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# *European Sustainable Energy Seminar*

## *INFORSE-Europe and EREF*

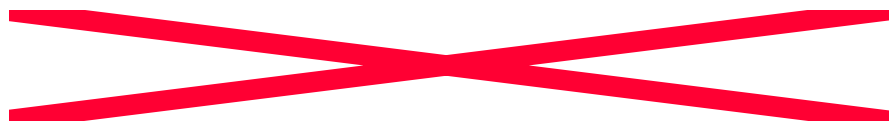
*Brussels, 8 April 2008*

INFORSE



**EREF**

Proceedings : [http://www.inforse.org/europe/seminar08\\_BXL.htm](http://www.inforse.org/europe/seminar08_BXL.htm)



## **EU Strategic Energy Technology Plan and Sustainability**

Bruno Schmitz, Head of Unit, DG RTD  
European Commission





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# Contents

- Context, in short
- Related policy initiatives, in short
- SET Plan (Overview, Technology Roadmap, European initiatives, follow-up)
- EU energy Technology Platforms
- Co-operation / Energy Theme

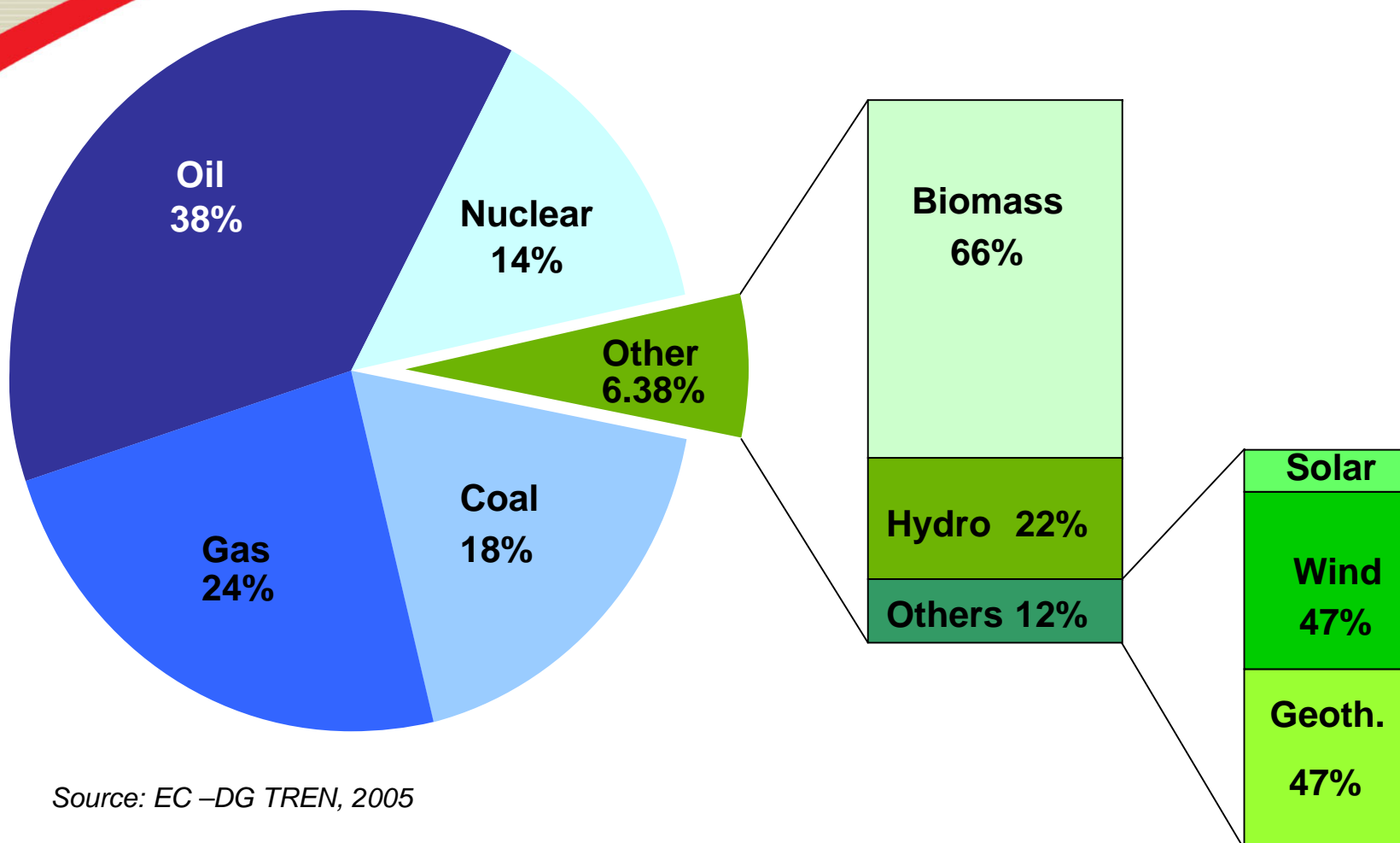




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# Context : EU-27 Energy mix



Note: document not legally binding

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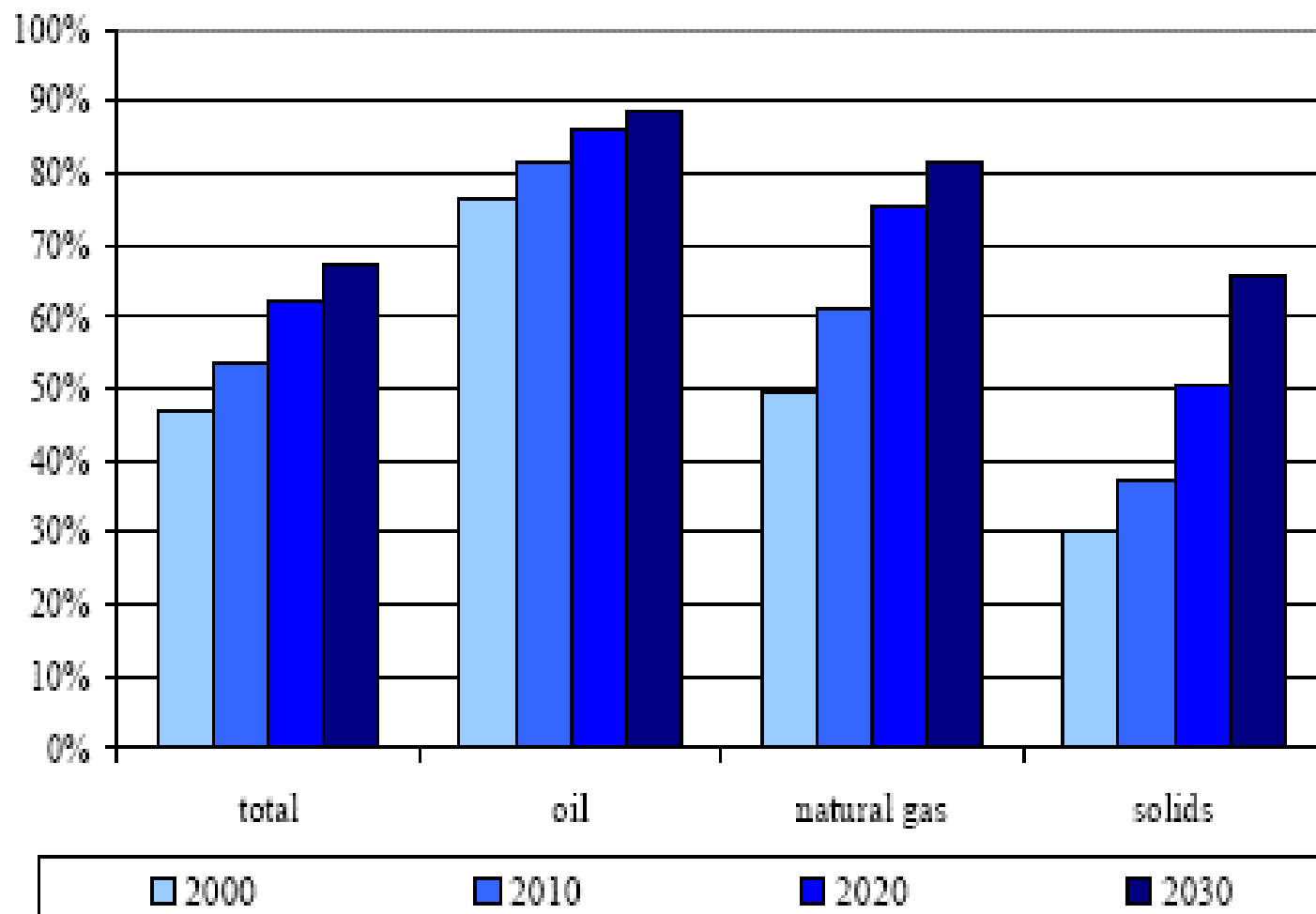




