

Global Indicators of Climate Communication and Education / Action for Climate Empowerment | Possibilities for the UAE–Belém Work Programme on Indicators for the UAE Framework under the Global Goal on Adaptation

This submission by the Monitoring and Evaluating Climate Communication and Education (MECCE) Project responds to the call for inputs in decision 2/CMA5 paragraph 41 on the UAE Framework for Global Climate Resilience in relation to the UAE–Belém Work Programme on Indicators for the UAE Framework.

This submission overviews:

- The context of climate communication and education (CCE) and action for climate empowerment (ACE) in furthering the Global Goal on Adaptation.
- The MECCE Project's existing indicator work on quality CCE/ACE, which may be of interest to support progressing the UAE–Belém Work Programme on Indicators for the UAE Framework.

Context: Action for Climate Empowerment and the Global Goal on Adaptation

- Climate communication and education (CCE) is critical to achieving the targets outlined in paragraphs 9 and 10 of decision 2/CMA5.
- The importance of climate communication and education is recognized in paragraph 23 of decision 2/CMA5, which recognizes the importance of climate education to empower people to action.
- Any CCE-related indicators developed to support global adaptation could be aligned with the action for climate empowerment (ACE) workstream under the UNFCCC process.
- Measures and indicators of CCE/ACE have already been developed by various initiatives, including by the MECCE Project, and could form the basis of indicators developed under the Global Goal on Adaptation Work Programme.

Synergies with the MECCE Project's CCE/ACE Indicator Work

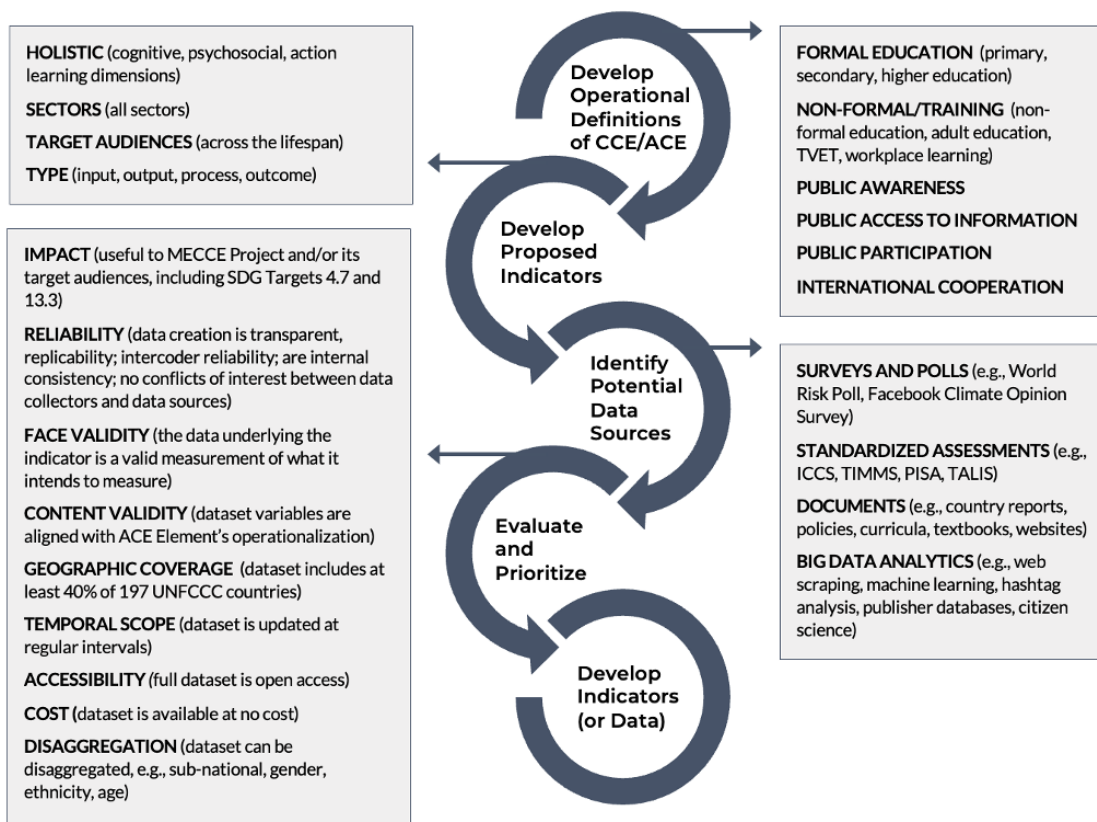
The Monitoring and Evaluating Climate Communication and Education (MECCE) Project (mecce.ca) is an international partnership focused on increasing the quantity and quality of climate communication and education (CCE) and action for climate empowerment (ACE) globally, including through developing global datasets and indicators for CCE/ACE.

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, and includes components of indicator development, country profiles, case studies, and broader knowledge mobilisation for impact.

