

Theme 6

Environment

Content of Calls in 2009

Basic facts

Call identifier: **FP7-ENV-2009-1**

Date of publication: **3 September 2008**

Deadline: **8 January 2009**

Indicative budget: **193.5 M€**



Funding Schemes:

a) **Small or Medium-scale** (CP) the requested EC contribution shall not exceed **3.5M€**

(except for topic ENV.2009.4.2.3.2, where the requested EC contribution cannot be over **1.5M€**).

b) **Large-scale** (CP) the requested Community contribution shall be from **4M€** up to **7M€**

c) '**Coordination and Support Action**' (CSA) the EC contribution shall not exceed **1M€** (except for topic ENV.2009.1.2.3.1 where the EC contribution shall be up to **4M€**)



Objectives of the Environment Theme

- Promoting sustainable management of the human environment and its resources by advancing knowledge on the interactions between the biosphere, ecosystems and human activities
- Developing new technologies, tools and services, in order to address, in an integrated way, global environmental issues
- Rebalancing the 3 elements of environment research: 'Understanding', 'Assessing impact', 'Responding'.



Main Policy Drivers

- EU researchers contribution to the implementation of relevant international commitments, protocols, initiatives, emerging EU environmental legislation and policies.
- Political focus on Climate and environmental change, their consequences and link to energy
- An **overreaching priority** – Adaptation to Climate and Environmental Change, such as sustainable cities and coastal zones.



Emphasis:

- Prediction of Changes - Climate, Ecological, Earth and Ocean systems.
- Tools and Technologies for monitoring.
- Prevention and Mitigation of environmental pressures and risks.
- Sustainability of the natural and man-made environment.
- Policy related issues – Problem-solving, Coordination, Socio-economic aspects.



International Cooperation

An important dimension of all research activities in the Environment Theme.

- There is a provision for the financing of the participation of ICPC.
- General opening of all topics to ICPC.



Activity 6.1 Climate Change, pollution and risks



Sub-Activity 6.1.1 Pressures on environment and climate

- Integrated actions for understanding, analyzing and predicting climate change and its impacts.
- Emphasis on abrupt changes and extreme events.
- Interactions between climate change, ecosystems and greenhouse gases budgets.
- Advanced climate and earth system modeling.
- Climate impacts and public perception.
- Links between climate and water security
- Adaptation to climate change and its impacts in Europe and Africa.
- Actions supporting the 'Bali Roadmap' and related post-2012 climate policy initiatives



Sub-Activity 6.1.2 Environment and Health

- Health effects of climate change
- Health effects of environmental stressors (such as ambient air pollution or electromagnetic fields)
- Environmental health risk analysis and policy development



Sub-Activity 6.1.3 Natural Hazards

- Climate / meteorological related hazards (wild fires, drought) in a changing climate.
- Urban floods as an emerging policy need to support the Flood Directive.
- Seismic vulnerability of buildings (in the context of European Construction Technology platform.
- Societal impacts and economic costs



Activity 6.2 Sustainable management of resources

Sub-Activity 6.2.1 Conservation and sustainable management of natural and man-made resources and biodiversity



- Building up innovative methods for protecting and managing resources in a changing environment.
- Promoting an ecosystem approach.
- Integrated management of natural resources.
- Climate change impacts on biodiversity
- Freshwater ecosystems and water quality
- Transferability of research results
- Innovative soil process models
- Integrative concepts for urban development
- Options for European forests and landscape management, desertification and land degradation



Sub-Activity 6.2.2 Management of Marine Environments

- Exploiting marine resources with the long-term objective of protecting the seas and oceans (including biodiversity and the capacity for providing expected goods and services)
- Boosting international research in strategic areas such as the Mediterranean/ Black Sea coastal areas, coral reefs, biodiversity and ecosystems structures and dynamics
- Promoting ecosystem approach
- Proposals shall consider developing options to respond to climate change



Activity 6.3 Environmental technologies

Sub-Activity 6.3.1 Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment



- Adaptation to environmental changes
- Preventing and protecting from extreme events and risks
- Extreme hydro-meteorological events
- Other risks (Coastal erosion, Coastal floods, Chemical/ pollution risks)
- Waste/ recycling technologies
- Labeling the sustainability performance of buildings
- Industry participation



Sub-Activity 6.3.2 Protection, conservation and enhancement of cultural heritage, including human habitat

Technologies for preventing and protecting cultural heritage assets from extreme events and risks resulting from natural hazards, especially:

- Earthquakes
- Storms
- Fires



Sub-Activity 6.3.3 Technology assessment, verification and testing

- Dealing with new computational methods for assessing chemical hazards
- Promoting research for methodological developments for improving Life Cycle Impact Assessment (LCIA) methods



International Cooperation Partner Countries - (ICPC)

- ACP Countries (African, Caribbean, Pacific)
- EECA (Eastern Europe and Central Asia)
- MPC (Mediterranean Partner Countries)
- WBC (Western Balkan Countries)
- Latin America
- Asia

Third Countries

- USA, Canada, Japan, Australia, NZ



Why Third Countries in the FP7?