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# Context : EU-25 Energy Imports



Source: Slides from EC Green Paper « A European Strategy for Sustainable, Competitive and Secure Energy COM(2006)105 final

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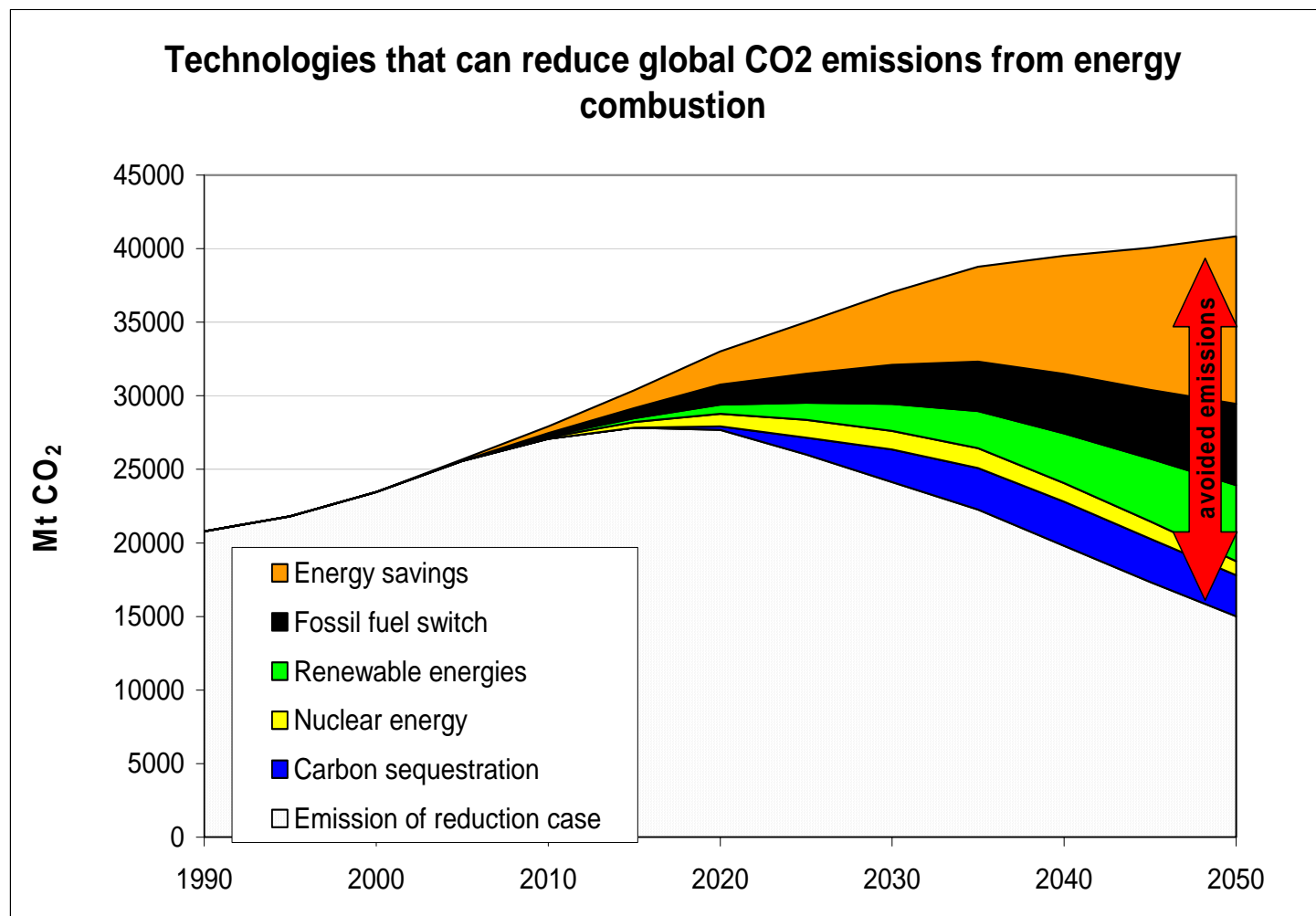




