



EUROPEAN  
COMMISSION

Community research

Building a  
**Europe** of  
Knowledge

Towards the  
**Seventh** Framework  
Programme  
2007-2013

**Environment (including Climate Change)**

Ib Troen, RTD-I-5: Environment - Climate



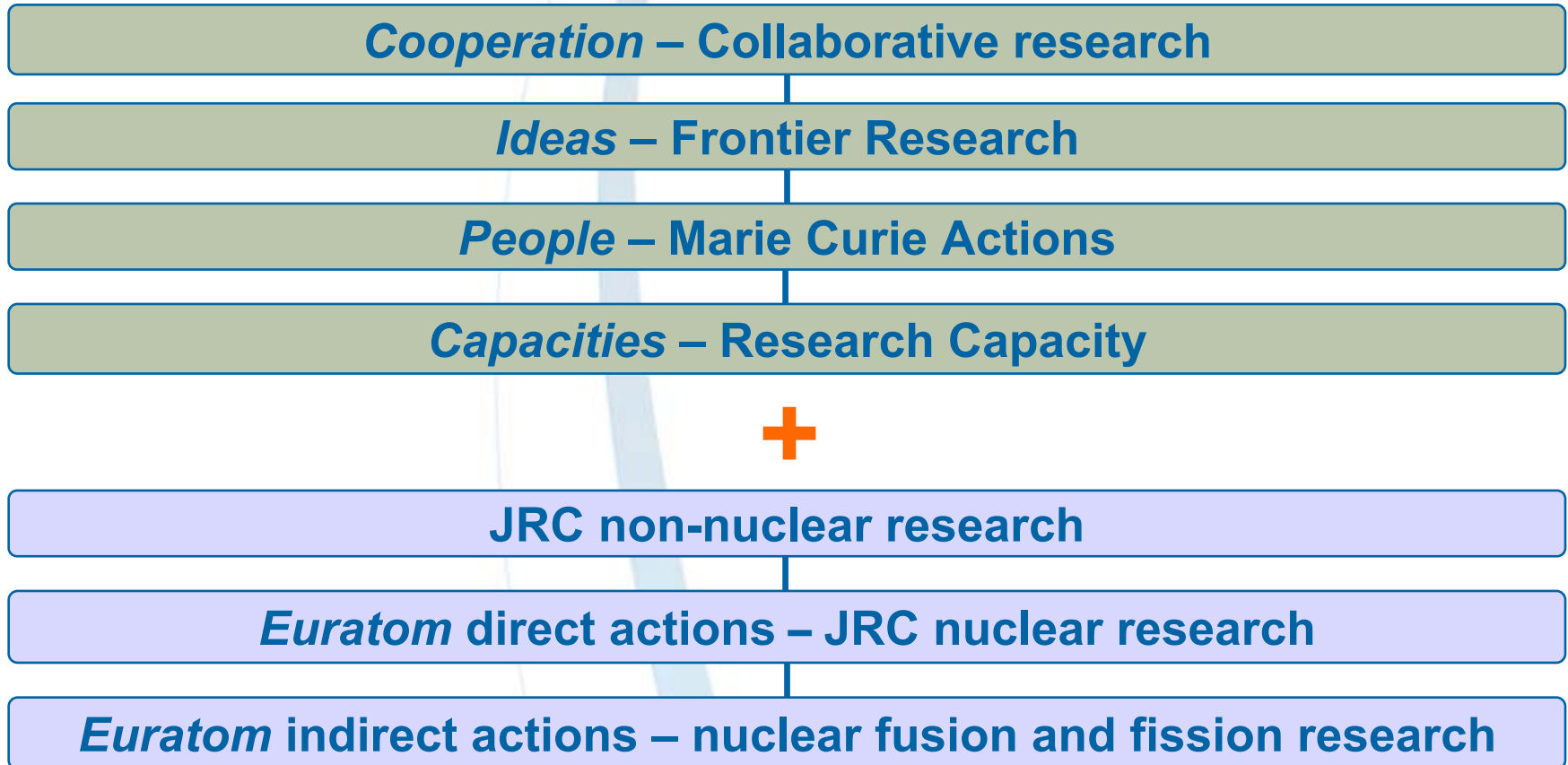
# What's new?

