



Non Nuclear Energy Programme

THEMATIC NETWORK CLEANER & MORE EFFICIENT GAS TURBINES (CAME-GT)

First Combined Workshop

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5th Framework Programme for Research, Technological Development and Demonstration (RTD)

1998 - 2002

The Framework Programme for RTD is the main political instrument of Community research, a four year plan devised by the Commission in close co-operation with the world of science, economics and politics





The Energy Content - Overview

Clear Energy Policy Targets:

- ✦ **Meeting Kyoto Objectives: 8% CO₂ reduction between 2008 and 2012 compared to 1990 level**
- ✦ **Doubling the Share of Renewable Energy Sources: from 6% to 12% final energy**
- ✦ **Improving Energy Efficiency: increase by 18% until 2010 compared to 1995**
- ✦ **Improving Security and Diversity of Supply**





Key Action 5

“Cleaner Energy Systems, including Renewables”

- ↘ **Large-scale generation of electricity and/or heat with reduced CO₂ emissions from coal, biomass and other fuels, including combined heat and power (CHP)**
- ↘
- ↘ **Development and demonstration, including decentralised generation, of the main new and renewable energy sources (in particular, biomass, wind and solar technologies) and of fuel cells**
- ↘
- ↘ **Integration of new and renewable energy sources into energy systems**
- ↘
- ↘ **Cost-effective environmental abatement technologies for power production, including CO₂ management**





Key Action 6

“Economic & Efficient Energy for a competitive Europe”

- ↘ **Technologies for the rational and efficient end use of energy**
- ↘ **Technologies for the transmission and distribution of energy**
- ↘ **Technologies for the storage of energy on both macro and micro scale**
- ↘ **More efficient exploration, extraction and production technologies for hydrocarbons**
- ↘ **Improving the efficiency of new and renewable energy sources**
- ↘ **Elaboration of scenarios on supply and demand technologies in economy/environment/energy (E3) systems and their interactions**





Energy, Environment and Sustainable Development

Part B: Energy

Work Programme Update:

A New Approach

Target Actions, Priorities and Calls for Proposals (2000-2002)





Innovative approach for 2001-2002

- »»»» Concentration of ~60% of budget around a core set of Target Actions**
- »»»» identification of a limited number of priorities of strategic importance to the EU**
- »»»» clear differentiation between short term (less than 5 years) and medium-to-long term issues**





Indicative timetable and budget

Target Actions 60% of total budget

Short-Term 50% of total Target Action budget

1st closing date: 15.03.2001
 Budget: ~70 Meuro
 Topics covered:
 •Sustainable Communities
 •Clean Urban Transport
 •Gas Power Generation
 •Application Driven Fuel Cells

2nd closing date: 14.12.2001
 Budget: ~75 Meuro
 Topics covered:
 •Application Driven Fuel Cells
 •Bio-electricity
 •Eco-buildings
 •Sustainable Communities

Medium to Long-Term 50% of total Target Action budget

1st closing date: 09.02.2001
 Budget: ~70 Meuro
 Topics covered:
 •Fuel Cells and hydrogen
 •Bio Energy
 •Integration
 •Cleaner fuels for transport
 •Storage
 •Photovoltaic

2nd closing date:
 14.12.2001
 Budget: ~75 Meuro
 Topics covered:
 All MLT actions addressed

RTD projects, Thematic Networks and Concerted Action





Indicative timetable and budget

General Call

40% of total budget

Short-Term 50% of total General Call budget

1st closing date: 15.03.2001
Budget: ~45 Meuro
Topics covered: short-term actions covering all areas of the WP

2nd closing date: 14.12.2001
Budget: ~50 Meuro
Topics covered: short-term actions covering all areas of the WP

Medium to Long-Term 50% of total General Call budget

1st closing date: 09.02.2001
Budget: ~45 Meuro
Topics covered: Medium to long-term actions covering all areas of the WP

2nd closing date:
14.12.2001
Budget: ~50 Meuro
Topics covered: Medium to long-term actions covering all areas of the WP

