

## FP7 Cooperation

### Environment (including Climate Change)



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#### What funds will be available?

- Budget 2007 – 2013 of approximately 1,900 million Euros
- Main calls are expected on an annual basis as shown in this table
- **First call: early 2007**

2007	2008	2009	2010	2011	2012	2013
■	■	■	■	■	■	■

■ Planned calls

 Detailed information on calls: [www.euresearch.ch/calls](http://www.euresearch.ch/calls)

### What are the objectives and background of Environment (including climate Change?)

#### Objectives

To promote sustainable management of the natural and human environment and its resources by advancing our knowledge on the interactions between the biosphere, ecosystems and human activities, and developing new technologies, tools and services, in order to address in an integrated way global environmental issues. Emphasis will be on prediction of climate, ecological, earth and ocean systems changes, tools and technologies for monitoring, prevention and mitigation of environmental pressures and risks including health and for the sustainability of the natural and man-made environment.

#### Background

Protecting the environment is essential for the quality of life of current and future generations as well as for economic growth. The challenge facing the EU is to ensure continuous and sustainable growth while at the same time reducing negative environmental impacts. EU-wide cooperation is motivated by the fact that countries, regions and cities face common environmental problems and that critical mass is needed given the scale, scope and high level of complexity of environmental research. Such cooperation also facilitates common planning, use of connected and inter-operable databases, and the development of common indicators, of assessment methodologies and coherent and large scale observation and forecasting systems. Furthermore international cooperation is necessary for the advancement of knowledge and the promotion of better management at a global level. Research under this topic will contribute to a number of areas, including but not limited to, the implementation of international commitments of EU and Member States, the promotion of innovative environmental technologies and technological developments that will improve the market positioning of European enterprises, in particular of SMEs, European Technology Platforms.

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## What areas will be funded during FP7 under Environment (including Climate Change)?

### Climate change, pollution and risks

#### - Pressures on the environment and climate

Effective adaptation and mitigation measures to climate change and its impacts will be based on better understanding of the functioning of climate. Research will focus on a) advanced climate change models, b) changes in atmospheric composition and in the water cycle, c) pressures on environmental quality and on climate from pollution of the air, water and soil, d) interactions between the atmosphere, the ozone layer, land, ice and oceans, e) feedback mechanisms, abrupt changes (e.g. ocean circulation) and impacts on biodiversity and ecosystems.

#### - Environment and health

Research will focus on a) multiple exposures via different exposure routes e.g. indoor and outdoor air, electromagnetic fields, noise, and exposure to toxic substances, b) human bio-monitoring including cohort studies, c) biomarkers and modelling tools taking into account combined exposures, variations in vulnerability and uncertainty, d) methods and decision making support tools for risk analysis, management and communication, and for policy development and analysis.

#### - Natural hazards

Disasters related to climate (such as storms, droughts, forest fires, landslides and floods) and geological hazards (such as earthquakes, volcanoes and tsunamis) will be studied. Societal repercussions of major natural hazards will be quantified.

### Sustainable Management of Resources

#### - Conservation and sustainable management of natural and man-made resources

Research will include a) advanced models and tools for better management of ecosystems, b) ecosystem modelling, c) innovative approaches to develop economic activities from ecosystem services, d) prevention of desertification, land degradation and biodiversity loss, e) sustainable management of forests and the urban environment, f) data management and information systems.

#### - Evolution of marine environments

Research will target sustainable use of ocean resources and the impact of human activities on the ocean.

### Environmental Technologies

#### - Environmental technologies for the sustainable management and conservation of the natural and man-made environment

Research will target technologies that prevent or reduce environmental risks, mitigate hazards, disasters, climate change and biodiversity loss; research will also promote sustainable production, consumption, pollution treatment and the sustainable management of human environments.

#### - Technology assessment, verification and testing

Research will focus on the risk and performance assessment of technologies e.g. life cycle analysis, long-term opportunities, market potential, socio-economic aspects, chemicals risk assessment, minimising animal testing, risk quantification techniques and the development of the European Environmental Technologies Verification and Testing system.

