



**Joint Research Centre**  
***“Robust Science for Policy Making”***

**Joint Research Centre**  
**European Commission**

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Stakeholder Relations

**[www.jrc.ec.europa.eu](http://www.jrc.ec.europa.eu)**



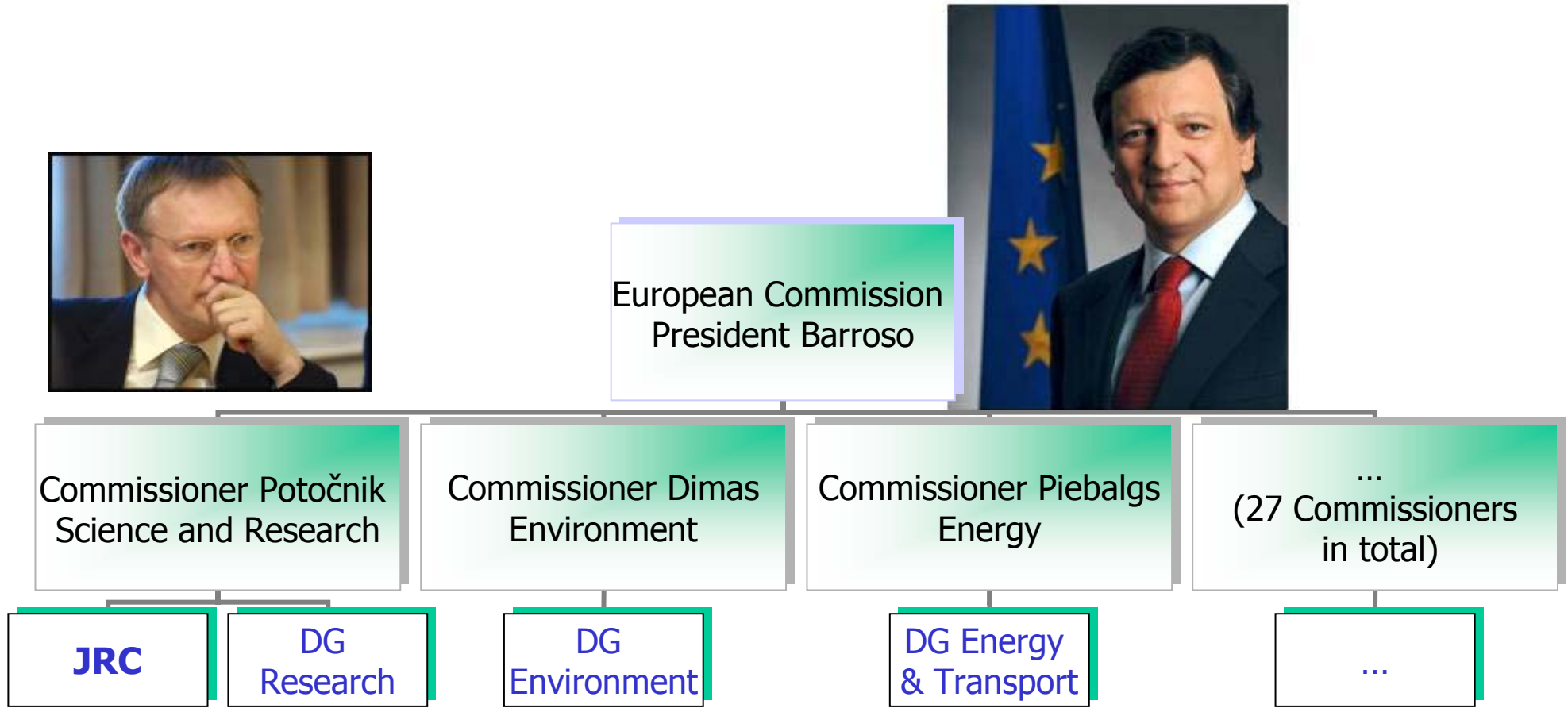
## What is JRC?