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# Context :The 2°C challenge: Cut global emission by 15-20% by 2050 compared with 1990 (Baseline 2005)



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# EU Most Relevant Policy Initiatives

- **Green Paper** of March 2006 on “A European Strategy for Sustainable, Competitive and Secure Energy”
- **Energy Package**
  - Technology is a key element in achieving the Green Paper triangle and hence the proposed Strategic Energy Technology Plan (SET Plan)
  - Main EU targets:
    - 20% of greenhouse gas emissions reduction by 2020
    - 20% of energy efficiency improvement by 2020
    - 20% of renewable energy sources in the energy mix by 2020  
(With 10% Biofuels in transport)





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# European Strategic Energy Technology Plan (SET-Plan)

*COM(2007)723 of 22 November 2007*

- Joint strategic planning – new Governance - align technology development with energy policy goals
- Effective implementation:
  - European Industrial Initiatives: strategic technology alliances
  - Strengthening European energy research capacities – European Energy Research Alliance
  - Trans-European Energy Networks and Systems of the Future – transition planning
- Increase resources, both financial and human. Follow-up Communication in 2008
- Reinforce international cooperation

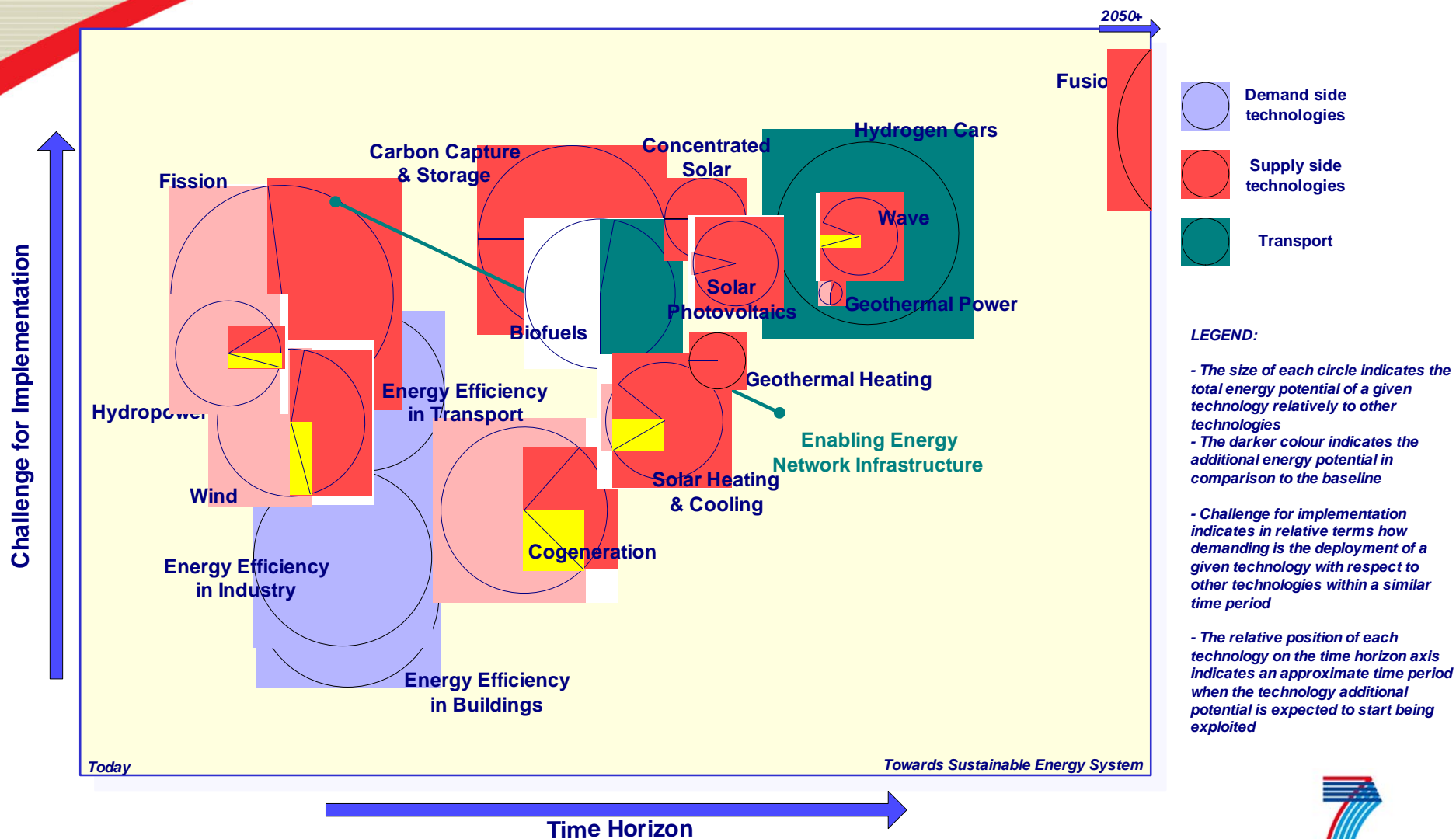




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# Technology Roadmap



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# Proposed priority initiatives

- **European Wind** (on and off-shore applications)
- **Solar Europe Initiative** (PV and CSP)
- **Bio-energy Europe** (next generation' biofuels within an overall bio-energy use strategy)
- **European CO<sub>2</sub> capture, transport and storage** (whole system requirements, including efficiency, safety and public acceptance)
- **European electricity grid** (smart electricity system, including storage)
