



Carbon Sequestration Leadership Forum

Current activities and plans for RTD actions in the EU

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“The Energy Package”

The European Commission proposed in January 2007 an integrated energy and climate change package:

- **An Energy Policy for Europe**
- **Limiting Global Climate Change to 2°C: The way ahead for 2020 and beyond**



An Energy Policy for Europe

- **The drivers: Sustainability, Security, Competitiveness**
- **The Action Plan:**
 - **The Internal Energy Market**
 - **Solidarity between Member States and security of supply for oil, gas and electricity**
 - **A long-term commitment to greenhouse gases reduction and the EU Emissions Trading System**
 - **An ambitious programme of energy efficiency measures at Community, national, local and international level**



An Energy Policy for Europe

- **The Action Plan (cont.)**
 - **A longer term target for renewable energy**
 - **A European Strategic Energy Technology Plan**
 - **Towards a low CO₂ fossil fuel future**
 - **The future of nuclear**
 - **An International Energy Policy that actively pursues Europe's interests**
 - **Effective monitoring and reporting**



Limiting Global Climate Change to 2°C

The way ahead for 2020 and beyond

- **EU leadership through a firm independent commitment to achieve at least 20% GHG emission reductions by 2020, compared to 1990 level**
- **Communication on carbon capture and geological sequestration by 2nd half 2007**



Actions initiated by the European Commission in 2007

- **Define a European Strategic Energy Technology Plan**
- **Establish instruments to stimulate a number of demonstration facilities by 2015 in Europe**
- **Produce EU legislative framework enabling CCS in power generation**



Highlights of CCS Activities

- **Projects on CCS: more than 170 M€**
- **Co-ordination of member states activities:
ERA-NET (FENCO)**
- **European Technology Platform on Zero
Emission Fossil Fuel Power Plants:**
 - **1st General Assembly in 2006**
 - **Strategic Research Agenda**
 - **Strategic Deployment Document**