- A Directorate-General of the European Commission:
- Providing **customer-driven and technical support** for the conception, development, implementation and monitoring of EU policies
- Functioning as a **reference centre of science and technology** for the European Union
- Serving the common interest of the Member States, while being **independent of special interests**, whether private or national



# Where to position JRC in the Commission

Joint Research Centre



More info: [http://ec.europa.eu/commission\\_barroso/potocnik/indexfl\\_en.htm](http://ec.europa.eu/commission_barroso/potocnik/indexfl_en.htm)



# Our Structure: 7 Institutes across 5 Member States

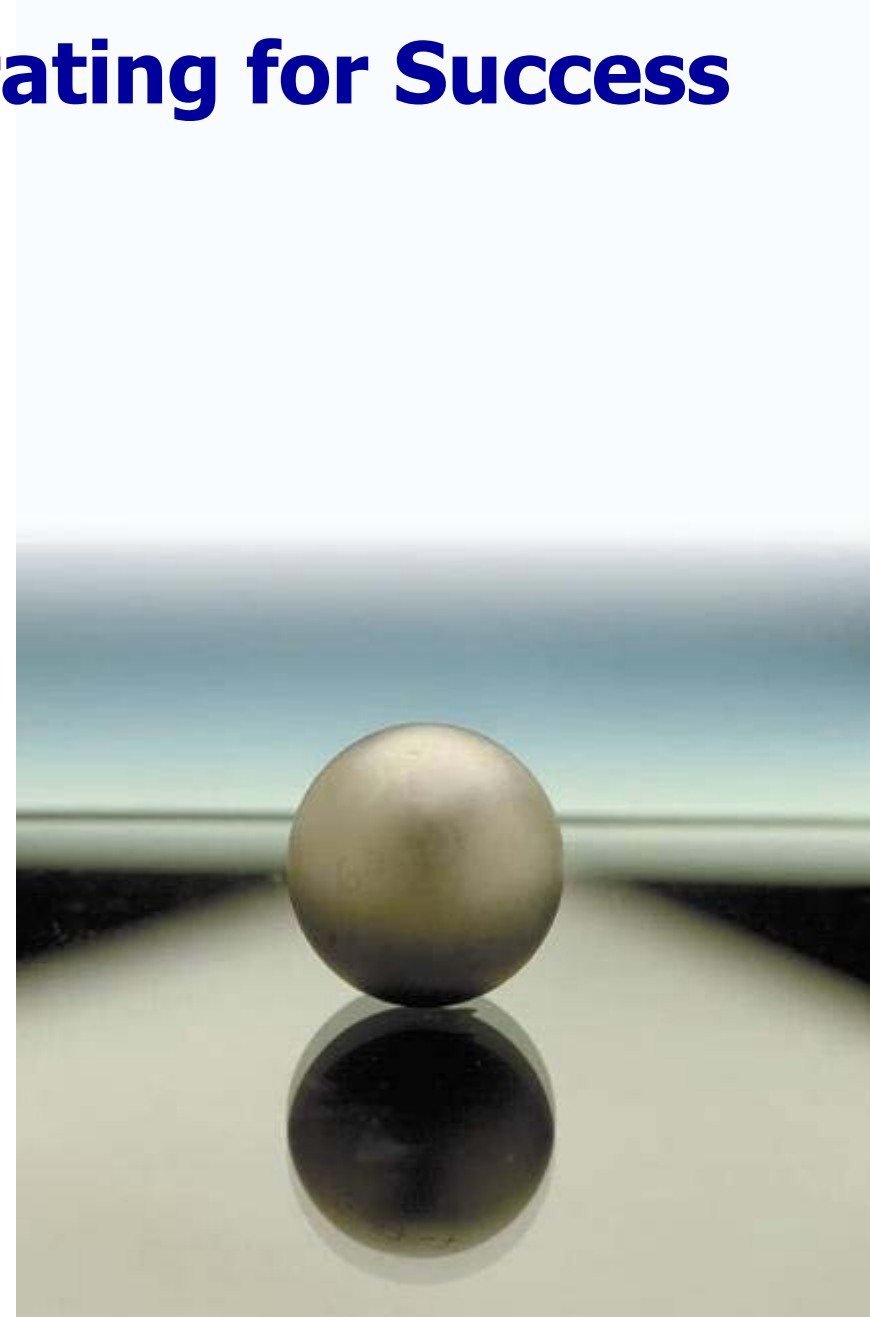
- Institute for Reference Materials and Measurements  
**IRMM** – Geel, Belgium
- Institute for the Protection and Security of the Citizen  
**IPSC** – Ispra, Italy
- Institute for Environment & Sustainability  
**IES** – Ispra, Italy
- Institute for Health and Consumer Protection  
**IHCP** – Ispra, Italy
- Institute for Transuranium Elements  
**ITU** – Karlsruhe, Germany
- Institute for Energy  
**IE** – Petten, The Netherlands
- Institute for Prospective Technological Studies  
**IPTS** – Seville, Spain





# Collaborating for Success

- **>2,700** scientific and support staff across Europe
- Work with over **1,000** public & private organisations
- Involved in more than **250** major networks including partnerships with applicant countries
- **Independent of national or commercial interests**
- **Close proximity to EU policy-makers**