- **Sustainable nuclear fission** (Generation-IV)





# Current and Next Steps

- Interacting with ETPs and other Energy Theme stakeholders groups (SRA agendas possibly revisited, other further inputs)
- FR Presidency Stakeholders meeting of October 2008 and preparatory meetings
- WPs 2008, 2009 and beyond (PC meetings) inc. other FP Themes where appropriate, e.g. on Biorefinery
- Internal reflection on financing (communication), cross-cutting issues (SATnetwork), etc.
- Listening to any further suggestions





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# EU RTD : Energy Technology Platforms

- **Hydrogen and Fuel cells**
  - > Joint Technology Initiative (JTI)**
- **Biofuels**
- **Photovoltaics**
- **Solar thermal**
- **Wind**
- **SmartGrids**
- **Zero emission fossil fuel power plants**





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# EU FP : Co-operation Specific Programme

## **THEMES**

- 1. Health**
- 2. Food, agriculture and fisheries, and biotechnology**
- 3. Information and communication technologies**
- 4. Nanosciences, nanotechnologies, materials and new production technologies**
- 5. Energy (2.3 Billion €)**
- 6. Environment (including climate change)**
- 7. Transport (including aeronautics)**
- 8. Socio-economic sciences and the humanities**
- 9. Space**
- 10. Security**





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# Energy Theme : Overview

*Note : 10 “activities” implemented jointly by DG RTD and TREN*

**Hydrogen and fuel cells**

**CO2 capture and storage  
technologies for zero  
emission power generation**

**Renewable  
electricity  
generation**

**Clean coal  
technologies**

**Renewable  
fuel production**

**Smart energy  
networks**

**Renewables  
for heating and cooling**

**Energy savings  
and energy efficiency**

**Knowledge for energy policy making**

**Horizontal Programme Actions**





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*THANK YOU FOR YOUR ATTENTION*

