

Bio-energy research

Future FP6 calls

Wiktor Raldow

New and Renewable Energy Sources
Directorate General for Research



BIO-ENERGY
ENLARGED PERSPECTIVES

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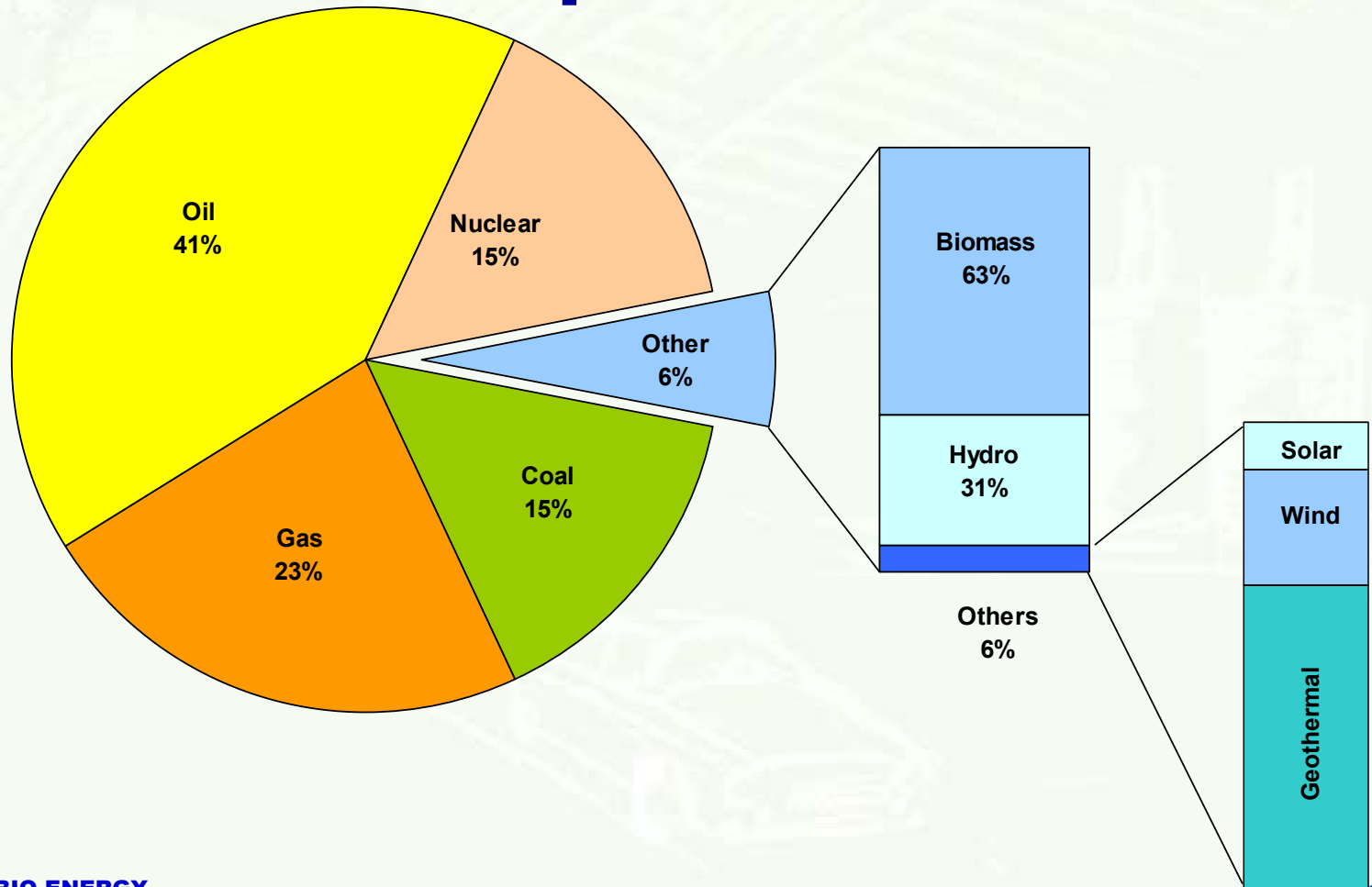
Research actions within Sustainable Energy Systems *

aim at sustainable, secure and affordable energy supply through

- × increasing security of energy supply
- × reducing greenhouse gases and pollutant emissions
- × improving energy efficiency
- × increasing the share of renewable energy sources
- × improving competitiveness of EU energy industry

* A part of Priority 6: Sustainable Development, Global Change and Ecosystem

Renewables in the EU energy consumption in 2000



Sustainable Energy Systems

Short and medium term actions (DG TREN - 405 M€)

Focus _____ Integrated demonstration actions

Impact _____ Accelerate market penetration with emphasis on 2010 energy policy objectives