## Main new elements compared to FP6:

- Duration increased from five to seven years
  - except for Euratom FP
- Annual budget increased significantly
- Frontier research (~ €1 billion per year)
- New structure: cooperation, ideas, people, capacities
- Flexible funding schemes
- Joint Technology Initiatives
- Simpler procedures
- Logistical and administrative tasks → external structures



# FP7 2007 –2013 | Specific Programmes





# Cooperation – Collaborative Research



## Ten+ themes

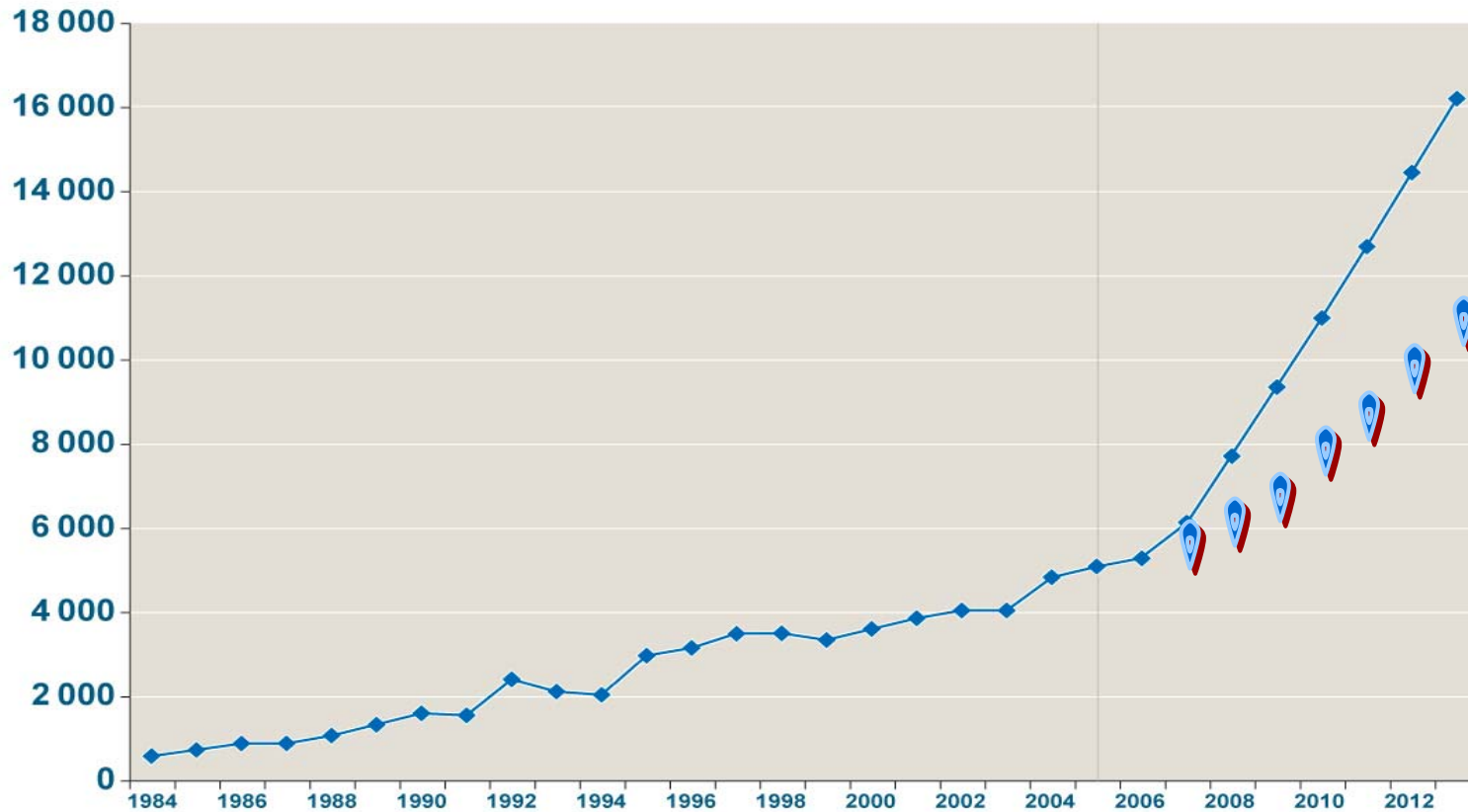
1. Health
  2. Food, agriculture and biotechnology
  3. Information and communication technologies
  4. Nanosciences, nanotechnologies, materials and new production technologies
  5. Energy
  6. **Environment (including climate change)**
  7. Transport (including aeronautics)
  8. Socio-economic sciences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