Global Indicator Development

A suite of [14 global indicators of quality CCE/ACE](#) have been developed to date. These provide national, regional, and global data to support benchmarking and progress tracking within and across aspects of CCE/ACE. The indicators and associated data are intended to be high-quality, research-informed, and open-access. The indicators use both existing international datasets and datasets created by the Project, using a lifecycle approach to indicator development (see Figure 1).

Figure 1. The MECCE Project’s Lifecycle Approach to Indicator Development



The current set of global indicators can enable monitoring and reporting on how CCE/ACE is contributing to climate adaptation and climate resilience. Some examples include:

- The three indicators of formal education and training analyze adaptation keywords (e.g., adaptation, climate resilience, climate vulnerability) in national policies.
- An indicator of the availability of information on climate change impacts includes a measure of the availability of climate vulnerability information, which is critical to adaptation.
- A dataset constructed by the MECCE Project of thousands of organizations working on CCE/ACE includes many organizations focused on adaptation, and is expected to result in a new indicator in 2024.

Table 1 outlines the MECCE Project’s global CCE/ACE indicators, the type of data upon which they are based, the number of countries represented by the indicators, and the indicator’s connections to adaptation.

Table 1. The MECCE Project’s global indicators of CCE/ACE

Indicator Name	Data Type	Indicator Type	# of Countries	Connection to Adaptation
Primary/Secondary Education				
<i>Integration of climate change in national curriculum policy</i>	Keyword Analysis	Input	161	The keywords the indicator is based on include adaptation themes such as climate resilience, vulnerability, and adaptation.

<i>Integration of climate change in grade 9 science and social science curriculum</i>	Keyword Analysis	Input	85	The keywords the indicator is based on include adaptation themes such as climate resilience, vulnerability, and adaptation.
<i>Students' self-declared knowledge on climate change</i>	Student Assessment	Outcome	60	One of the questions used for this indicator addresses students' understanding of needs for adaptation due to impacts from climate change.
Higher Education				
<i>Extent of climate change focus in peer reviewed publications</i>	Publication Database	Output	196	An increasing portion of the publications included are focusing on adaptation over the underlying science and mitigation.
Training				
<i>Integration of climate change in technical/vocational training policy</i>	Keyword Analysis	Input	137	The keywords the indicator is based on include adaptation themes such as climate resilience, vulnerability, and adaptation.
<i>Completion of online UN courses about climate change</i>	Usage Statistics	Output	150	Many of the courses included in the database focus on climate adaptation.
Public Awareness				
<i>Perceived impact of climate change on future generations</i>	Survey	Outcome	103	Concern about impacts of climate change on future generations indicates a readiness to support and take adaptation measures.
<i>Perception of climate change as a serious threat</i>	Survey	Outcome	118	Acknowledging climate change as a serious threat relates to support for, and willingness to take, adaptation measures.
Public Access to Information				
<i>Availability of information on climate change impacts</i>	Multi-level desk research	Output	105	This includes a measure looking at the availability of climate vulnerability information, critical for adaptation.
<i>Public perception of frequency of exposure to climate change information</i>	Survey	Output	103	The main focus of climate change in the news is on adaptation-related events such as extreme storms.
<i>Extent that NGOs engage and inform the public about climate change</i>	Multi-level desk research	Process	195	This database includes the mission statements of organizations, which show that numerous organizations are focused on adaptation.
<i>Extent of climate activities organized by libraries & library associations</i>	Survey	Process	52	The activities described by the libraries in the survey include provision of guidance and resources on climate adaptation.
Public Participation				
<i>Adult willingness to participate in climate action</i>	Survey	Outcome	101	Advocating for political support and action on adaptation is a critical role for citizens.
Cross Cutting				
<i>Inclusion index of climate communication and education in national government activities</i>	Multi-level desk research	Output	79	This database captures numerous examples of education and communication activities focused on adaptation.