## JRC: Our Added Value

- **Quality expertise and support** to other Commission services upon emergence of new issues in crisis situations
- **Anticipation and reinforcement of competences and facilities** in new fields of investigations which are relevant to future policies
- **Strong involvement in networks** (European Research Area) involving Member State authorities, institutions and expert groups
- **Continued day-to-day support** in the preparation, implementation & monitoring of EU regulations



## JRC in FP7

- **Aim:** To reinforce the JRC's **customer-driven orientation** and its already **strong connections** with the scientific and technical community in **Member States, Associated Countries and Candidate Countries**
- FP7 is taking an **integrated approach** to the JRC's main task, the provision of scientific and technological support to policies
- The JRC will engage in activities aimed at **consolidating growth and security and ensuring sustainable development**



## JRC in FP7

Specific programme  
“JRC direct actions”

2007-2013  
1,751 M€

EURATOM programme  
“JRC direct actions”

2007-2011  
517 M€

**FP7 indirect actions**

Collaboration with national  
public and private research  
institutes, academia, industry  
and international bodies

**TOTAL JRC = 2,268 M€**



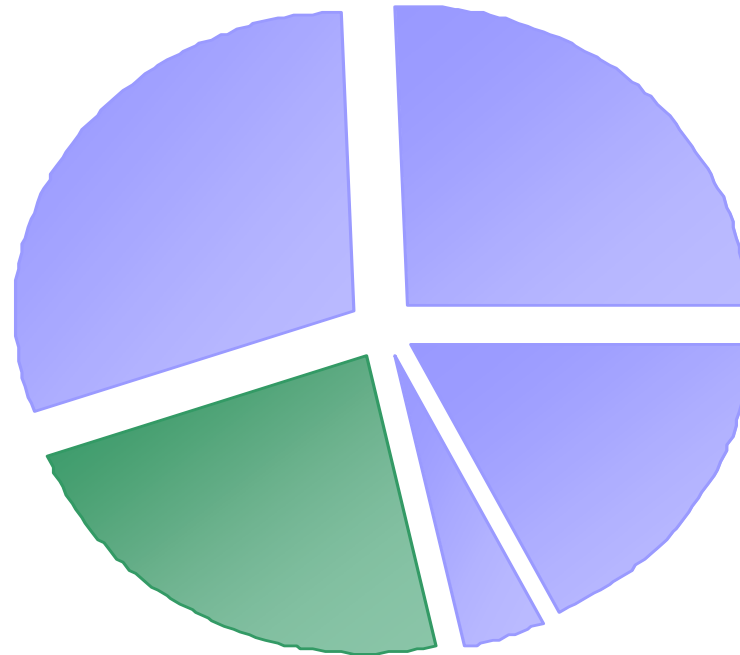
## JRC in FP7: Indicative Budget Breakdown

**683M€** ('Prosperity')

- Chemicals
- Biotechnology
- Energy & Transport
- Information Society

**578M€** ('Solidarity')

- Environment
- Health
- Climate Change
- Rural Development



**403M€** ('Security')

- Natural Disasters
- Internal/External Security
- Food Chain

**517M€\*** ('Nuclear')

- Nuclear Energy, Safety & Security

**88M€** ('World Partner')

- Global Security



Non-Nuclear



Nuclear (5-year programme)



# JRC in FP7: New Priorities

- **Support to Lisbon Process**  
Digital divide, econometric tools, interplay between innovation & regulation, standards and references in support of growth...
- **Increase Internal & External Security**  
Addressing terrorist threats, combating proliferation of CBRN, support border control...
- **Understand relationship between Environment & Health**  
Exposure to harmful agents, epidemiological studies, public health studies, enviro- and toxico-genomics, chemical stressors...
- **Sustainable Agriculture**  
Integrated use of agricultural resources, protection of agri-environment and of landscape, social issues...



# **Examples of JRC projects in the JRC Institutes outside Petten**



# IES (Ispra) - reducing emissions from road vehicles



Problem: Rising road emissions contribute to global warming

JRC activities: Vehicle Emissions Laboratory (VELA) allows the physical, chemical and toxicological characterization of the emissions from all types of transport fleet

