

## Goal 13

**Target 13.2:** Integrate climate change measures into national policies, strategies and planning

**Indicator Number and Name:** 13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

**Agency:** UNFCCC/WMO

### **Background**

Under the United Nations Framework Convention on Climate Change (UNFCCC), all Parties shall formulate, implement, publish and regularly update national/regional programmes containing measures to mitigate climate change and to facilitate adequate adaptation, while taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances. These policies and measures should be appropriate for the specific conditions of each Party and should be integrated with national development programmes.

The Convention established several processes to foster transparency and accountability of countries' actions to address climate change. Under Article 12, all Parties are asked to submit national inventories and national communications (NCs) to report on the implementation of the Convention. This reporting is required at different levels of stringency and with varying frequency for different Parties. The process to formulate and implement national adaptation plans (NAPs) also enables Parties to identify medium- and long-term adaptation needs and develop and implement strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach, supported by technical guidelines and up to USD 3 million per developing country through the Green Climate Fund Readiness and Preparatory Support Programme, intended to support the formulation of NAPs.

The Paris Agreement<sup>1</sup> builds upon the Convention and brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

Negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>2</sup>

---

<sup>1</sup> The Paris Agreement entered into force on 4 November 2016. Further information about the Paris Agreement may be found at < [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php)>

<sup>2</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

The Paris Agreement requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs)<sup>3</sup> that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. All Parties should further strive to formulate and communicate long-term low greenhouse gas emission development strategies to provide a context and integrated long-term view to their NDCs. Also, each Party should, as appropriate, submit and update periodically an adaptation communication,<sup>4</sup> which may include its priorities, implementation and support needs, plans and actions. The adaptation communications will be recorded in a public registry maintained by the secretariat.

In order to provide a clear understanding of climate change action and tracking of progress towards achieving Parties' individual NDCs and adaptation actions the Paris Agreement also established an enhanced transparency framework<sup>5</sup> for action and support, building on and enhancing the existing transparency arrangements under the Convention.

In addition, Parties will periodically (every five years starting in 2023) take stock of the implementation of the Paris Agreement to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals through a global stocktake. Negotiations are ongoing to develop the modalities for and identify the sources of input to the global stocktake. An illustration of mandates and provisions relevant to the global stocktake is shown below. The COP also requested the Subsidiary Body for Implementation to assess progress made in the process to formulate and implement national adaptation plans at its forty-eighth session (April–May 2018).<sup>6</sup> The COP will also convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term goal referred to in Article 4, paragraph 1, of the Agreement, and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8 of the Agreement.

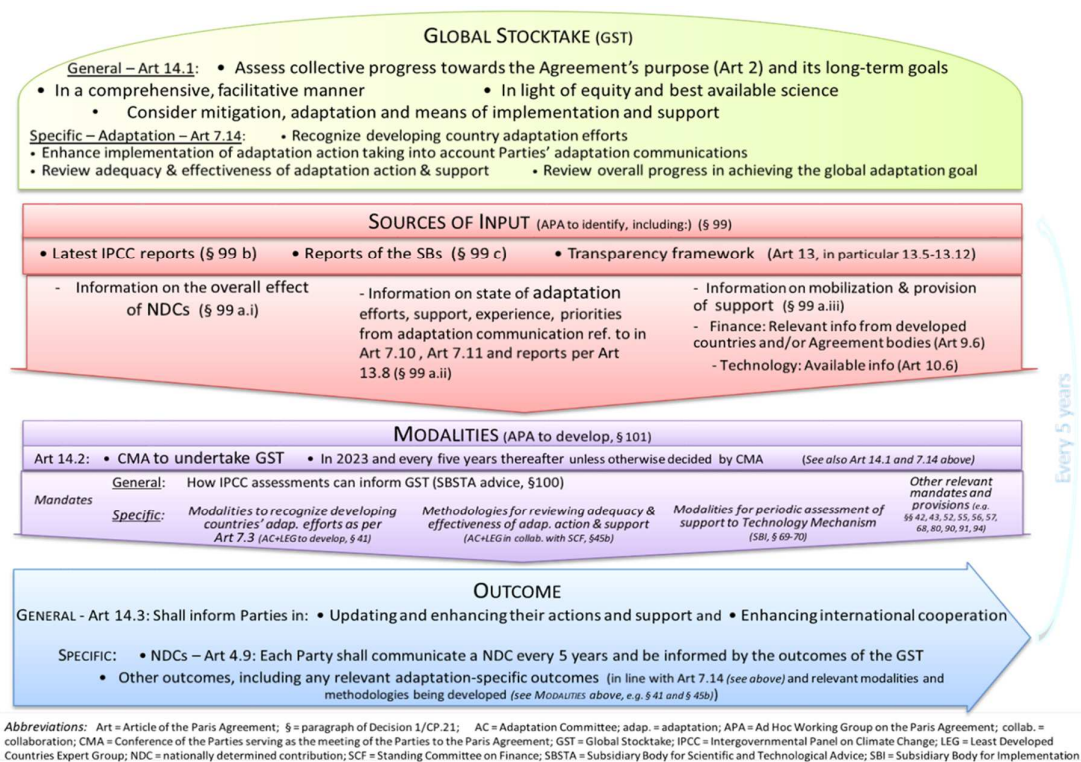
---

<sup>3</sup> Negotiations are ongoing under the APA process to develop to develop further guidance on features, information and accounting for NDCs.

