



Work Programme 2007: Climate change, pollution, and risks

Georgios Amanatidis
European Commission
Research DG, I.5: Climate change and environmental risks

Launching FP7 – Conference for Information Multipliers – Brussels, 7-8 February 2007





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Environment (incl. climate change)

Climate change, pollution and risks

- Pressures on environment and climate
- Environment and health
- Natural Hazards

Sustainable management of resources

- Conservation and sustainable management of natural and man-made resources
- Evolution of marine environments

Environmental Technologies

- Technologies for observation, prevention, mitigation, ..., of the natural and man-made environment
- Technology assessment, verification, testing

Earth observation and assessment tools

- Earth observation
- Forecasting methods and assessment tools



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Climate change, pollution and risks

- **Research is needed at EU level in order to:**
- **Support EU International commitments such as:**
 - **Kyoto and Montreal Protocols**
 - **World Summit on Sustainable Development**
- **Contribute to:**
 - **Intergovernmental Panel on Climate Change (IPCC)**
 - **Global Earth Observation System of Systems (GEOSS)**
 - **International Programmes (e.g. IGBP, WCRP)**
- **Contribute to EU policies such as:**
 - **6th Environmental Action Plan and associated Thematic Strategies**
 - **Action Plans on Environmental Technologies and Environment and Health**



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Preparation of the Work Programme

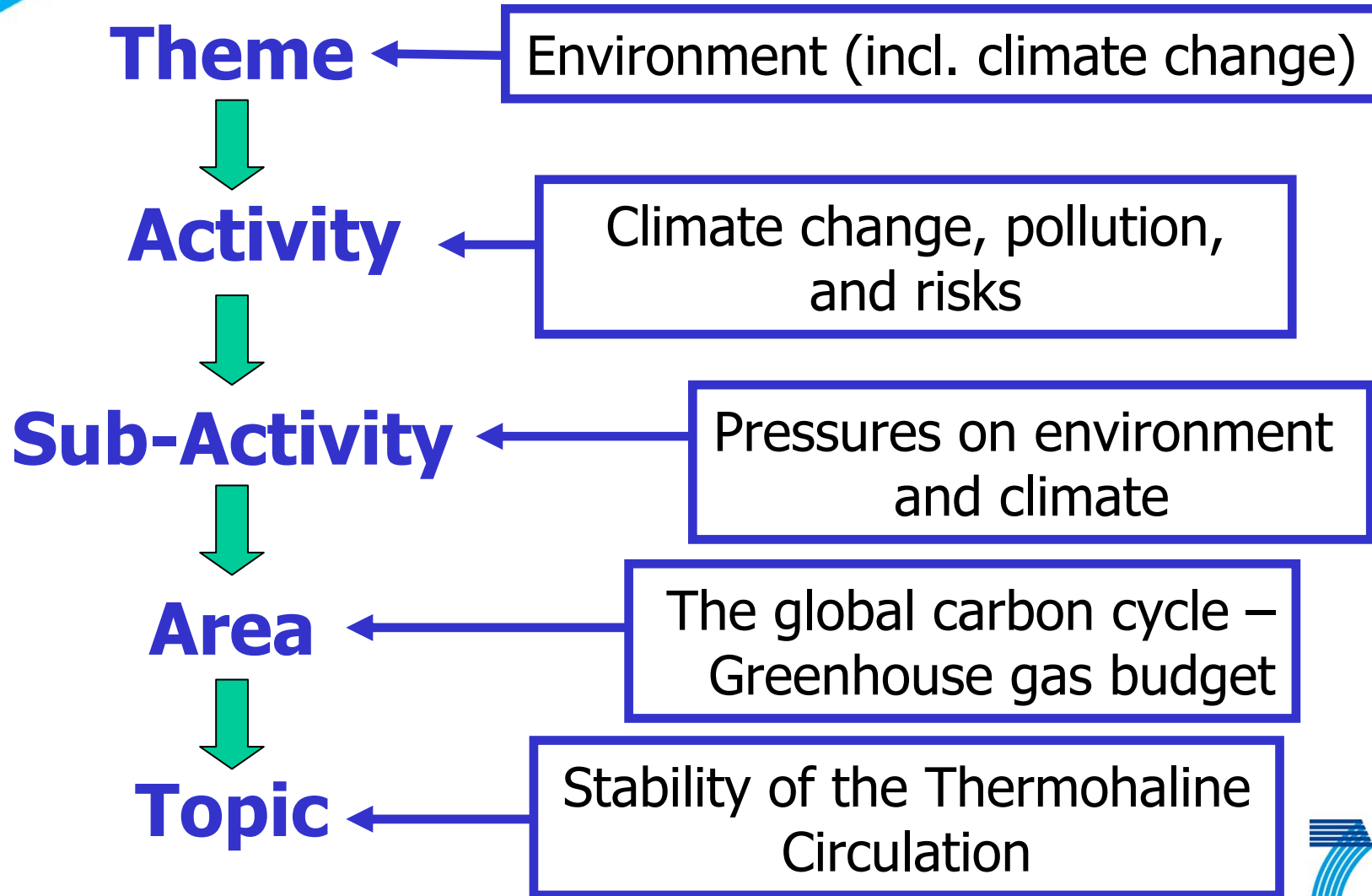
- **Annual process**
- **Following consultation and expert advice:**
 - Advisory Group
 - European Technology Platforms
 - Open consultations
 - Workshops, expert meetings, etc
 - Consultation with other Commission Directorate Generals
- **Subject to opinion by Programme Committees (Member State representatives)**



