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FP7 Cooperation Programme Theme 6 Environment (including climate change)

Work Programme 2009

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(including Climate Change)





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FP7 - Cooperation

Ten themes

1. Health
2. Food, agriculture and biotechnology
3. Information and communication technologies
4. Nanosciences, nanotechnologies, materials and new production technologies
5. Energy
6. **Environment (including climate change)**
7. Transport (including aeronautics)
8. Socio-economic sciences and the humanities
9. Security
10. Space

Environment has links with all the other themes





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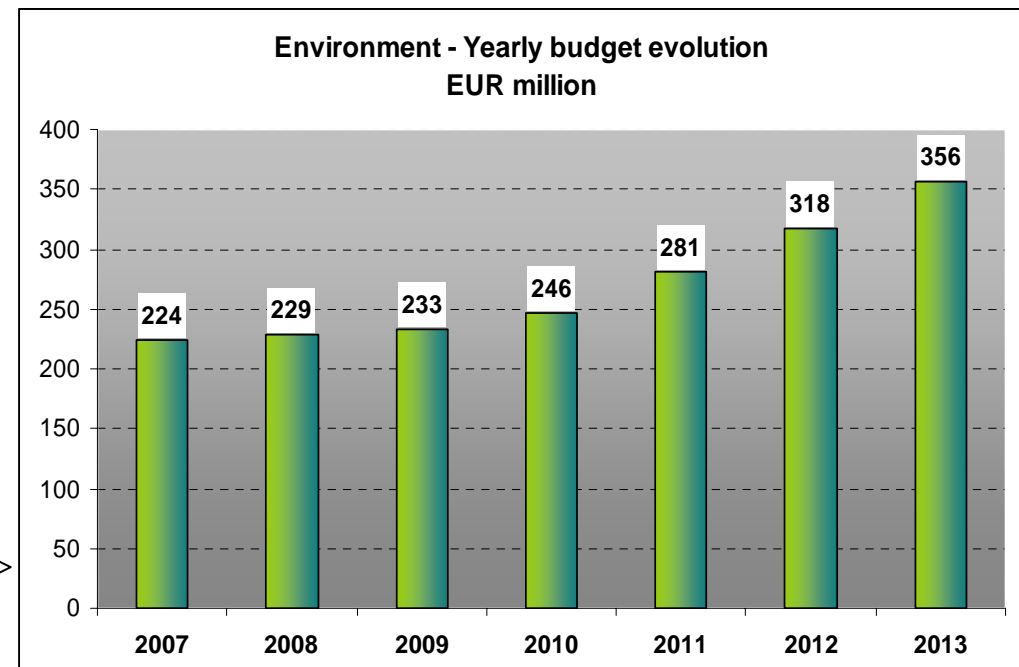
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Budget for Environment

FP7 budget (current prices)

- ✓ Total: 50.521 bn €
- ✓ Environment theme 1.89 bn €

**Environment
(including climate change)
Estimative
budget breakdown**



- No increase of budget in 2007, 2008 compared to 2006 (225 M€)
- Sharp increase only from 2011
- In 2013 expenditure 60% higher than in 2006



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Main policy drivers

(identified in the Roadmap and in the Strategy)

- ✓ **Implementation of relevant international commitments, protocols and initiatives**
- ✓ **Existing and emerging EU environmental legislation and policies**
- ✓ **Implementation of the 6th Environmental Action programme with associated thematic strategies and action plans**
- ✓ **Implementation of the European Research Area incl. Support for Joint Programming**





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Policy drivers and challenges for WP2009

- ✓ **Invest more in knowledge and innovation to transform Europe into environmentally sustainable economy**
(Key Issues Paper to Competitiveness Council)

- ✓ **Environment Theme to support sustainable development through:**
 - Improving understanding
 - Assessing impacts
 - Anticipating and responding to societal and environmental challenges (adaptation to climate and environmental change, their consequences and link to energy)