- To support **strategic partnerships**
- To facilitate **access to research environments** outside Europe
- To address **specific problems third countries face** or that have a global character



ICPC are compulsory Partners

ENV.2009.1.1.5.1 Climate change predictions in Sub-Saharan Africa (east to west), quantification of impacts and assessment of adequate adaptation measures)	Africa	CP-FP-SICA
ENV.2009.1.1.5.2 Climate induced changes in water resources in southern Europe and neighbouring countries as a threat to security	North Africa and Mediterranean partner countries, Middle East	CP-FP-SICA



ENV.2009.1.2.1.2 Methods to quantify the impacts of climate and weather on health in developing low income countries	Low income developing countries	CP- FP- SICA
ENV.2009.1.3.3.1 Risk, prevention and management of urban floods	Asia, e.g. China/ India/ Bangladesh	CP- FP- SICA
ENV.2009.2.1.3.2 Desertification process and land degradation	(not specified)	CP- FP- SICA



ENV.2009.2.1.5.1 Sustainable development of coastal cities	India, South-East Asia	CP-IP-SICA
ENV.2009.2.2.1.4 Integrated Coastal Zone Management	Mediterranean, Black SeaBasin	CP-IP-SICA
ENV.2009.2.2.1.5 Management and protection of coral reefs in the Wider Caribbean	Caribbean region	CP-IP-SICA
ENV.2009.4.1.3.2 Earth observation in support of a sustainable exploitation of mineral resources	(not specified)	CP-FP-SICA



CSA with participation of ICPCs as eligibility criteria

ENV.2009.3.1.3.1 Supporting sustainable nationwide and local wastes processing industry in ACP countries: legal framework, economical incentives, business/ organisational know-how	Min. 2 ACP countries	CSA-CA
ENV.2009.4.1.4.1 Action in the domain of EO to support capacity building in GEO	Min. 2 Developing countries	CSA-SA
ENV.2009.5.1.0.1 Research excellence and major infrastructure in China and potential for S&T cooperation with EU partners in the area of environment	Min. 2 China + min. 1 European	CSA-SA

ICPC are additional Partners (most welcome)

ENV.2009.1.1.1.1 Climate dynamics and abrupt changes – analysis of the palaeo-record	open to all Third Countries	CP-IP
ENV.2009.1.3.1.1 Wild fires in the context of climate and social changes	Mediterranean, North Africa	CP-IP
ENV.2009.1.3.2.2 Vulnerability assessment of buildings, lifelines systems and networks related to earthquakes	Open to all 3rd Countries	CP-FP



ENV.2009.3.1.1.1 Adaptation of water supply and sanitation systems to cope with climate change	open to all Third Countries	CP-IP
ENV.2009.3.1.6.1 Innovative coastal defense technologies	open to all Third Countries	CP-IP
ENV.2009.3.2.1.1 Technologies for protecting cultural heritage assets from risks and damages resulting from earthquakes	ICPC, in particular Mediterranean partner Countries	CP-FP
ENV.2009.3.2.1.2 Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the cases of storms and fires	ICPC	CP-FP



ENV.2009.4.1.1.1 Contribution to observing systems for seismogenic hazards	open to all Third Countries	CP-IP
ENV.2009.4.1.3.1 Contributing to observing systems for environment and health monitoring and modelling	open to all Third Countries	CP-IP
ENV.2009.4.2.3.1 Assessment of economic instruments to enhance the conservation and sustainable use of biodiversity	Latin America	CP-FP



Biorefineries Joint Call

- **Calls for proposals: 3rd September 2008**
- **Deadline Stage 1 proposals:**
2nd December 2008
- **Deadline Stage 2 proposals: 5th May 2009**
- **Evaluation results:**
Second half of July 2009



What is a Bio-refinery?

- Bio-refinery is the sustainable processing of biomass into a spectrum of value-added products and energy.
- Bio-refinery takes advantage of components and intermediaries and maximizes the value derived from refining operations.



Objectives of the Joint call

- **Research, development and integration of innovative technologies to prove the viability related to the entire value chain of advanced biorefineries.**
- **Provide a robust scientific basis for policy and decision making at different levels and scales (from production unit to policy development).**
- **Proposals should achieve a break-through beyond the “business as usual” scenario and include the sustainability assessment of any proposed solution on the basis of a life cycle approach.**



Implementation (2 Topics)

ENV.2009.3.3.2.2 Sustainable biorefineries

A 2 step evaluation procedure

(CP) – Emphasis on Industry participation

ENV. 2009.3.3.2.3 Enhancing exchange of information, synergies and cross-fertilization between projects in the field of Biorefineries

Only 1 proposal will be funded - (CSA)



Activity 6.4 Earth observation and assessment tools for sustainable development

Sub-Activity 6.4.1 Earth and ocean observation systems and monitoring methods for the environment and sustainable development



- EU plays a leading role in GEO and its primary initiative GEOSS (Global Earth Observation System of Systems)
- Focus on the integration of European earth observation research relevant to GEO
- Enhancing earth observation capacity building in developing countries



Activity 6.5 Horizontal activities

- Promoting better communication strategies and innovative approaches for the dissemination and uptake of research results



**Thank you for your
attention!**

Дзякуй

Спасибо

