

Submission on the SBI60 Expert Dialogue on Children and Climate Change | The Monitoring and Evaluating Climate Communication and Education Project

This submission responds to the call for inputs regarding the planned Expert Dialogue on Children and Climate Change as per decision 1/CMA.5 paragraph 182 on the disproportionate impacts of climate change on children and relevant policy solutions. The submission overviews relevant MECCE Project work on quality climate change communication and education (CCE), which is known as Action for Climate Empowerment under the UNFCCC process, including with children and youth. This work includes:

- Global indicators of primary and secondary education policy, which provide information on the extent of climate change integration in curricula for up to 161 countries;
- Country profiles of national CCE/ACE activity, which includes information on policies related to climate change and children; and
- Case studies exploring quality CCE/ACE, which have implications on policies relating to the impacts of climate change on children.

We welcome the opportunity to elaborate further on this submission and are available to support Parties and the Secretariat during SBI60. Links to relevant MECCE Project resources and information are located at the end of this document.

About the MECCE Project

The Monitoring and Evaluating Climate Communication and Education (MECCE) Project (mecce.ca) is an international partnership focused on increasing the quantity and quality of climate communication and education (CCE) and action for climate empowerment (ACE) globally, including through developing case studies, datasets, and indicators of quality CCE/ACE around the world. The MECCE Project assembles over 100 Party and non-Party stakeholders under the leadership of Director Prof. Marcia McKenzie and a Steering Council including researchers and organisational team members. The UNFCCC, UNESCO, the IPCC, and UNESCO Global Education Monitoring (GEM) Report form the Project's Advisory Committee. The Project was initiated in 2020 to respond to the lack of CCE/ACE-related global benchmarks and targets available to support intergovernmental processes.

Global Indicators

The MECCE Project's global indicators provide national, regional, and global data to support benchmarking and progress tracking within and across aspects of CCE/ACE, including with children. The indicators and associated data are intended to be high-quality, research-informed, and open-access.

The Project has published a suite of [14 global indicators of quality CCE/ACE](#) to date, with another slate planned to be released for the upcoming SBI. Several of these indicators provide data on the extent of integration of climate change in national education policy at various levels of primary and secondary education. We are also exploring development of a composite indicator that would represent country progress across primary and secondary education. The Project's extensive database of nearly 1,400 curriculum documents from 85-161 countries in all 7 SDG regions includes National Curriculum Frameworks, as well as science and social science subject syllabi for grades 3, 6, and 9. The Project remains actively engaged in increasing this curriculum document database.

Table 1 outlines the MECCE Project's global indicators of CCE/ACE primary and secondary education policy, the type of data upon which they are based, the number of countries represented by the indicators, and the number of documents analyzed for the indicator.

Table 1. Global data and indicators of CCE/ACE primary and secondary education policy

Indicator Name	Data Type	Indicator Type	# of Countries	# of Documents
Integration of climate change in national curriculum policy	Keyword Analysis	Input	161	188
Integration of climate change in grade 9 science and social science curriculum	Keyword Analysis	Input	85	451
Integration of climate change in grade 6 science and social science curriculum	Keyword Analysis	Input	88	383
Integration of climate change in grade 3 science and social science curriculum	Keyword Analysis	Input	88	351

Case Studies

The MECCE Project funds in-depth [case studies](#) to improve understandings of quality CCE/ACE and its impacts. Identified through an annual [call for proposals](#), 10 case studies have been completed, another 9 will be completed by September 2024, and a third cohort is currently being selected through our [regional hubs](#) and [steering committee](#).

Several of the case studies explore education with children and many other case studies have relevance for policy solutions—both within and outside of the formal education system—to *help address the impacts of climate change on children*. Narratives and descriptions of all of the Project’s case studies are available on our [interactive data platform](#). Final reports from the first cohort of case studies may be found on our [digital library](#). A video summarizing key findings from across the case studies will be released in the coming months.

Table 2 shows the titles, locations, and descriptions of select relevant case studies (complete and in-progress).

Table 2. Titles, locations, and descriptions of case studies related to climate change and children

Case Study Title	Location	Description
Climate Change in General Education (in progress)	Senegal	This case study of and with the federal government provides an example of mainstreaming climate change into preschool, primary, and secondary education. This case study brings together different actors responsible for implementing public policies with the aim of strengthening holistic CCE in the country’s schools. The project maps interdisciplinary approaches to curriculum, diverse teaching practices, and key education stakeholders within and beyond government.
Futures-Building Through Dene Stewardship Camps (in progress)	Canada	This case study explores Indigenous land-based learning with youth in the Dënesųłíné Yatı – ʔedacho Kué Camp, which takes place within the Thaidene Nënë Indigenous Protected Area. During the camps, Indigenous youth learn skills for research and adaptation in a changing climate. Participants connect with their culture through harvesting, navigation, survival skills, and environmental monitoring led by Ni Hat’ni Dene guardians. The camp also integrates storytelling by Elders, games, and language learning.