→ **WP 2009 with more focus on anticipation, adaptation, and response**





EU Relevant Policy Initiatives

- **Lead Market Initiative (2007):** Foster the emergence of markets which are highly innovative, respond to customers' needs, have a strong technological and industrial basis in Europe and depend more than other on favourable framework conditions
- **The Strategic Energy Technology Plan (2007):** Aligning technology development with energy policy goals, through notably, the strengthening of European research capacities (European Research Alliance) and the setting up of strategic public/private RD&D partnerships (European Industrial Initiatives, including one on Bioenergy)
- **Renewable Energy Directive (2008):** Fixing a number of objectives and targets (notably the "3x20%" by 2020) and a number of "boundary conditions": minimum 35 % GHG Savings; RE should be produced outside land with recognised high biodiversity or carbon stock value; 2nd generation count double; respect of sustainability criteria (still debated in EP and Council, will also apply to the Fuel Quality Directive)



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From Roadmap to Work Programme

✓ **Roadmap (2007-2013)**

- Defining overall orientations for the FP7 Environment Theme for the years to come taking into account the main policy drivers and scientific challenges (2007)

✓ **Strategy/ Vision for WP2009**

- Defining at the FP7 level the overall strategy and approaches for WP2009 across the Themes (Dec '07 – Feb '08)
- Developing a rationale and prioritisation for WP2009, taking into account major changes in the political drivers

✓ **Work Programme 2009**

- Identifying priorities and topics for Environment WP2009, taking into account the Roadmap and the Strategy/ Vision for WP2009 (Feb-June '08)
- Consultations with Advisory Group, Programme Committee
- and internally within the Commission





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Vision/ Strategy for WP2009

✓ **Main objectives to reinforce:**

- Cross-thematic approaches
- Measures promoting the structuring of European research
- Strategic dimension of International Cooperation
- Visibility, dissemination and uptake of research results, and science-policy links

→ **Overarching priority in 2009: Adaptation to climate and environmental change, and related issues such as sustainable cities and coastal zones**

(addressed in a problem-solving manner, including socio-economic aspects)





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Theme “Environment” (including Climate Change)

Objective

- ✓ To advance our **knowledge** on the interactions between the climate, biosphere, ecosystems and human activities
- ✓ To develop **new technologies**, tools and services in view of the **sustainable management of the environment and its resources**
- prediction and monitoring, prevention, mitigation, adaptation





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WP 2009 Environment Implementation and budget

- ✓ **Balanced combination of FP7 funding schemes, including**
 - Collaborative research
 - NoE
 - ERA-Nets (ERA-Net+)
 - SICAs
 - Coordination and support actions

- ✓ **Reduction of number of topics from two previous calls will continue (72 in 2007, 54 in 2008, 49 in 2009), with increasing proportion of large-scale projects**

- ✓ **Budget**
 - Around 193.5 million Euros (for main call)
 - Implemented on annual basis and divided into 11 sub-activities





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Theme Environment (including Climate Change)

Activities and sub-activities

- ✓ **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 and biodiversity
 - Management of marine environments





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Theme Environment (including Climate Change)

Activities and sub-activities

✓ **Environmental Technologies**

- Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment
- Protection, conservation and enhancement of cultural heritage including human habitat
- Technology assessment, verification and testing

✓ **Earth observation and assessment tools for sustainable development**

- Earth and ocean observation systems and monitoring methods for the environment and sustainable development
- Forecasting methods and assessment tools for sustainable development, taking into account differing scales of observation





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Overview WP 2009 call FP7-ENV-2009-1