<sup>4</sup> Negotiations are ongoing under the APA process to develop further guidance in relation to the adaptation communication.

<sup>5</sup> Negotiations are ongoing under the APA process to develop to develop the modalities, procedures and guidelines for the enhanced transparency framework.

<sup>6</sup> Decision 4/CP.21, National adaptation plans, FCCC/CP/2015/10/Add.2, 29 January 2016, available at: <http://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf>.



Information in already communicated NDCs<sup>7</sup> shows a clear and increasing trend towards introducing national policies and related instruments for low-emission and climate-resilient development. The national determination has enabled Parties to shape their efforts in line with their circumstances, with several already recognizing related sustainable development and socioeconomic co-benefits.

While the level of ambition and degree of advancement of national climate policies vary, most Parties’ NDCs build on and/or are embedded in existing climate change and/or development strategies, policies and legislation, owing to ongoing national sustainable development or climate change processes as well as experience with implementing the Convention and its Kyoto Protocol. Several Parties have highlighted the need to further integrate climate change related objectives into national economic and social development plans in this context.

Launched in 2009, the Global Framework for Climate Services (GFCS), is a global partnership of governments, UN entities, and international organizations led by WMO, to guide the development and application of science based climate information to support better decision-making in climate sensitive sectors including agriculture, water, health, disaster risk reduction, and energy. GFCS vision is to enable better management of the risks of climate variability and change and adaptation to climate change, through the development and incorporation of science-based climate information and prediction into planning, policy and practice on the global, regional and national scale.

<sup>7</sup> Note that as per paragraph 22 of Decision 1/CP.21 Parties are invited to communicate their first NDC no later than when the Party submits its respective instrument of ratification, acceptance, approval or accession of the Paris Agreement; if a Party has communicated an INDC prior to joining the Agreement, that Party shall be considered to have satisfied this provision unless that Party decides otherwise.

Commitment to the five pillars of the GFCS is essential for the provision of climate services in support of decision-making in the climate sensitive sectors.

The five pillars are 1) User Interface Platform: a structured means for users, climate researchers and climate information providers to interact at all levels; 2) Climate Services Information System: the mechanism through which information about climate (past, present and future) will be routinely collected, stored and processed to generate products and services that inform often complex decision-making across a wide range of climate-sensitive activities and enterprises; 3) Observations and Monitoring: to ensure that climate observations and other data necessary to meet the needs of end-users are collected, managed and disseminated and are supported by relevant metadata; 4) Research, Modelling and Prediction: to foster research towards continually improving the scientific quality of climate information, providing an evidence base for the impacts of climate change and variability and for the cost-effectiveness of using climate information; and 5) Capacity Development: to address the particular capacity development requirements identified in the other pillars and, more broadly, the basic requirements for enabling any Framework related activities to occur.

### **Has work for the development of this indicator begun?**

Negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>8</sup> As reflected in Decision 1/CMA.1,<sup>9</sup> *Matters relating to the implementation of the Paris Agreement*, The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement invited the Conference of the Parties to continue to oversee the implementation of the work programme under the Paris Agreement in accordance with the arrangements contained in decision 1/CP.21, and to accelerate work and forward the outcomes at the latest to the third part of the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement to be convened in conjunction with the twenty-fourth session of the Conference of the Parties (December 2018) for its consideration and adoption.

This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this indicator.

Up-to-date progress on the implementation of relevant requests to operationalize the Paris Agreement can be found in the UNFCCC Paris Agreement Progress Tracker.<sup>10</sup>

As part of the implementation of the GFCS, action on the Development of National Climate Service Plans has been agreed by the Intergovernmental Board on Climate Services (IBCS). An analysis of NDCs submitted by UNFCCC parties as of April 2016 found that all included adaptation components requiring information on key impacts and vulnerabilities associated with meteorological and oceanic phenomena addressed by WMO, including flooding, sea level rise, heat waves, and drought or desertification. Furthermore, 35% of the NDCs analyzed included specific references to climate services. Priority areas and sectors identified in the adaptation component of the communicated NDCs include water, agriculture, health, ecosystems, infrastructure, forestry, energy, disaster risk reduction, food security, coastal protection, and fisheries. These areas include all priority areas addressed by the GFCS implementation plan. WMO and the GFCS are taking steps to strengthen the incorporation of climate services in National Adaptation Plans and monitoring the implementation of climate services across all WMO Member countries.