Case Study Title	Location	Description
Global Challenges, Local Narratives in Non-formal Climate Education (complete)	South Africa	This case study focuses on the climate narratives of girls participating in a nonformal education program. The case study used a participatory approach to identify and answer their ‘Big Questions’ on climate change, such as: “Climate change impacts rich people differently: How does climate change impact people living in low-income communities?” The case study highlights the importance of shifting narratives away from Global North dominated discourses that shape how climate change is discussed. The importance and challenges of intergenerational engagement and youth voice are also explored. The girls propose that song, poetry, performance, and animation are powerful for understanding and inspiring climate action.
Teaching Forest Community Youth to Adapt to Climate Change (complete)	Indonesia	At a Madrasah on steep forest slopes in Indonesia, junior high students take part in CCE that is tailored for their community’s needs and values. Classes integrate religious and spiritual teachings and provide experiential learning on agroforestry, biodiversity, and climate change. Students also learn Indigenous knowledge, including how their ancestors cared for the environment, through Javanese wayang, a traditional form of storytelling through puppets made from plant materials.
The Whole-School Approach to Climate Change Education in Action (complete)	Argentina	This case study explores a whole-school approach to CCE and the importance of place-based pedagogy and experiential learning, in developing stewardship for and connection with the environment. Students, families, and the wider community built the off the grid in a new ‘earthship’ school out of recycled materials. Students participate in real-world project-based learning through engagement with the sustainable school building and the surrounding lagoon, which is a UNESCO-designated ‘biosphere reserve.’
Empowering Young Climate Leaders by Co-Creating Climate Education Practices (in progress)	United Kingdom	This ‘Teach the Teacher’ program is helping students engage their teachers in learning about quality CCE. The students participate in a peer-to-peer onboarding which provides them with the skills to deliver a professional development workshop for their teachers in their school. The program helps teachers deepen their understanding of CCE across all subjects, including the need to address climate justice and climate anxiety. The program helps students develop confidence, presentation skills, and leadership capacity.

Country Profiles

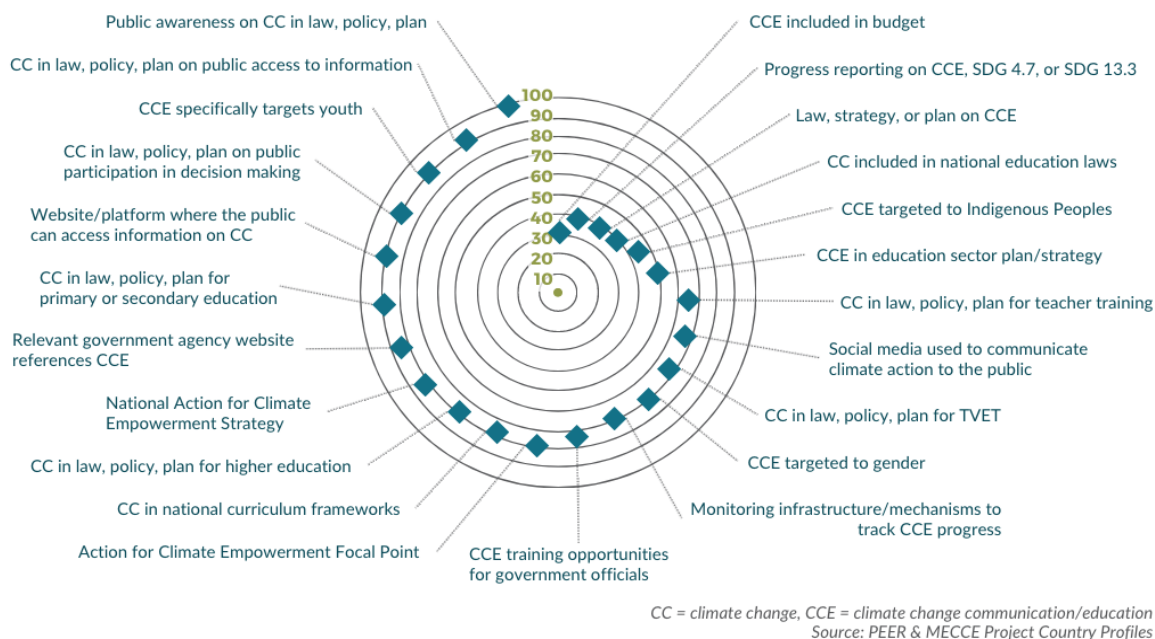
Our [country profiles of CCE/ACE](#), produced in partnership with the UNESCO GEM Report, represent another data type useful for tracking CCE/ACE progress, including in relation to children. Developed through a careful methodology using consistent search terms, the profiles summarize national level CCE/ACE activities in 80 countries, and include information about climate change and education policies the country. Specifically, the profiles overview:

- The country’s national CCE/ACE context, including climate change impacts; relevant laws, policies, and plans; and national budget allocated to CCE/ACE;
- Activities related to each of the six ACE elements included in UNFCCC processes; and
- Activities related to national CCE/ACE monitoring.