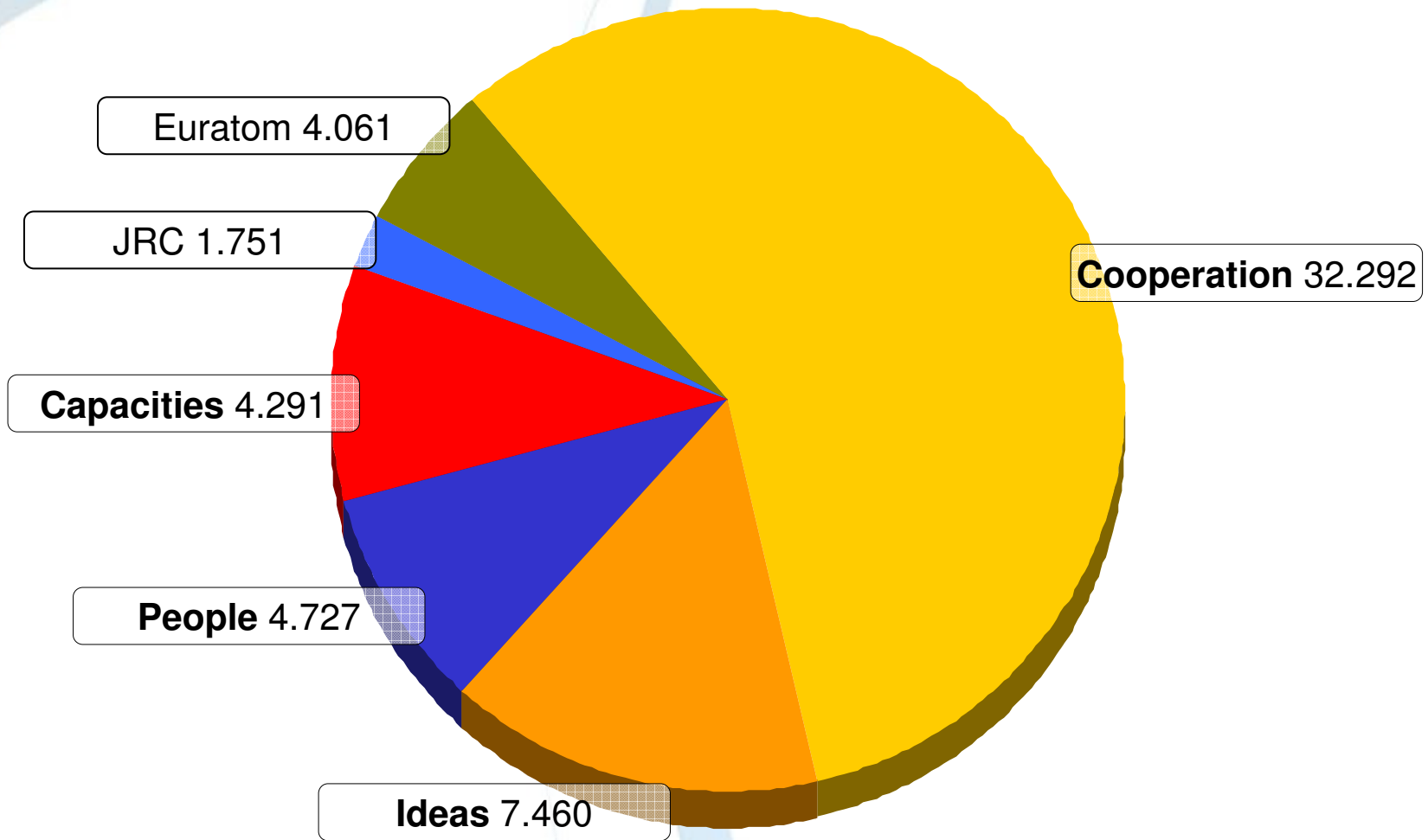


International Cooperation

- **CSLF membership**
- **The IEA framework, participation in:**
 - *IEA Working Party on Fossil Fuels*
 - *Greenhouse Gas R&D Programme*
 - *Clean Coal IA.*
- **Bilateral S&T agreements with US, Japan, China, India, Canada, Australia and others**



FP7 structure and budget (million €)





Cooperation Specific Programme

Theme	Million €
1. Health	5984
2. Biotechnology, food and agriculture	1935
3. Information society	9110
4. Nanotechnologies, materials and production	3467
5. Energy	2265
6. Environment	1886
7. Transport	4180
8. Socio-economic research	607
9. Security and space	2858



Energy Theme

Hydrogen and fuel cells

CO2 capture and storage for ZEP generation

Renewable electricity generation

Clean coal technologies

Renewable fuel production

Smart energy networks

Renewables for heating and cooling

Energy efficiency and savings

Knowledge for energy policy making



CCS and Clean Coal in FP7

➤ **CCS technologies for ZEP generation**

Topics for first call: pilot scale capture demo, storage site qualification methods, advanced separation techniques, etc.

➤ **Clean Coal Technologies**

Topics for first call : demonstration of large or pilot plants for gasification and supercritical coal combustion, capture ready plants, integration of post-combustion capture, etc.

➤ **Cross-cutting actions between both above**

Topics for first call : regulatory issues for CSS and ZEP generation, support to international cooperation, socio-economic assessments of pathways for CCS in Europe, etc.



Cooperation Topics in the first call

Cooperation with CSLF members is particularly encouraged in two topics:

- **CO₂ storage: development of a suitable methodology for qualification of deep saline aquifers for CO₂ storage**
- **Cross-cutting actions: Support to regulatory activities for ZEP generation**



In summary

Key elements for Zero Emission Power Generation in the EU are:

- ✓ **European Technology Platform Zero Emission Fossil Fuel Power Plants**
- ✓ **Energy policy development**
- ✓ **European Strategic Energy Technology Plan**
- ✓ **Seventh Framework Programme**

➔ The European CCS Flagship Programme



**Thank you for
your attention!**

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