### **Who are the entities, including national and international experts, directly involved and consulted in developing the methodology/and or data collection tools?**

---

<sup>8</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>9</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>10</sup> <[http://unfccc.int/files/paris\\_agreement/application/pdf/pa\\_progress\\_tracker\\_200617.pdf](http://unfccc.int/files/paris_agreement/application/pdf/pa_progress_tracker_200617.pdf)>

Parties are currently developing further guidance on features, information and accounting for NDCs; further guidance in relation to the adaptation communication; the modalities, procedures and guidelines for the enhanced transparency framework; as well as the modalities for and sources of input to the global stocktake.

Conclusion of this work will provide the methodology/data collection tools that are required to assess progress towards target 13.2 and indicator 13.2.1.

The GFCS has a Partner Advisory Committee composed of 17 UN and international entities, scientific and Humanitarian agencies. This provides a substantial grouping of international organizations relevant to SDG 13. WMO's eight technical commissions, addressing issues related to climate, hydrology, oceans, agricultural meteorology, and basic hydro-meteorological systems and instrumentation, engage hundreds of experts in all aspects of weather, water and climate. The WMO co-sponsored Global Climate Observing System (GCOS), programme, defines requirements for the global observing system needed to support climate research, climate services and climate policies, in particular UNFCCC. These requirements underpin assessments by the IPCC and support understanding of changes to the climate system needed for the global stocktake.

**What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?**

As outlined above, as reflected in Decision 1/CMA.1,<sup>11</sup> *Matters relating to the implementation of the Paris Agreement*, The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement invited the Conference of the Parties to continue to oversee the implementation of the work programme under the Paris Agreement in accordance with the arrangements contained in decision 1/CP.21, and to accelerate work and forward the outcomes at the latest to the third part of the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement to be convened in conjunction with the twenty-fourth session of the Conference of the Parties (December 2018) for its consideration and adoption.

This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this target/indicator.

The National Statistical Offices are expected to play a substantial role in monitoring impacts, which is essential for tracking the efficacy of climate change adaptation measures.

**Please briefly describe the process of developing the methodology for the indicator**

Parties, are currently developing further guidance on features, information and accounting for NDCs; further guidance in relation to the adaptation communication; the modalities, procedures and guidelines for the enhanced transparency framework; as well as the modalities for and sources of input to the global stocktake. Negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>12</sup>

As outlined above, as reflected in Decision 1/CMA.1,<sup>13</sup> *Matters relating to the implementation of the Paris Agreement*, The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement invited the Conference of the Parties to continue to oversee the implementation of the work programme under the Paris Agreement in accordance with the arrangements contained in decision 1/CP.21, and to accelerate work and forward the

---

<sup>11</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>12</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>13</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

outcomes at the latest to the third part of the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement to be convened in conjunction with the twenty-fourth session of the Conference of the Parties (December 2018) for its consideration and adoption.

This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this target/indicator.

Government agencies such as National Meteorological and Hydrological services involved in weather and climate related provision of information and emergency warnings will be consulted along with the GFCS Partner Advisory Committee.

**Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology.**

Parties, are currently developing further guidance on features, information and accounting for NDCs; further guidance in relation to the adaptation communication; the modalities, procedures and guidelines for the enhanced transparency framework; as well as the modalities for and sources of input to the global stocktake. Negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>14</sup> This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this target/indicator.

The Intergovernmental Panel on Climate Change (IPCC), co-sponsored by the WMO and UNEP, at the invitation of the UNFCCC, is preparing refinements to the reporting methodologies for national greenhouse gas inventories, by 2019.<sup>15</sup> The *2019 Refinement* will not revise the *2006 IPCC Guidelines*, but update, supplement and/or elaborate the *2006 IPCC Guidelines* where gaps or out-of-date science have been identified. It will not replace the *2006 IPCC Guidelines*. It should be used in conjunction with the *2006 IPCC Guidelines*.

**When do you expect the methodological work on this indicator to be completed?**

Negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>16</sup>

This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements, including on features, information and accounting for NDCs; further guidance in relation to the adaptation communication; the modalities, procedures and guidelines for the enhanced transparency framework; as well as the modalities for and sources of input to the global stocktake. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this target/indicator.

Up-to-date progress on the implementation of relevant requests to operationalize the Paris Agreement can be found in the UNFCCC Paris Agreement Progress Tracker.<sup>17</sup>

The IPCC methodological work is due to be completed by 2020.