In total, the countries covered by the country profiles are home to 75% of the global population and include all levels of climate vulnerability, income/development, and SDG regions. The country profiles are validated by country experts, including National ACE Focal Points under the UNFCCC process. A [research brief](#) and [blog post](#) released at COP28 summarize key findings from these measures across the 80 country profiles.

The MECCE Project and the GEM Report have collaborated on a series of measures that map CCE/ACE activity across the country profiles. Several of these measures relate to climate change inclusion in education policies, as shown in Figure 1.

Figure 1. Percentage of countries with laws and policies related to CCE/ACE from the country profiles mapping



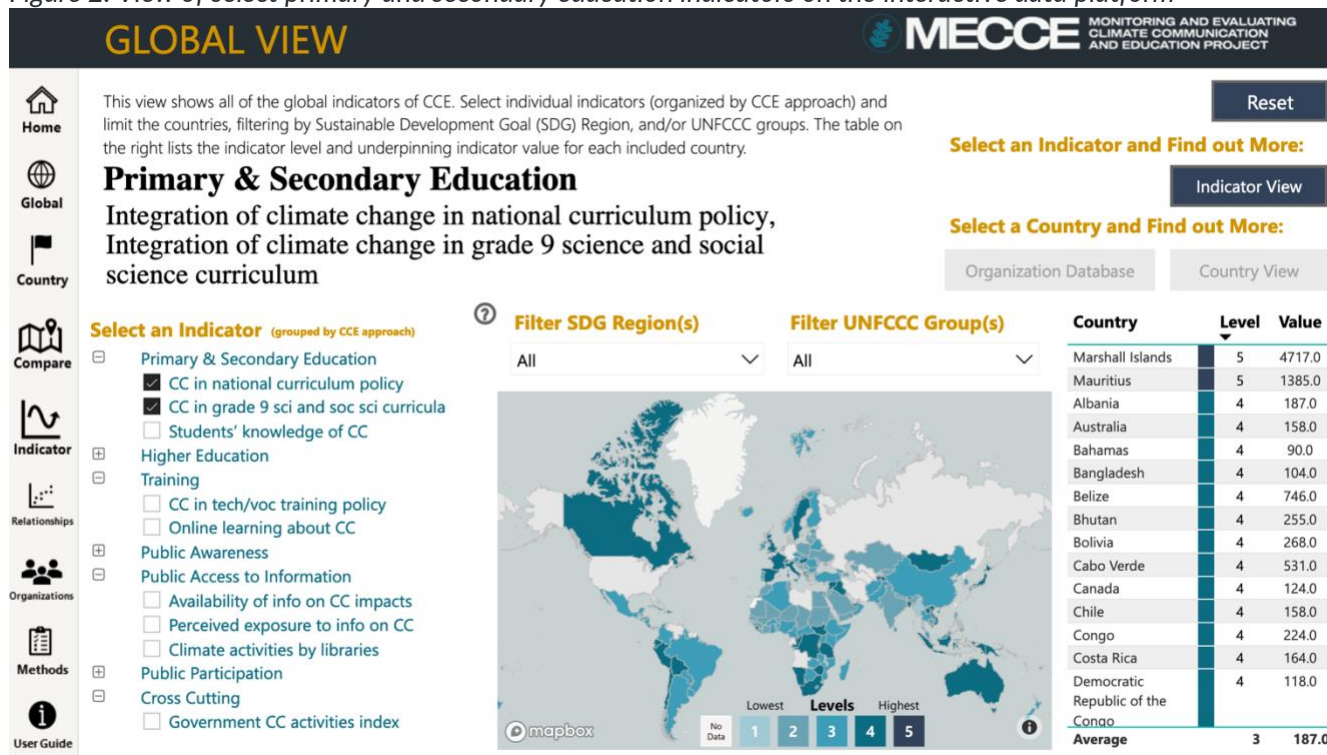
Interactive Data Platform

Developed in partnership with the University of Melbourne and Microsoft, the [interactive data platform](#) is a key tool to support decision-making and reporting related to CCE/ACE implementation. Users are able to analyze and visualize an unprecedented amount of global data on the extent and type of CCE/ACE provision in and across countries globally. All of the MECCE Project’s data, including the [global indicators](#), [country profiles](#), and [case studies](#) are available open-access on the platform.

The platform allows CCE/ACE stakeholders, including intergovernmental and country-level policymakers, researchers, and practitioners, to learn about how their own and other countries are implementing CCE/ACE in policy and practice. This supports the setting of country benchmarks and targets, and tracking and reporting of CCE/ACE progress. This includes through:

- Visualizing and analyzing the global indicators through global, region, and country views;
- Supporting peer learning via side-by-side visualizations of regional- and country level indicators;
- Allowing in-depth exploration of the relationships between CCE/ACE activities and variables such as country emissions, climate vulnerability, and economic characteristics; and
- Providing narrative and photographic data on quality CCE/ACE to provide contextual and in-depth information.

Figure 2. View of select primary and secondary education indicators on the interactive data platform



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