



# Climate services policy: Operationalizing the Paris Agreement

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# **Climate services policy: Operationalizing the Paris Agreement**

- European research and innovation Roadmap for Climate Services
- Copernicus Climate Change Service
- Paris Agreement
- COP23
- IPCC
- DG RTD



# European research and innovation Roadmap for Climate Services



*A European research  
and innovation*

# Roadmap

for Climate Services

Research and  
Innovation

# European research and innovation Roadmap for Climate Services

Table 1. Roadmap synthesis

Main activities	Specific actions
<b>Challenge 1: Enabling market growth</b>	
1.1: <i>Assessing the nature of climate services market.</i>	(a) Assessing the climate services market (demand and supply). (b) Translating users' needs into services and access required. (c) Exploring the public and private domains of the market.
1.2: <i>Growing the climate services market.</i>	(a) Developing foresight into perspective market growth: identifying untapped potentials, and measures to promote market growth. (b) Establishing the means of enhancing the awareness of, and promoting, climate services. (c) Developing appropriate business models for the provision of climate services.
1.3: <i>Demonstrating the added value.</i>	(a) Identifying mature markets and front-runners. (b) Demonstrating the impacts and full value of climate services as standalone services and/or integrated into broader decision-support systems.
<b>Challenge 2: Building the market framework</b>	
2.1: <i>Communities and infrastructures to support and grow the climate services market.</i>	(a) Developing a viable climate services community that engages users, providers, purveyors and researchers. (b) Building and widening capacity for climate services development, provision and use. (c) Computing, data and information technology (IT) infrastructure required to develop, deliver and support access/use of climate services.
2.2: <i>Standards, quality assurance and control, access and legal aspects.</i>	(a) Demonstrating credibility and assuring quality of climate services. (b) Implications of limited, and open and free access to data and information for services supply and demand. (c) Liability in providing climate services and market implications. (d) Intellectual property (IP) implications of co-design, co-development and co-delivery.
2.3: <i>International cooperation.</i>	(a) Engaging the European climate service community internationally. (b) Supporting the growth of climate service capacities (demand and supply) within least developed countries (LDCs), with a focus on Africa.
<b>Challenge 3: Enhancing the quality and relevance of climate services</b>	
3.1: <i>Information frameworks in support of climate services.</i>	(a) Integration of physical and socioeconomic data and information. (b) Developing standards and protocols for data in support of vulnerability and risk assessments, and decision-support systems. (c) Establishing confidence in, and the role of uncertainty, in climate services and decision-support systems.
3.2: <i>Strengthening the scientific basis and relevance of climate services.</i>	(a) Improving modelling and prediction capacity relevant to improve climate services. (b) Developing tools and supportive resources needed by users – local, national and transnational. (c) Identifying and evaluating the implications of scientific development on climate processes in terms of improving climate services.
3.3: <i>Climate information and end-users' needs: innovations and products.</i>	(a) Making better use of available climate information and knowledge (b) Making innovations in service products and presentation.

# Copernicus

The Copernicus programme places a world of insight about our planet at the disposal of citizens, public authorities and policy makers, scientists, entrepreneurs and businesses on a **full, free and open** basis.



# Paris Agreement

## **Article 7, Paragraph 7 (c)**

Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making

# COP 23 in (Fiji) Bonn

- WMO Statement on the State of the Global Climate in 2017:
  - Average global temperature from January to September 2017 was approximately 1.1°C above the pre-industrial era.
  - 2013-2017 is set to be the warmest five-year period on record.
  - Rising sea levels and increasing concentrations of GHG (despite a stalling in emissions).



# Intergovernmental Panel on Climate Change (IPCC)

- Special Report on 1.5°C
- Special Report on Oceans and Cryosphere
- Special Report on climate change, desertification, land degradation, sustainable land management, food security and greenhouse gas fluxes in terrestrial ecosystems.
- Sixth Assessment Report
- *Seventh Assessment Report*



# Intergovernmental Panel on Climate Change (IPCC)

- Outlines for the 6<sup>th</sup> assessment report approved at the 46<sup>th</sup> session of the IPCC, Montreal, September 2017.
- **Working Group I, Chapter 12:** "Climate Change information for regional impact and for risk assessment"

## *Executive Summary*

- *Framing: physical climate system and hazards*
- *Region-specific integration of information, including confidence*
- *Information (quantitative and qualitative) on changing hazards: present day, near term and long term*
- *Region-specific methodologies*
- *Relationship between changing hazards, global mean temperature change, scenarios and emissions*

## *Frequently Asked Questions*

# Intergovernmental Panel on Climate Change (IPCC)

- Outlines for the 6<sup>th</sup> assessment report approved at the 46<sup>th</sup> session of the IPCC, Montreal, September 2017.
- **Working Group II, Chapter 18:** "Climate resilient development pathways"

*Synergies and trade-offs of sustainable development (including SDGs), adaptation and mitigation, including the social effects of greenhouse gas emissions*

- *Adaptation pathways, including transformation and economic diversification, technologies, and strategies that strengthen resilience, reduce inequalities, and improve climate related human wellbeing*
- *Synthesis of risks and levels of adaptation in climate resilient pathways*
- *Lessons from case studies at different scales*

# Intergovernmental Panel on Climate Change (IPCC)

- Approximate cut-off dates for publication is 6 months before the date of the final approval session:
  - **Special Reports:** March 2019
  - **Working Group I:** October 2020
  - **Working Group II:** April 2021
  - **Working Group III:** January 2021

## DG RTD

- Periodic communication
- Invite us to your events, especially when they have policy implications
- At the end of your project... please prepare a *"Science and research policy brief on research gaps and priorities"*



# Thank you

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