



EUROPEAN  
COMMISSION

Community research

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# Milestones and context of EU Research

## Milestones:

- 1st Framework Programme (FP): 1984-1987
- Now: FP7 2007-2013
- Common objective to all FPs: funding of research activities
- European Research Area (ERA) launched 18 January 2000
- Going further in building a European Research Area

## Context:

- Legal framework of the European Union (subsidiarity)
- FP7 adoption by Decision of the European Parliament and Council of the European Union, 18 December 2006

# The European Research Area (ERA)

## History

- Commission communication 'Towards a European Research Area', January 2000 and endorsed at the March 2000 Lisbon European Council
- Mid-Term review 2005 put the interaction between research, innovation and education, « the Knowledge Triangle » at the centre
- Green Paper on ERA adopted by the Commission on 4 April 2007
- Public consultations on the Paper lasted from 1 May to 31 August 2007
- Results of these initiatives to be used to prepare legislative proposals in 2008

### **Consultation process** - the Commission invites:

- Member States to promote a regional and national debate
- European Parliament, Council, European Economic and Social Committee, and Committee of the Regions to express their views
- Research agencies, businesses, higher education bodies, civil society organisations and citizens directly to engage in this debate

# The European Research Area (ERA)

## The development of ERA

- **Why?**
  - Globalisation, eg. new emerging S&T players
  - Major challenges on a world wide level such as global warming and energy security
- **Where do we stand?**
  - Some progress, however outstanding issues to tackle
    - Fragmentation of public research base, policies and programmes
    - Business R&D investment

# The European Research Area (ERA)

## The ERA vision

- Knowledge Triangle: research, innovation, education
- The **European knowledge potential** in all its *dimensions*

*People:* realising a single labour market for researchers

*Infrastructures:* developing world-class research infrastructures

*Institutions:* strengthening Research Institutions

*Knowledge sharing:* Intellectual Property Rights

*Funding:* optimising research programmes and priorities

*Opening to the world:* international cooperation in S & T

# ERA: Main supporting measures

## Promoting Synergies

### Research Policy

- FP7 is the financial instrument to implement the EU Research Policy for the period 2007-2013

### Cohesion Policy

- The Structural Funds are the financial instrument to implement the cohesion policy for 2007-2013

**Objective:** to overcome differences between countries regarding economic growth and jobs creation

Therefore, key investments are needed for:

- R&D and innovation
- Infrastructures of European importance
- Industrial competitiveness
- Renewable energies and Energy efficiency
- Human resources

# Framework Programme 7 (FP7)

## Characteristics:

- Overall budget doubled (compared to FP6)
- Significant **simplification**
- Focus on developing research that meets the needs of European industry
- Basic research - Establishment of a *European Research Council*
- Programme duration: 7 years

# FP7 – Specific Programmes

*Cooperation* – Collaborative research

*Ideas* – Frontier Research

*People* – Human Potential

*Capacities* – Research Capacity

+

JRC (non-nuclear)

JRC (nuclear)

Euratom

# FP7 (2007-2013) 'Cooperation' programme

Theme	Indicative Budget Breakdown (M€)
1. Health	6,100
2. Food, agriculture and biotechnology,	1,935
3. Information and Communication Technologies	9,050
4. Nanosciences, Nanotechnologies, materials and new production technologies	3,475
5. Energy	2,350
6. Environment (including Climate change)	1,890 } 4,24
7. Transport (including Aeronautics)	4,160
8. Socio-economic sciences and the Humanities	623
9. Security and space	2,830
<b>TOTAL</b>	<b>32,413</b>

# KEY CHALLENGES

- **Limiting climate change to 2° C** for 2020 and beyond
- **An Energy Policy for Europe**
  - Reduce Greenhouse gases emission by 20% by 2020 (as compared to 1990)
  - 20% of renewable energy in overall EU consumption by 2020
  - 10% share of biofuels in EU transport fuel consumption by 2020
- **A Strategic Energy Technology Plan**
  - to be presented to Council by 2008
  - Large scale target-oriented EU initiatives
  - Structural measures to transform the energy research and innovation system (to better integrate EU and Member States' programmes)

# FP7 – Proposed Priority Topics in Energy

Hydrogen and fuel cells

Energy savings and energy  
efficiency

Renewable electricity generation

CO<sub>2</sub> capture and storage  
technologies for zero emission  
power generation