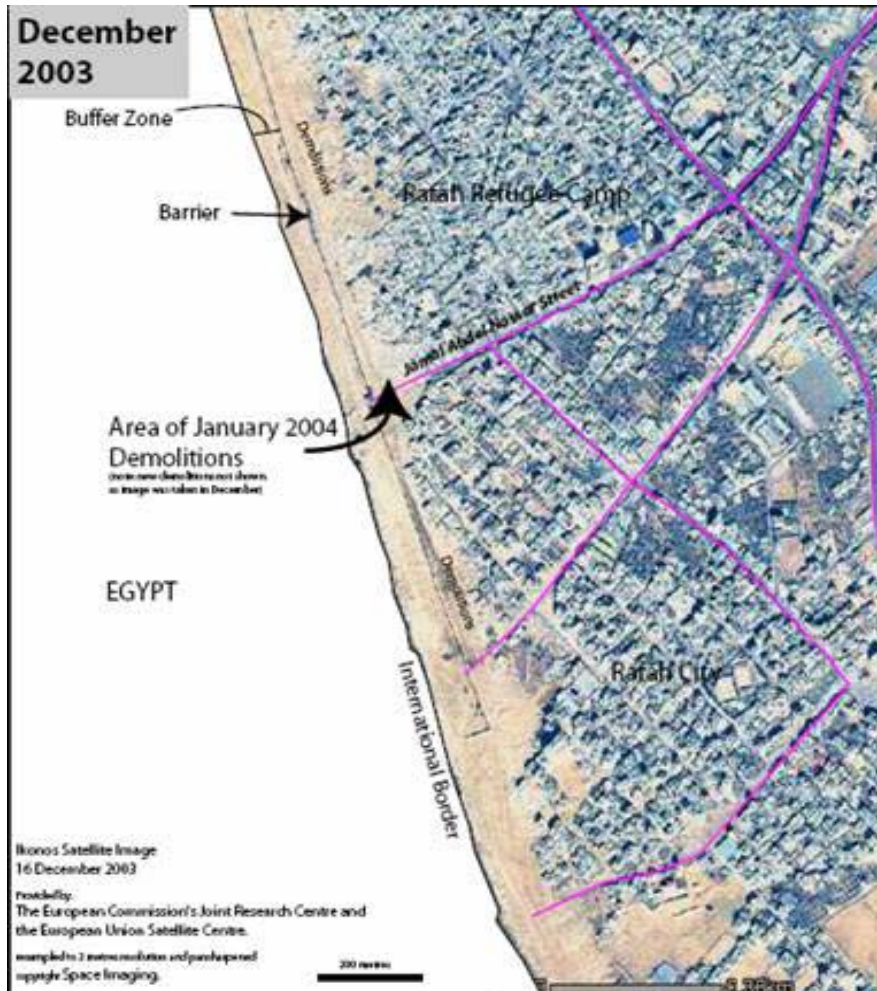
JRC results: update of “well to wheels” report (analyses of direct costs, potential availability and energy/greenhouse balance of alternative fuels); technical/scientific support to the EURO norms



Problem: EU external relations need reliable intelligence

JRC activities: Situational maps, satellite images and analysis, support to European Commission's crisis room, open source analysis, country profiles

JRC results: E.g., Lebanon crisis 2006: damage assessment, oil spill assessment, spatial database infrastructure for reconstruction





# IHCP (Ispra)- Genetically Modified Organisms



**Problem:** Implementation of EU legislation on GMOs is technically challenging

**JRC activities:** Community Reference Laboratory on GMO in food and feed (testing and validation of methods for sampling, detection, identifications and quantification of selected GM crops), modelling of coexistence

**JRC results:** E.g., validation of detection method for illegally imported LLRice 601 (autumn 2006); report on coexistence (2006)

**Problem:** Ensure compliance with EU legislation on food safety and quality throughout the EU

**JRC activities:** Method development, validation and harmonisation (e.g. food allergen and BSE tests), measurement evaluation programmes (e.g. heavy metals), monitoring data bases (e.g. for European wine), reference materials



**JRC results:**

6 Community reference laboratories for food safety operated by the JRC





# ITU (Karlsruhe) - Nuclear Safeguards



**Problem: Proliferation and illicit trafficking of nuclear materials**

**JRC activities: Nuclear forensics (determine the nature and origin of seized illicitly trafficked nuclear material), training of nuclear inspectors, maintenance and upgrading of sealing systems, provision of nuclear reference materials**

**JRC results: Investigation of several serious illicit trafficking or diversion cases since 1994 (e.g., fuel pellets, Germany, 2007)**