# Budgets of the EU Framework Programmes



€ MILLION



NB: Budgets in current prices. Source: Annual Report 2003, plus FP7 proposal



# 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



# Environment (incl. Climate Change)



## Climate Change, pollution and risks

### - Pressures on environment and climate -

*Integrated research on the **functioning of climate and the earth system**, including the polar regions, is needed in order to observe and analyse how these systems evolve and **predict their future evolution**. This will enable the development of effective **adaptation and mitigation** measures to climate change and its current and future **impacts**. **Pressures** on environment and climate **from anthropogenic and natural emissions** will be investigated as well as related interactions. Advanced **climate change models** from the global to sub-regional scales will be developed and applied to assess changes, potential **natural and socio-economic impacts** and critical thresholds. Climate **induced changes to atmospheric composition**, greenhouse gases and to the **water cycle** will be studied. Emphasis will also be given to **feedback mechanisms and abrupt changes**. Novel responses to climate changes will also be studied.*



## Climate Change, pollution and risks

### - Pressures on environment and climate - Indicative budget: 39 M€



#### area 1: *The Earth System and Climate: Functioning and abrupt changes*

- **Stability of the ThermoHaline Circulation (LP)**

#### area 2: *Emissions and Pressures: natural and anthropogenic*

- **Megacities, regional hot spots, air quality and climate (SMPs)**

#### area 3: *The Global Carbon cycle - GreenHouse Gas budget*

- **Ocean acidification and its consequences (LP)**

#### area 4: *Future Climate*

- ...

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

- **Climate change impacts and adaptation strategies in water policies (SA/CA)**
- **Climate change impacts on vulnerable mountain regions (LP)**
- **Past and future climate change impacts in the Parana-Plata river basin of South America (SMP)**

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

- **Full costs of climate change (SMPs)**
- **Effectiveness of adaptation and mitigation measures related to changes of the hydrological cycle and its extremes (SMP)**
- **Impacts and feed-backs of climate policies on land use and ecosystems in Europe (SMP)**
- **Exploitation and dissemination of climate change research results and public perception (SA)**



**ENV.2007.1.1.2.1.**

## **Megacities and regional hot-spots, air quality and climate**

Impacts of air pollution from megacities and large air-pollution “hot-spots” in Europe and elsewhere. Integrated research on emissions, their local impacts with special emphasis on air quality and associated risks, and their regional to global impacts. Assessment of mitigation options and quantification of impacts from polluted air-masses on larger scale atmospheric dynamics (physics and chemistry, hydrological processes, long-range/hemispheric transport etc.) as well as other important feedbacks between air quality, climate and climate change. The participation of international cooperation partner countries is encouraged.

**Funding scheme: small or medium-scale focused research collaborative projects**

*Expected impact: A better quantification of air quality, mitigation options and availability of more reliable tools for prediction of air pollution in cities. Support to EC Thematic Strategy on Air Pollution and Air Quality regulation. Better quantification on regional and global links between air pollution, climate and climate change necessary to underpin mitigation and other policy initiatives.*



# Environment (incl. Climate Change)



Climate Change, pollution and risks

- Environment and Health -

*Multidisciplinary research on interactions of **environmental risk factors and human health** is needed to support the Environment and Health action plan and the integration of public health concerns and disease characterisation related to emerging environmental risks. Research will focus on **multiple exposures via different exposure routes**, identification of **pollution sources** and new or **emerging environmental stressors** and their potential health effects, as well as on the quantification and **cost-benefit analysis** of environmental health risks and indicators for **prevention strategies***



Climate Change, pollution and risks

- Environment and Health -

Indicative budget: 21 M€



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

- Indoor air pollution in Europe: an emerging environmental health issue (SMP/NoE)
- Environmental factors and their impact on reproduction and development (SMP)

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

- European network on human biomonitoring (NoE/SMP)
- European cohort on air pollution (LP)
- Health impacts of drought and desertification including related socio-economic aspects (SMP)

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

- ERA-NET for environment and health (CA)



Call Name **Environment**

Budget **213 Million Euro**

Publication **End of December 2006**

Closure Date **27 March 2007**

Submission Procedure **1 Stage**

Evaluation Procedure **1 Stage**

Intended Period for Remote Evaluation **16 April - 30 April 2007**

Intended Period for On-site Evaluation **7 May - 20 May 2007**



# Information



- EU research:  
<http://ec.europa.eu/research>
- Seventh Framework Programme:  
<http://ec.europa.eu/research/fp7>
- European Research Council:  
[http://ec.europa.eu/erc/index\\_en.cfm](http://ec.europa.eu/erc/index_en.cfm)
- Info on programmes and projects:  
<http://www.cordis.lu/>
- RTD *info* magazine:  
<http://ec.europa.eu/research/rtdinfo/>
- Information requests:  
<http://ec.europa.eu/research/enquiries/>