### Earth observation and assessment tools

#### - Earth observation

Research activities will be devoted to the development and integration of the Global Earth Observation System of Systems (GEOSS) for environment and sustainable development issues in the framework of the GEO initiative. Interoperability between observation systems, information management and data sharing, and optimisation of information for understanding, modelling and predicting environment phenomena will be addressed. These activities will focus on natural hazards, climate change, weather, ecosystems, natural resources, water, land use, environment and health, and biodiversity (including the aspects of risk assessment, forecasting methods and assessment tools) in order to produce advances for the GEOSS societal benefit areas and contribute to GMES.

#### - Assessment tools for sustainable development

Tools are needed to quantitatively assess the environmental and research policy contribution to competitiveness and sustainable development, including assessments of market-based and regulatory approaches as well as the impacts of current trends in production and consumption patterns. Such tools will include models that consider the links between the economy, environment and society and hence beneficial and efficient strategies of adaptation and prevention. Research will also seek to improve existing indicators and develop new ones to assess sustainable development policy priorities, and to analyse the linkages between them taking into account the existing set of EU sustainable development indicators. The analysis of technology, socio-economic drivers, externalities and governance as well as foresight studies, will be included. Areas of application include land use and marine policies and the economic, political and social conflicts related to climate change.



**Two further areas will be supported which are:**

**a. International cooperation:**

Environmental problems often have a trans-boundary, regional or global dimension therefore international cooperation will be an important aspect in this theme. Particular areas related to EU international commitments are climate change, biodiversity, desertification, chemicals, wastes, and sustainable development.

**b. Responding to emerging and unforeseen policy needs:**

Research on emerging needs in this theme may address questions such as the interactions between people, ecosystems and the biosphere or new risks related to natural, man induced or technologically induced disasters. Support to respond to unforeseen environmental policy needs could, for example, relate to sustainability impact assessments of new EU policies such as in environment, maritime policy, standards and regulations.

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**What other areas of FP7 might I apply for?**

- Other Themes including:
  - Food, Agriculture and Biotechnology (FAB)
  - Information and communication Technologies (ICT)
  - Nanosciences, Nanotechnologies, Materials and new Production Technologies (NMP)
  - Space
  - Energy
- Bottom-up Research projects for collaboration between SMEs and R&D institutions
- Funding of fellowships (People)
- Funding of infrastructures

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## What key stakeholders should I be aware of?

- European Technology Platforms e.g. Plants for the Future, Water Supply and Sanitation Technology Platform (WSSTP), Technology Platform on Sustainable Chemistry, Innovative & Sustainable Use of Forest Resources, European Construction Technology Platforms (ECTP) including focus area on Cultural Heritage
- European Environment Agency
- EU Commission Environment
- World summit on sustainable development 2002

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## How do I find partners, for example, to join a consortium?

### Find partners by:

- Contacting researchers/private industries you know personally
- Attending conferences and events
- Searching the project databases of former successful EU projects
- Reading about the experiences of others who have obtained EU funding
- Submitting a partner search request
- Screening the presentations made during FP7 events

[www.euresearch.ch/partnersearch](http://www.euresearch.ch/partnersearch)

## What other information could be helpful?

### Key documents

- European Community Biodiversity Strategy UN convention on biological diversity
- European Climate Change Programme II (ECCP-II)
- 6<sup>th</sup> Environmental Action Plan 2001-2010 and associated
- Thematic Strategies (waste, marine, soil, pesticides, urban)
- European Community Biodiversity Strategy and European Strategy for Environment & Health
- Action plans on Environmental Technologies (ETAP) and Environment and Health
- European Directives including Water Framework Directive (WFD), REACH (chemicals), CAFÉ (air quality), INSPIRE (env. data)
- Maritime Policy Green Paper
- Millennium Assessment

- EU Water Initiative
- European Partnership to promote Alternative Approaches to Animal Testing
- European Soil Strategy
- EU Forest Action Plan (2007-2013)

### Key websites

- 6<sup>th</sup> Environmental Action Plan 2001-2010
- Environmental Technologies Action Plan (ETAP)
- European Strategy for Environment & Health
- United Nations Framework Convention on Climate Change (UN FCCC)
- Kyoto Protocol
- Montreal Protocols
- Post-Kyoto protocol initiatives
- United Nations Convention on Biological Diversity
- United Nations Strategy for disaster reduction
- World Summit on Sustainable Development
- Intergovernmental Panel for Climate Change (IPCC)
- Group on Earth Observations (GEO)

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