# IPTS (Seville) - Industrial R&D Investment Scoreboard

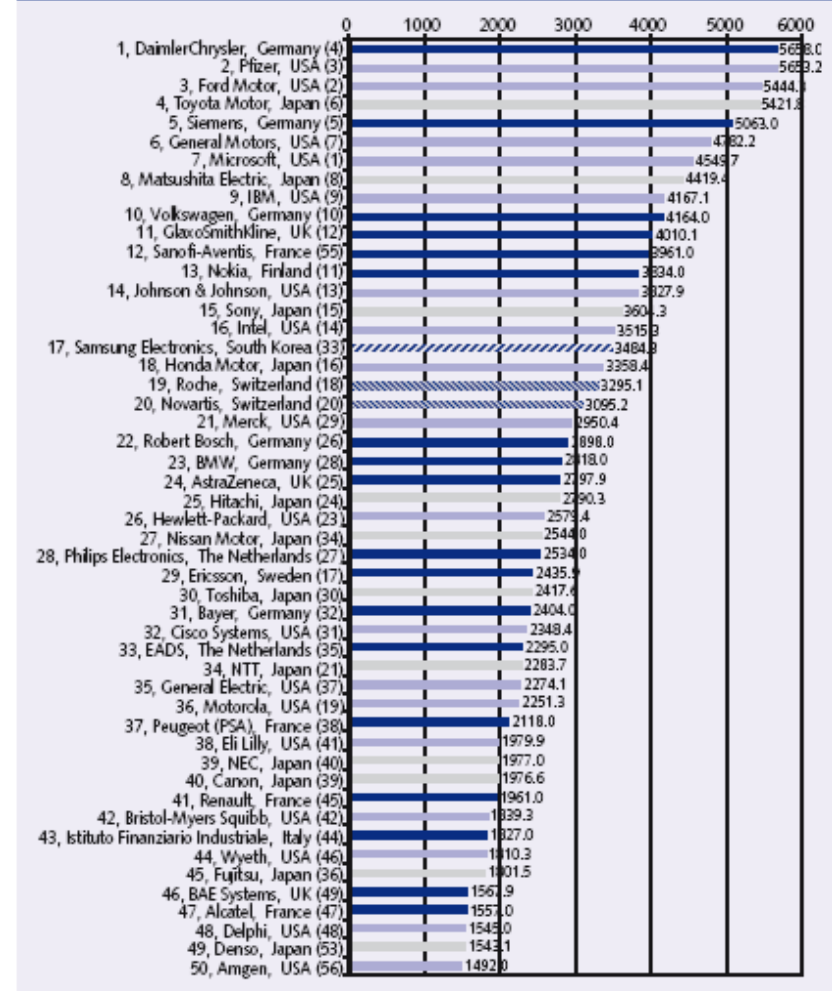
**Problem: EU lagging behind in R&D**

JRC activities: monitoring corporate R&D investment

JRC result: "Industrial R&D Investment Scoreboard"

- ranks top 1000 EU and non-EU corporate R&D investors
- 2005: EU has 18 of the top 50 R&D spenders and 5 of the 10 world-wide companies with the fastest R&D growth

Ranking of world top 50 companies by R&D investment (million €) in 2004



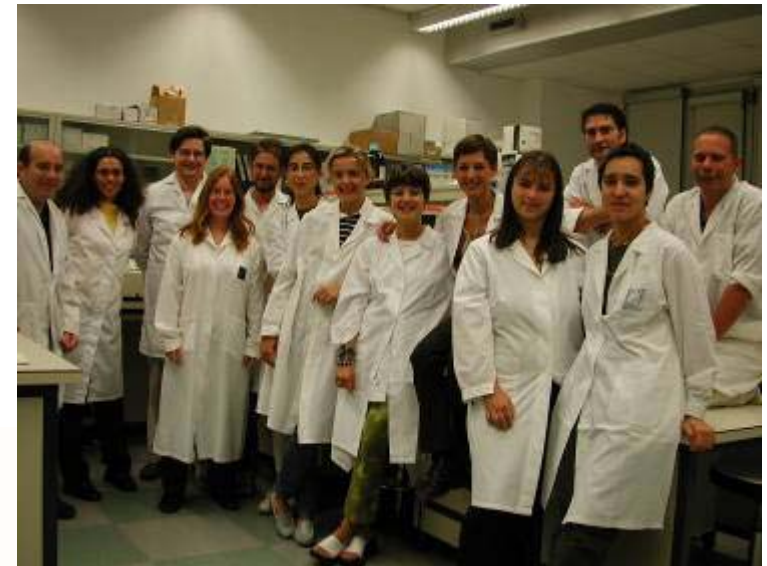


# Implementing the Mission

*... to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.*

**... in implementing its mission,  
the JRC...**

**... depends on intensive networking  
with public and private institutions in  
the Member States and beyond...**





**JRC**

***Robust Science for Policy Making***