunities, including training sessions and conferences. They enhance their knowledge through collaborative peer exchange and best practice exchanges on a global level."

Apart from the climate change education resources available on the OCE platform, Siemens Stiftung also hosts dynamic collection of OER on its <u>Media</u> <u>Portal</u> dedicated to climate change. The foundation has been recognized for its exceptional quality in this area, earning the covetous German <u>Comenius EduMedia</u> Seal and Medal for its comprehensive <u>climate change series</u>. This series, comprises diverse media packages, providing educators with high-quality, multimedia materials to eqip lower and upper secondary school students with the vital knowledge they need on this complex topic. The pedagogical resources cover a wide range of topics: starting with the anthropogenic greenhouse effect and the critical role of greenhouse gases, impacts such as ocean acidification, extreme weather events, and ways to adapt to the consequences of climate change.

About Office for Climate Education (OCE)

The OCE was created in 2018 in response to Article 12 of the Paris Agreement, highlighting the importance of climate change education. Under the auspices of UNESCO and the Foundation La main à la pâte, the OCE is also an observer organization to the Intergovernmental Panel on Climate Change (IPCC), thus placing the Office in a unique position to mobilize both its scientific and educational expertise to contribute to the Sustainable Development Goals. The OCE supports education systems around the world to address the challenges imposed by climate change, through developing educational resources rooted in scientific and social research on climate change that are multilingual, free-of-charge and open-licensed; providing professional development to primary and secondary school teachers; implementing operational climate change education (CCE) projects; and supporting the development of CCE policy. oce.global/en

Siemens Stiftung

As a non-profit foundation, Siemens Stiftung is committed to sustainable social development. It focuses on three topic areas: Access to Essential Services, Connected Societies, and Climate & Sustainability. Adopting a proactive approach, it shapes the transformations required to tackle these challenges. By working with partners from the fields of Education, Social Entrepreneurship, and Arts & Culture, Siemens Stiftung strengthens collective learning and locally based, sustainable structures. Its projects and networks focus on Africa, Europe, and Latin America. siemens-stiftung.org/en