| Activity | | Sub-activity | | Estimated budget €193,5 million | Number of topics (49) |
|--|------|--------------|---|---------------------------------------|-------------------------------|
| CLIMATE CHANGE, POLLUTION AND RISKS | 6.1. | 6.1.1. | PRESSURES ON ENVIRONMENT AND CLIMATE | 32,5 | 8 |
| | | 6.1.2. | ENVIRONMENT AND HEALTH | 21 | 5 |
| | | 6.1.3. | NATURAL HAZARDS | 13 | 4 |
| SUSTAINABLE MANAGEMENT OF RESOURCES | 6.2. | 6.2.1. | CONSERVATION AND SUSTAINABLE MANAGEMENT OF NATURAL AND MAN-MADE RESOURCES AND BIODIVERSITY | 27 | 7 |
| | | 6.2.2. | MANAGEMENT OF MARINE ENVIRONMENTS | 22 | 5 |
| ENVIRONMENTAL TECHNOLOGIES | 6.3. | 6.3.1. | ENVIRONMENTAL TECHNOLOGIES FOR OBSERVATION, SIMULATION, PREVENTION, MITIGATION, ADAPTATION, REMEDIATION AND RESTORATION OF THE NATURAL AND MAN-MADE ENVIRONMENT | 27 | 6 |
| | | 6.3.2. | PROTECTION, CONSERVATION AND ENHANCEMENT OF CULTURAL HERITAGE, INCLUDING HUMAN HABITAT | 8 | 2 |
| | | 6.3.3. | TECHNOLOGY ASSESSMENT, VERIFICATION AND TESTING | 7 | 2 |
| EARTH OBSERVATION AND ASSESSMENT TOOLS FOR SUSTAINABLE DEVELOPMENT | 6.4. | 6.4.1. | EARTH AND OCEAN OBSERVATION SYSTEMS AND MONITORING METHODS FOR THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT | 20 | 5 |
| | | 6.4.2. | FORECASTING METHODS AND ASSESSMENT TOOLS FOR SUSTAINABLE DEVELOPMENT TAKING INTO ACCOUNT DIFFERING SCALES OF OBSERVATION | 12 | 3 |
| HORIZONTAL ACTIONS | 6.5. | 6.5.1. | DISSEMINATION AND HORIZONTAL ACTIVITIES | 4 | 2 |





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Cross-thematic activities

✓ **Coordinated topic on impacts of climate change on water security**

Topic called: Climate induced changes in water resources in southern Europe and neighbouring countries as a threat to security (SICA targeted to North Africa, Mediterranean, Middle East)

- Publication date: 3 September 2008
- Deadline: 8 January 2009
- Themes involved: 6. 'Environment', 8. 'Socio-economic sciences and humanities'





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Cross-thematic activities

✓ Coordinated topics on sustainable use of seas and oceans

- Publication date: 3 September 2008

Topics called:

- Theme 2. 'Food, Agriculture and Fisheries, and Biotechnology': Integration of aquaculture and fisheries in the coastal zone; Importance of foraging fish in the ecosystem; Biomass from micro- and macro-algae for industrial applications
- Theme 5. 'Energy': Deep off-shore multi-purpose renewable energy conversion platforms for wind/ocean energy conversion; Coordination action on off-shore renewable energy conversion platforms; Algal and other suitable non-food aquatic biomass feedstock for 2nd generation biofuel production
- Theme 6. 'Environment': Options for ecosystem based management; Towards integrated European marine research strategy and programmes; Support to 'Maritime Partnership'; Integrated coastal zone management; Climate change impacts on the marine environment: research results and public perception.





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Cross-thematic activities

- ✓ **Joint call 'Activities towards the development of appropriate solutions for the use, recycling and/or final treatment of nanotechnology-based products'**
 - Publication date: 19 November 2008
 - Deadline: 31 March 2009
 - Indicative budget: 10 million Euros
 - Themes involved: 6. 'Environment' and 4. 'Nanosciences, Nanotechnologies, materials and new production technologies'





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Approach Cross-thematic activities

✓ **BIOREFINERY Joint call**

Topics called: 'Sustainable Biorefineries' (two stage submission)

'Enhancing exchange of information, synergies and cross-fertilisation between projects in the field of biorefineries' (one stage submission)

- Publication date: **3 September 2008**
- **Deadline: 2 December 2008**
- Indicative budget: 57 million Euros
- Themes involved: 5. 'Energy', 6. 'Environment', 2. 'Food, Agriculture and fisheries, biotechnology', and 4. 'Nanosciences, Nanotechnologies, materials and new production technologies'





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International Cooperation

- ✓ **WP 2009 strategy includes three mechanisms:**
 - Opening of all topics to international cooperation
 - Specific International Cooperation Actions (SICA) targeted to ICPC countries
 - Specially highlighted research areas/ topics for international co-operation (all third countries)