[1]RTD projects, Thematic Networks and Concerted Action





Indicative roadmap 2001-2002

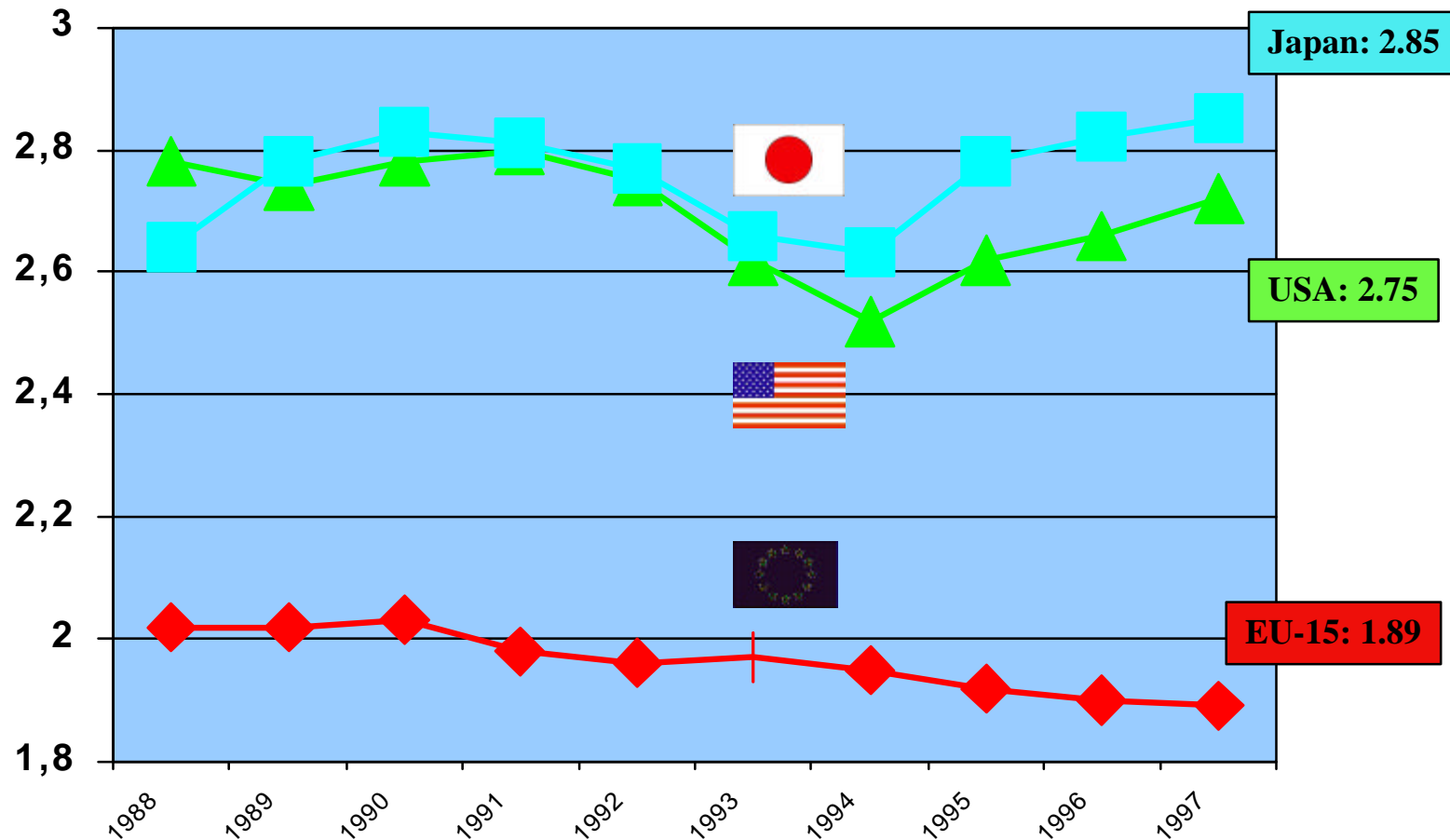
(other type of actions)

Type of activity	Cut-off-dates
RTD activities of a Generic Nature	09.02.2001 14.12.2001
Training	
Accompanying Measures	
SME Measures	17.01.2001 and 18.04.2001
•Explanatory Awards	2001: 17.01, 18.04 and 19.09. 2002: 16.01 and 17.04.
•Co-operative Research	



European research: intensity

R&D expenditure as a % of GDP





Why a “European research area”?

- Today: European research = 15 + 1 (15 MS +EU)
- EU Enlargement prospects

Thus:

- Need to improve spending of scarce resources
 - Need to organise research better
- Need to move to a real **European research policy**



Possible impact

- Taking **stock** of the research effort in the MS
- Elaborating a European research **policy** going beyond the 15+1 approach
- Better organisation of research
- Bringing **public and industrial** research closer
- Improving **coherence** of national and European research programmes
- Improving **exploitation** of research results and capacities
- Making Europe an **attractive** place for researchers from Europe and the entire world
-



European research area

What might be done:

- Networking of existing excellence
- Creation of “virtual” European laboratories
- European approach to research infrastructures
- Co-ordination national/European programmes
- Greater mobility of researchers
- Greater coherence of research activities
- Improving the attraction of Europe for researchers from other parts of the world