**Are data and metadata already being collected from the National Statistical System for one or more components of this indicator?**

<sup>14</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>15</sup> <<https://www.ipcc-nggip.iges.or.jp/home/2019refinement.html>>

<sup>16</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>17</sup> <<http://unfccc.int/process-and-meetings/the-paris-agreement/paris-agreement-work-programme>>

**If yes, please describe:**

**How do you plan to collect the data?**

Data collected through mandates under the UNFCCC, Kyoto Protocol and Paris Agreement, as outlined in the attached annex;

Towards operationalization of the Paris Agreement, Parties are expected to complete negotiations and agree on an outcome including definition of modalities, procedures and reporting guidelines, for adoption at the twenty-fourth session of the Conference of the Parties (December 2018), as reflected in Decision 1/CMA.1.<sup>18</sup>

This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator, and serve as a basis to assess progress on this target/indicator.

Information will be submitted in agreed formats by Parties to the UNFCCC under the existing mandates, and as of 2020 under the enhanced transparency framework. The modalities for the global stocktake are still being developed through negotiations under the UNFCCC and Paris Agreement, as well as the sources of input. These are expected to define how the information will be obtained and considered.

**If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here:**

Current and on-going (pre and post-2020):

- Nationally determined contributions (every 5 years) <<http://unfccc.int/8766.php>>;
- Adaptation components (as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution as referred to in Article 4, paragraph 2, and/or a national communication)
- National Communications (every four years) <<http://unfccc.int/7742.php>>;
- Biennial and Biennial Update Reports (every two years) <<http://unfccc.int/7550.php>>, <<http://unfccc.int/8722.php>>;
- GHG Inventory database and national inventory submissions (annual) <<http://unfccc.int/3800.php>> <<http://unfccc.int/9492.php>>;
- National adaptation plans <<http://unfccc.int/6057.php>>;
- National adaptation programmes of action <<http://unfccc.int/7567.php>>;
- NAPs annual progress reports, as reported to UNFCCC Subsidiary Bodies/COP;
- Databases that can be found on NAP central, including a database of policies <<http://www4.unfccc.int/nap>>;
- Long-term strategies submitted by Parties to the Paris Agreement: <[http://unfccc.int/focus/long-term\\_strategies/items/9971.php](http://unfccc.int/focus/long-term_strategies/items/9971.php)>.

Data related to the GFCS national climate service developments will be collected by National Meteorological and Hydrological Services and consolidated by the WMO and its international partners in the PAC. The WMO also operates the Integrated Global Greenhouse Gas (GHG) Information System (IG3IS) which is critical for reporting on impacts of climate at different scales.

**With what frequency is data expected to be collected?**

See above

---

<sup>18</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

**Is there a process of data validation by countries in place or planned for this indicator?**

Annex I Parties were required to have their information subject to a review.<sup>19</sup> In 2007, as a result of the agreed outcome under the Bali Action Plan, non-Annex I Parties were also to be subject to a less onerous review process.<sup>20</sup>

Towards operationalization of the Paris Agreement, Parties are expected to complete negotiations and agree on an outcome including definition of modalities, procedures and reporting guidelines, for adoption at the twenty-fourth session of the Conference of the Parties (December 2018), as reflected in Decision 1/CMA.1.<sup>21</sup> Under the enhanced transparency framework of the Paris Agreement, information submitted by each Party shall undergo a technical expert review, with further possible definition forthcoming.

Data collected under the GFCS will be collected and validated under internationally agreed standards by the WMO.

**If yes, please briefly describe:**

**If you have any additional comments that you believe would be helpful to IAEG-SDG members in analysing the work plan and methodological development of the indicator, please provide them here:**

As outlined above, negotiations to operationalize the Paris Agreement are planned to conclude at the twenty-fourth session of the Conference of the Parties (December 2018).<sup>22</sup> This outcome is expected to provide modalities, procedures and guidelines which will define the new data and reporting requirements. This will allow for the possible refinement of this indicator by 2020, and serve as a basis to assess progress on this target/indicator.

Data contributing to this indicator will be provided by the GFCS and by the WMO efforts to monitor the capacity of national meteorological and hydrological services and their partners to provide countries with climate services that meet internationally agreed standards.

This workplan will be further developed in collaboration with other relevant agencies, as appropriate.

*(as of August 2018)*

---

<sup>19</sup> See Decision 1/CP. 17. The biennial reports of developed country Parties are subject to an International Assessment and Review. Annex I to decision 2/CP.17 includes the detailed guidelines for their preparation.

<sup>20</sup> Decision 1/CP.16

<sup>21</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>

<sup>22</sup> <<http://unfccc.int/resource/docs/2016/cma1/eng/03a01.pdf#page=2>>