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International Cooperation

- ✓ Methods to quantify the impacts of climate and weather on health in developing low income countries (SICA)
- ✓ Risk, prevention and management of urban floods (Asia)
- ✓ Sustainable development of coastal cities (India, South-East Asia)
- ✓ Technologies for protecting cultural heritage assets from risks and damages resulting from earthquakes (Mediterranean)
- ✓ Assessment of economic instruments to enhance the conservation and sustainable use of biodiversity (Latin America)





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Approach SME relevant research

- ✓ Adaption of water supply and sanitation systems to cope with climate change
- ✓ Technologies for improved safety of the built environment in relation to flood events
- ✓ Screening methods for assessing the toxicological and ecotoxicological properties of chemicals
- ✓ Improved Life Cycle Impact Assessment methods for better sustainability assessment of technologies
- Joint call on biorefineries





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Approach Dissemination actions

Visibility, dissemination and uptake of research results, and science-policy links are further promoted.

- ✓ Climate change impacts on the marine environment: research results and public perception
- ✓ Enhancing connectivity between research and policy-making in sustainable development
- ✓ Knowledge transfer and uptake of EU-research results





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ERA-Net

- ✓ **Two ERA-Net proposals* for 2009 with a total budget of 4 million Euros**
- ERA-Net on climate change impacts and responses
- Towards integrated European marine research strategy and programmes

* Subject of a joint DG RTD ERA-Net call





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Approach

Theme specific information

- ✓ **Funding thresholds and minimum conditions for participation will be applied as eligibility criteria**
- ✓ **Collaborative research**
 - Small or medium-scale focused research projects (up to 3.5 million Euros)
 - Large scale integrated projects (4-7 million Euros)
 - Specific International Cooperation Action (SICA)
- ✓ **Network of Excellence (up to 7 million Euros)**
- ✓ **Coordination and Support Actions (up to 1 million Euros)**
 - Coordinating type
 - Supporting type
- ✓ **ERA-Net (up to 2 million Euros)**
- ✓ **Research for the benefit of specific groups (up to 1.5 million Euros)**





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General information

✓ **One stage submission will be followed for the main call FP7-ENV-2009-1**

- Publication date: **3 September 2008**
- Deadline: **8 January 2008**
- Large scale collaborative project: maximum of **1** retained per topic
- Small/medium scale collaborative project: maximum of **2** retained per topic
(Except sub-activity 6.4.2 Sustainable development: maximum of **3** retained per topic)





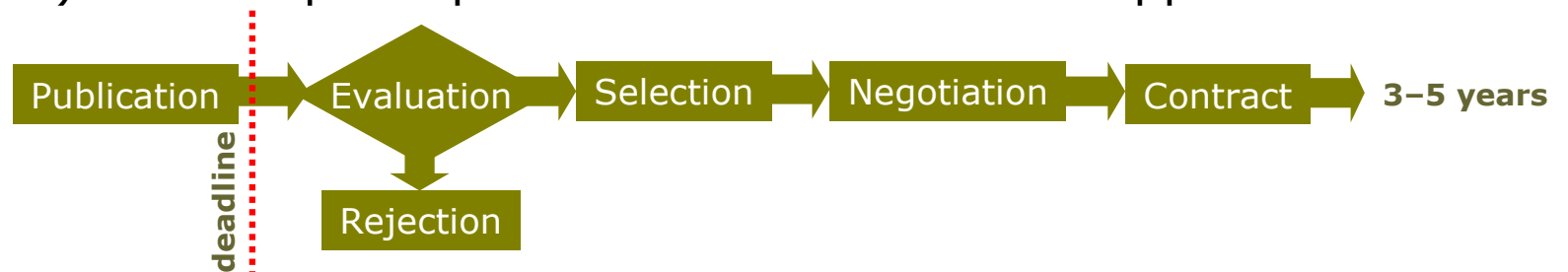
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Implementing FP7

Who can participate?:

- Any legal entity from
 - EU 27 Member States
 - 11 Associated Countries (Switzerland, Israel, Norway, Iceland, Liechtenstein, Turkey, Croatia, Former Yugoslav Republic of Macedonia, Serbia, Albania and Montenegro)
 - Third countries: International Co-operation Partner Countries (ICPC) can also participate and receive financial support



Implementation:

- Calls for proposals
- Evaluation and selection
- Negotiation and contract



SEVENTH FRAMEWORK
PROGRAMME



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Evaluation of proposals

Criterion 1: Scientific & Technological Excellence

- * Clear state-of-the-art (including performance data for benchmarking)
- * SMART objectives

Criterion 2: Implementation

- * Wise and sufficiently detailed budget description
- * Structure of the consortium

Criterion 3: Potential Impacts





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Maximum funding rate

- **Research and technological development activities:** up to 50% of eligible costs except for:
 - Public bodies: up to **75%**
 - Secondary and higher education establishments: up to **75%**
 - Research organisations (non-profit): up to **75%**
 - SMEs: up to **75%**
 - Industries: up to **50%**
- **Demonstration activities:** up to **50%**





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Minimum conditions for participation

General:

- **3 independent participants** from 3 different Member States (MS) or Associated countries (Ac)
- **Natural persons** may participate
- **JRC** may participate and is deemed to be from a different MS or Ac (same principles for international European interest organisations and entities established under Community law)
- **Additional conditions** can be established by the work programme (WP) or specific programme (SP) (e.g. number or type of participant, place of establishment)



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Minimum conditions for participation

Specific:

- **Coordination and support actions** of the supporting type and in favour of training and career development of researchers – minimum of **1** legal entity (except actions CSAs to coordinate)
- **SICA** - Collaborative projects addressing the participation of international cooperation partner countries (ICPC) – minimum is **4 participants** of which 2 in MS or Ac and 2 in ICPC countries unless otherwise foreseen in work programme.
- Participation of international organisations and participants from third countries possible if in addition to minim



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Outcome 2007 and 2008 calls

✓ **FP7-ENV-2007-1**

- 632 proposals received
- 73 (+2 ERA-Nets) selected for funding (5 on reserve list)
- Indicative budget: 200 million Euros
- Coverage of the work programme: 71%

✓ **FP7-ENV-2008-1**

- 425 proposals received
- 64 selected for funding (24 on reserve list)
- Indicative budget: 212 million Euros
- Coverage of the work programme: 91%





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Environment (incl. climate change) Preliminary strategic orientations for 2010

- Emphasis on assessing, reducing and preventing tensions and conflicts related to the depletion of natural resources and environmental services
 - Integrated management and use of natural resources (e.g. water)
- The ERA dimension enhanced
 - ERA-Nets, Article 169 (Bonus)
- The international collaboration continues to play a key role
 - Cooperation with Africa; joint/coordinated call on water and food security for Africa
- Reinforcing dissemination and uptake of research results





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Some Advice

- Take part in our **info-days**
- Get in touch with your **National Contact Point (NCP)**
- Be aware that drafting a proposal and establishing the right consortium takes **time**, particularly as co-ordinator
- Read carefully the **call & WP** (topic, funding scheme, number of participants, size of the project, etc.)





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Further information

- ✓ <http://cordis.europa.eu/fp7/dc/index.cfm>
- ✓ http://cordis.europa.eu/fp7/environment/home_en.html
- ✓ http://cordis.europa.eu/technology-platforms/home_en.html
- ✓ <http://cordis.europa.eu/emmp7>
- ✓ **FP7 WP2009 Info-Days:**
 - ✓ **EU Water Research Day EXPO ZARAGOZA 2008:**
http://circa.europa.eu/Public/irc/rtd/eesdwatkeact/library?l=/european_research&vm=detailed&sb=Title
 - ✓ **Environmental Technologies:**
http://circa.europa.eu/Public/irc/rtd/eesdwatkeact/library?l=/environmental_technologi_2&vm=detailed&sb=Title
 - ✓ **Biorefineries:**
<http://circa.europa.eu/Public/irc/rtd/susbioref/library>



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Thank you for your attention