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FP7 Terminology





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Climate Change, pollution and risks

Pressures on environment and climate

area 1: *The Earth System and Climate: Functioning and Abrupt Changes*

area 2: *Emissions and Pressures: Natural and Anthropogenic*

area 3: *The Global Carbon cycle – Greenhouse Gas Budget*

area 4: *Future Climate*

area 5: *Climate Change: Natural and Socio-economic Impacts*

area 6: *Response strategies: Adaptation, Mitigation and Policies*



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Sub-activity 6.1.1. Pressures on environment and climate

SME INCO Cross-Thematic Dissemination Policy and emerging RELEVANCE

ENV.2007.1.1.1.1. Stability of the ThermoHaline Circulation	LS					
ENV.2007.1.1.2.1. Megacities and regional hot-spots, air quality and climate	SM					
ENV.2007.1.1.3.1. Ocean acidification and its consequences	LS					
ENV.2007.1.1.5.1. Climate change impacts and adaptation strategies in water policies	CSA					
ENV.2007.1.1.5.2. Climate change impacts on vulnerable mountain regions	LS					
ENV.2007.1.1.5.3. Past and future climate change impacts in the Parana-Plata river basin of South America	SM					

Funding scheme	Collaborative projects (large-scale integrating projects)	LS
	Collaborative projects (small or medium-scale focused research projects)	SM
	Coordination and support actions (coordinating or supporting type)	CSA



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Topic ENV.2007.1.1.1.1. Stability of the ThermoHaline Circulation

Integrated observation and process studies in key regions (e.g. the Arctic and sub-Arctic), modelling and palaeo-studies to assess the risk of the breakdown or sudden reduction of the ThermoHaline Circulation (THC). Feedback with stability of ice-sheets in polar regions, changes and variability in atmospheric circulation and the hydrological cycle should be included. The participation of international cooperation partner countries (e.g. Russia) is encouraged. This topic is also a contribution to the International Polar Year.

Funding scheme: collaborative projects (large-scale integrating projects) (Community contribution from 4 up to 10 million Euros)

Expected impact: Much improved quantification of the risk, time horizon and possible scenarios for THC breakdown and related abrupt/rapid climatic change; understand the influence of ice sheets melting on THC; predict the THC in the future.



