



QUICK TIPS

# INTEGRATING THE ENVIRONMENT AND CLIMATE CHANGE IN THE EDUCATION SECTOR

Climate change is already disrupting education systems around the world. Extreme weather events and epidemic outbreaks can lead to school closures, loss of livelihoods and mass migration. This results in significant loss of learning and raises the risk of children permanently leaving school, particularly girls and children from vulnerable families. Environmental degradation decreases agricultural productivity, pushing children into work, keeping them away from school, and increasing malnutrition; and early exposure to pollution can severely affect children's health and ability to learn.

Yet, education also has a tremendous transformative potential: it can help raise awareness about environmental issues and the impact of climate change; it helps build key competences, skills and knowledge, enabling young people to grasp new job opportunities in the transformation towards a green economy; and it facilitates societal change towards more sustainable production and consumption patterns. This objective is captured in SDG target 4.7: “by 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles [...]”.



Leveraging the potential of education in the field of environment and climate change requires action and investment at different levels, including curriculum development, teacher training and building sustainable school infrastructure

Tackling climate change and improving environmental protection requires **increased awareness and new skills sets** among children, education stakeholders, policy makers, academics and business leaders through a **lifelong learning approach**. EU support can focus on:

- ▶ **Promoting the integration of environmental protection and climate change** (including disaster risk reduction) **in the curriculum** from early childhood, primary and secondary through to vocational and higher education, across a broad set of subjects.
- ▶ Supporting the development of **Science, Technology, Engineering and Mathematics (STEM)** programmes, to build national and local knowledge and capacity on climate change and environment management that are relevant to local circumstances and can be applied across all sectors of the economy.
- ▶ **Ensuring higher education and technical and vocational education and training (TVET)** interventions develop the knowledge and skills needed by employers and policy makers. New skill sets are needed in a broad range of sectors, not only those directly linked to environment and climate change like forestry, waste management or renewable energy, but also those that can contribute most to sustainability and climate action such as agriculture, energy, architecture, infrastructure, urban planning, circular economy, banking and insurance. This can include opportunities for re-training and continuous professional development in targeted areas of the labour market as well as open up opportunities for new (green) jobs.
- ▶ **Enhancing social and emotional learning and 21st century skills**, including problem solving, critical thinking, communication, creativity, inter-disciplinarity and collaboration, in order to trigger behaviour change.

Strengthening environmental sustainability and the resilience of education systems to climate risks requires building sustainable school infrastructure. The EU can support:

- ▶ Planning new education infrastructure in **locations that limit risks**, avoiding areas prone to flooding and landslides and promote sustainable mobility, through proximity and connection to public transport networks.
- ▶ Relying on **'green' design** and integrating sustainable and low-cost methods (local building materials, natural ventilation, rainwater harvesting, composting and clean cookstoves), introducing more efficient lighting renewable energy and insulation.
- ▶ Promoting green procurement standards when tendering for **school construction and renovation** works and equipment (e.g. use of locally sourced sustainable wood). Educational infrastructure needs to be climate- and disaster-proof, using recognised building standards.
- ▶ Promoting **environmental health** in education facilities, including to contain infectious diseases and epidemics, by: promoting hygiene; developing well-ventilated (and where possible larger) classrooms; avoiding toxic building materials; providing access to clean water; supporting waste management; and developing safe and gender-segregated sanitation facilities (that favour girls' attendance).



Education policies need to be framed in a broader strategy and coherent vision on the role of education in the field of environment and climate change and which are in line with partner countries' global commitments

When engaging in dialogue and designing policies and programmes, it is important to check if and how the education sector is included in and contributes to **Nationally Determined Contributions** and National Biodiversity Strategies and/or Action Plans. Verify how proposed programme activities contribute to the **Rio Conventions** related to climate change mitigation and adaptation, biodiversity and combating desertification. See [Guidance on activities in the education sector that qualify for Rio markers](#).

The EU can support:

- ▶ Promoting the development of a clear vision and costed strategies within **Education Sector plans and budgets**, to address the impact of environmental degradation and climate change. Encourage the integration of environment and climate change into **education sector analysis**, research and risk assessments (e.g. impact on access, attendance and learning), identifying the groups/regions most at risk, including gender dimensions, and the barriers to change. Strategic Environmental Assessments (SEAs) can support this work.
- ▶ Strengthening the **education system resilience and capacity** to respond to natural disasters and the impacts of climate change (e.g. school infrastructure planning, district contingency plans, flexible calendars and timing of examinations, distance learning options) and migration (e.g. inclusion in host community, language of instruction).
- ▶ Ensuring **results frameworks and indicators** reflect the focus on relevant skills and knowledge, the changes needed in the curriculum and teaching practice, and contributions to broader behaviour change. This may require strengthening data systems, use of qualitative methods, and longer-term studies.
- ▶ Develop **partnerships** with private and public sector employers to understand their needs for skills, develop internships, and improve labour market readiness. Include the private sector, civil society and media in consultations, to ensure relevance, build awareness and contribute to behaviour change that actively promotes long term environmental and climate sustainability.
- ▶ Promoting **girls education and gender equality** to reduce population growth, the effect of which should in turn reduce carbon emissions and pressure on the environment, while helping more women into climate-relevant decision-making positions and green sector jobs.



Further information and support:

- ▶ [Global Education Monitoring Report Blog on Education: a powerful response to climate change](#)
- ▶ [Global Partnership for Education Blog on climate, environment and education](#)
- ▶ [UNESCO. Global Education Monitoring Report \(2016\): Education for people and planet](#)
- ▶ [GIZ paper on "Environment Education and Communication and the Agenda 2030"](#)
- ▶ [DFID Topic guide on education, environment and climate change](#)

\* All documents are available on [capacity4dev.eu](http://capacity4dev.eu) (public groups: "[Environment, Climate Change and Green Economy](#)" and "[Education and Development](#)")

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