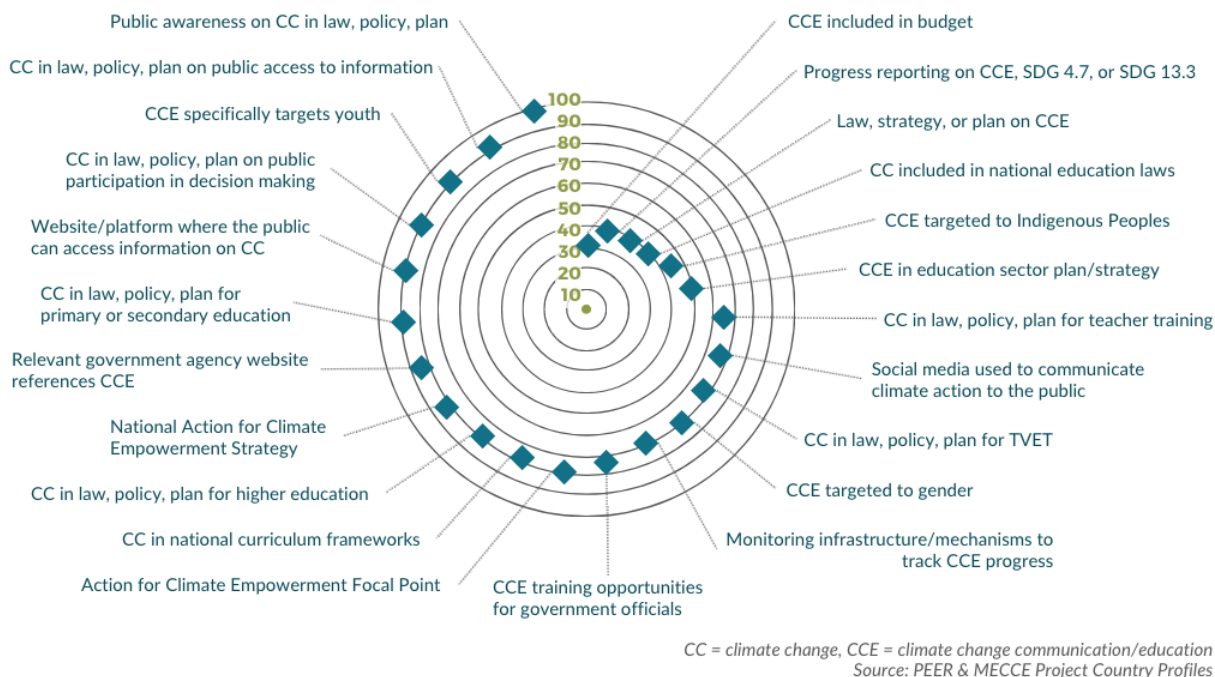
Country Profiles

Our [country profiles of CCE/ACE](#), produced in partnership with the UNESCO GEM Report, represent another data type useful for tracking CCE/ACE progress. 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 adaptation activities in 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
- 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. The MECCE Project and the GEM Report have collaborated on a series of measures that map out ACE activity across the country profiles (see Figure 2 below). A [research brief](#) and [blog post](#) released at COP28 summarize key findings from these measures across the 80 country profiles.

Figure 2. Percentage of countries with laws and policies related to CCE/ACE from the country profiles mapping



(Figure from UNESCO GEM Report & MECCE Project, 2023)

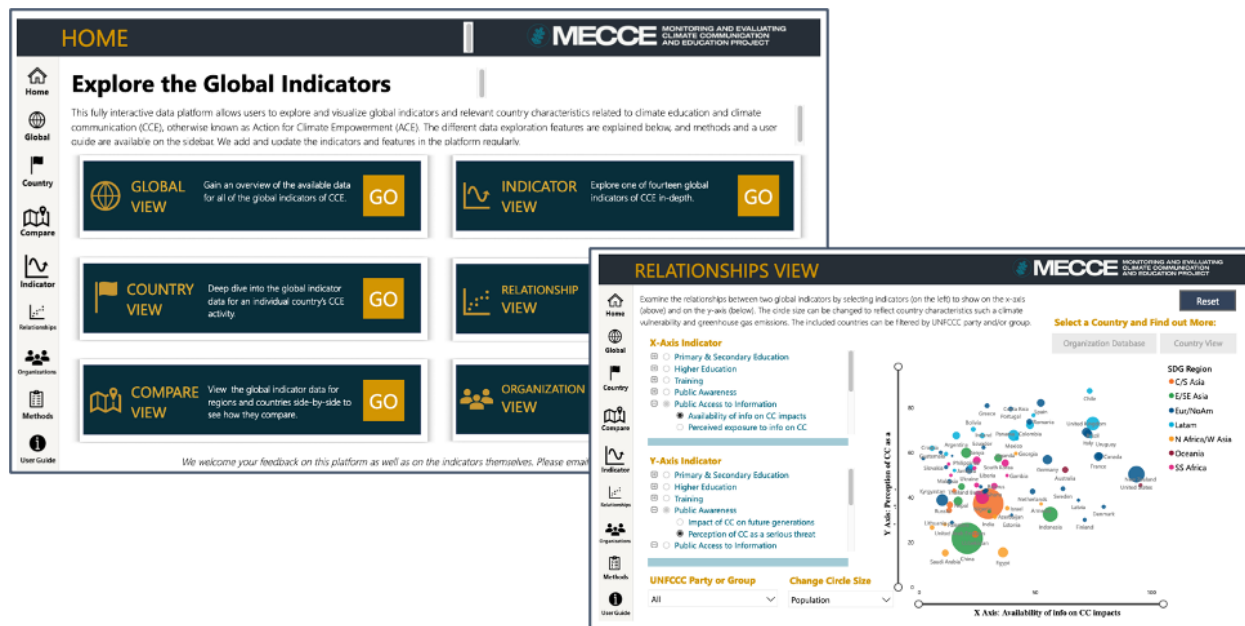
Interactive Data Platform

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.
- Providing narrative and photographic data on quality CCE/ACE to provide contextual and in-depth information.

Figure 3. The interactive data platform home page and relationship view



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