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Topic ENV.2007.1.1.5.3. Past and future climate change impacts in the Parana-Plata river basin of South America

Observations and modelling studies at both regional and continental scale to quantify past and predict future climate changes and impacts in the Parana-Plata basin. Emphasis in climate change impacts should be given to floods, hydrological systems, land-use and agriculture, deforestation and needs to assess the social and economic implications. Adaptation measures to future climate risks and impacts should be also considered.

Funding scheme: collaborative projects (small or medium-scale focused research projects) (Specific International co-operation action)

Expected impact: *Strengthening of the cooperation between European and South American multidisciplinary research communities by studying climate change impacts in a basin which largely involves the greater part of the population, economy, agriculture, hydropower production of the five major South American countries concerned. Improved prediction capacity of the climate change impacts, which will result in economic, environmental and social benefits for the region.*



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Sub-activity 6.1.1. Pressures on environment and climate

SME INCO Cross-Thematic Dissemination Policy and emerging RELEVANCE

ENV.2007.1.1.6.1. Full costs of climate change	SM								
ENV.2007.1.1.6.2. Effectiveness of adaptation and mitigation measures related to changes of the hydrological cycle and its extremes	SM								
ENV.2007.1.1.6.3. Impact and feed-backs of climate policies on land use and ecosystems in Europe	SM								
ENV.2007.1.1.6.4. Exploitation and dissemination of climate change research results and public perception	CSAs								



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Climate Change, pollution and risks

Environment and Health

area 1: *Health effects of exposure to environmental stressors*

area 2: *Integrated approaches for environment and health risk assessment*

area 3: *Delivery of methods and decision support tools for risk analysis and policy development*



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Sub-activity 6.1.2. Environment and Health

SME

INCO

Cross-Thematic

Dissemination

Policy and emerging

RELEVANCE

ENV.2007.1.2.1.1. Indoor air pollution in Europe: an emerging environmental issue	SM					
ENV.2007.1.2.1.2. Environmental factors and their impact on reproduction and development	SM					
ENV.2007.1.2.2.1. European network on human biomonitoring	NoE					
ENV.2007.1.2.2.2. European cohort on air pollution	LS					
ENV.2007.1.2.2.3. Health impacts of drought and desertification including socio-economic aspects	SM					
ENV.2007.1.2.3.2. Geographical information systems in support for environment and health research	CSA					



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Climate Change, pollution and risks

Natural hazards

area 1: *Hazard assessment, triggering factors and forecasting*

area 2: *Vulnerability assessment and societal impacts*

area 3: *Risk assessment and management*

area 4: *Multi-risk evaluation and mitigation strategies*

Sub-activity 6.1.3. Natural Hazards

SME INCO Cross-Thematic Dissemination Policy and emerging RELEVANCE

<i>ENV.2007.1.3.1.1.</i> European storm risk	<i>SM</i>					
<i>ENV.2007.1.3.2.1.</i> Frame for better vulnerability assessment	<i>SM</i>					
<i>ENV.2007.1.3.3.1</i> Assessing and managing volcanic threat	<i>SM</i>					
<i>ENV.2007.1.3.3.2.</i> Harmonising avalanche forecasting, risk mapping and warning	<i>SM</i>					
<i>ENV.2007.1.3.3.3.</i> Investigating Europe's risk from droughts	<i>CSA</i>					
<i>ENV.2007.1.3.4.1.</i> European (multi) hazard database analysis	<i>CSAs</i>					



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Information

- EU research: <http://ec.europa.eu/research/>
- Seventh Framework Programme:
http://ec.europa.eu/research/future/index_en.cfm
- Information on research programmes and projects:
<http://cordis.europa.eu/>
- RTD info magazine:
<http://ec.europa.eu/research/rtdinfo/>
- Information requests:
research@ec.europa.eu