Renewable fuel production

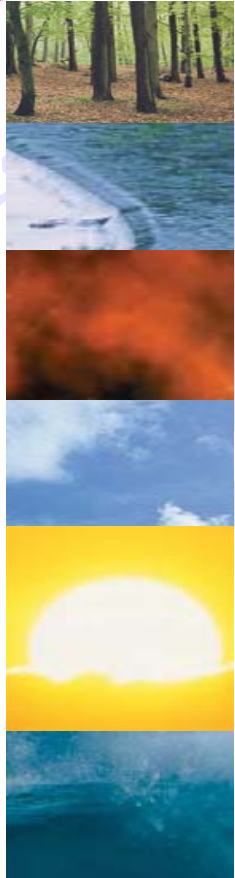
Clean coal technologies

Renewables for heating and  
cooling

Smart energy networks

Knowledge for energy policy making

# Renewable energy sources supported in FP7: where to focus?



**Biomass**

**Hydro**

**Geothermal**

**Wind**

**Photovoltaics  
& Solar thermal**

**Ocean**

# FP7 versus FP6 Climate Change / Energy

- **Reinforcement of certain areas in FP7 such as:**
  - ✓ Renewable energy technologies
  - ✓ Climate change and natural hazards
  - ✓ Hydrogen technologies: Joint Technology Initiative (JTI)
- **Introduction of new activities in FP7:**
  - ✓ Sustainable Development including Sustainable Consumption and Production: social economic research
  - ✓ Clean Coal Technologies: increasing system efficiency

# International Cooperation in FP7

## Aim of International Cooperation in EU RTD:

- Support **European competitiveness**
- Address specific problems that third countries face on the basis of **mutual interest** and **mutual benefit**
- Use S&T cooperation to reinforce the Community's external relations and other EU relevant policies
- **Opening ERA to the world:** make sure that international S&T cooperation contributes effectively to stability, security and prosperity in the world

# S&T International Cooperation State of Play

## Cooperation at bilateral level

- **Legal basis:** S&T agreement based on reciprocity and mutual interest
- Participation in regular Energy/Climate Change Dialogues addressing S&T and energy Strategies

# S&T International Cooperation State of Play

## Cooperation at bilateral level

- Set up research areas/topics of common interest and mutual benefit eg. opening of all activities and topics to all countries
- Identify forms of cooperation: joint research, exchange of knowledge, joint studies, etc...)
- Define implementing instruments: **SICA** (Specific International Cooperation Actions), **coordinated calls**, networking, workshops, technical visits, etc)

# S&T International Cooperation State of Play

## Cooperation at multilateral level

- Kyoto and Montreal protocols and initiatives
- Implementing Agreement of the International Energy Agency (IEA)
- International Partnership for the Hydrogen Economy (IPHE)
- Carbon Sequestration Leadership Forum (CSLF)
- Intergovernmental Panel on Climate Change (IPCC)
- Convention on Biological Diversity (CBD)
- UN Framework Convention on Climate Change (UNFCCC)
- UN Convention on Combating Desertification (UNCCD)
- International Strategy for Disaster Reduction (ISDR)
- Global Earth Observation System of System initiative (GEOSS)

# S&T International Cooperation State of Play

## Cooperation at multilateral level

- Exchange of information on research priorities
- Organisation of side events
- Research under FP7 to contribute to the implementation of international commitments

# Funding schemes for collaborative projects in FP7

- Similarities with FP6; structure of the contract and application of the consortium agreement
- Simplified funding scheme under FP7: including a higher funding limit, average personnel costs accepted under certain conditions, no cost models and introduction of a Guarantee Fund to cover financial responsibility

# FP7 Calls Climate Change / Energy

- **Environment program (including Climate Change)**
  - Next Call (indicative):
    - ✓ Date of publication: November 2007
    - ✓ Deadline: February 2008
    - ✓ Budget: ~ 200 M€
- **Energy**
  - First Calls closed in 2007:
    - ✓ Budget: ~ 275 M€ (negotiation of selected proposals on-going)
  - Next Calls (indicative):
    - ✓ Date of publication: November 2007
    - ✓ Deadlines: February and May 2008
    - ✓ Budget: ~ 240 M€

# Staying informed

Seventh Framework Programme

[http://cordis.europa.eu/fp7/home\\_en.html](http://cordis.europa.eu/fp7/home_en.html)

Calls for Proposals

<http://cordis.europa.eu/fp7/dc/index.cfm>

Rules for participation

[http://cordis.europa.eu/fp7/find-doc\\_en.html](http://cordis.europa.eu/fp7/find-doc_en.html)

Energy Policy

[http://ec.europa.eu/research/energy/index\\_en.htm](http://ec.europa.eu/research/energy/index_en.htm)

Environment Policy

[http://ec.europa.eu/research/environment/index\\_en.htm](http://ec.europa.eu/research/environment/index_en.htm)

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**Thank you  
for your attention!**

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