Medium and long term actions (DG RTD - 405 M€)

Focus _____ Research, including prototypes and pilot plants

Impact _____ Technology development (wide exploitation beyond 2010)

Short and medium-term (SM) research actions

- × **Clean energy, in particular renewables**
 - ✓ Cost effective supply
 - ✓ Large scale integration
- × **Energy savings and energy efficiency**
 - ✓ Eco-buildings
 - ✓ Polygeneration
- × **Alternative motor fuels**

Medium and long-term (ML) research actions

- × Fuel cells, including their applications
- × New technologies for energy carriers (hydrogen and electricity)
- × **New and advanced concepts in renewable energy technologies**
- × Capture and sequestration of CO₂
- × Socio-economic tools and concepts for energy strategy

Renewable energy technologies

- × Photovoltaics
- × **Biomass and bio-energy**
- × Other areas such as
 - ✓ wind
 - ✓ geothermal
 - ✓ ocean
 - ✓ concentrated solar thermal

Biomass and bio-energy

Producing cheaper and cleaner bio-energy

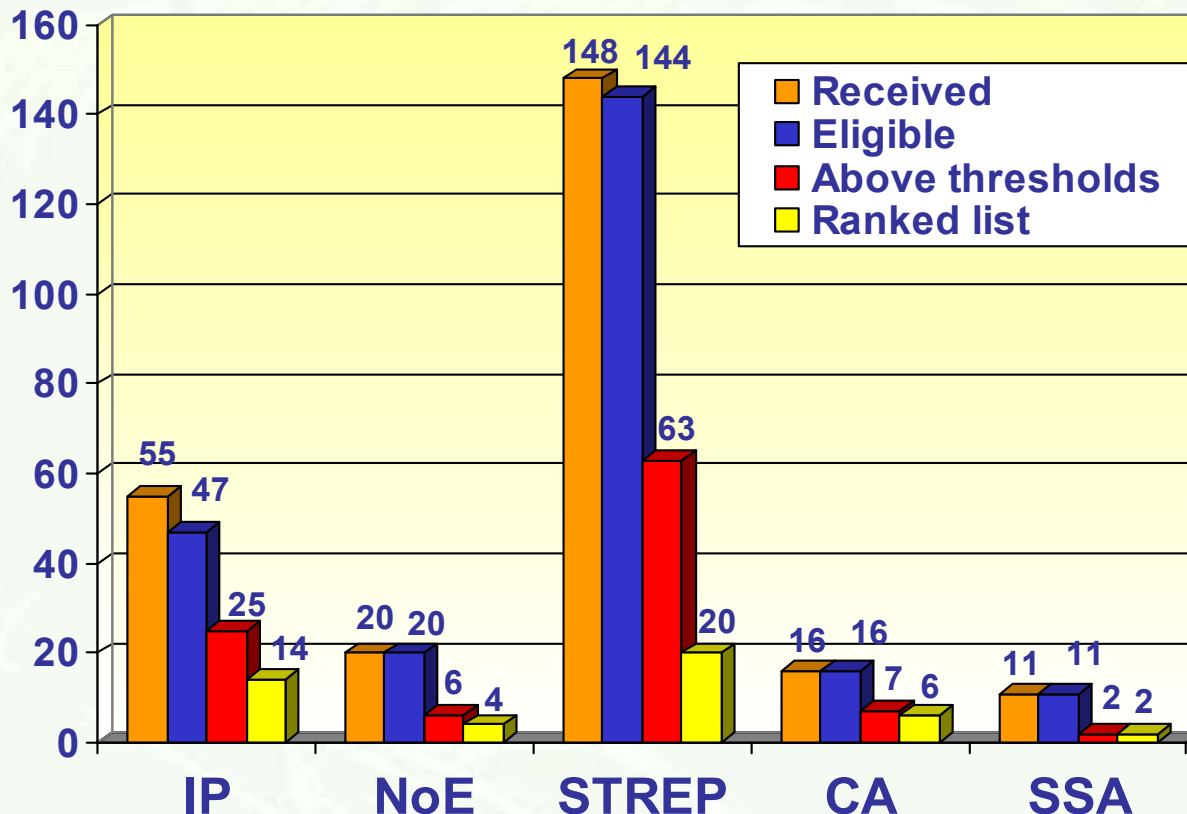
- × **Combustion technologies**
(reduced pollution, multi-fuel processes, self-running systems)
- × **Gasification systems**
(electricity and hydrogen production)
- × **Biofuels for transport and fuel cells**
(clean bio-fuels)
- × **Energy from bio-residues and energy crops**
(waste-to-energy, crop-to-energy concepts)

Results of the first ML call

Main Indicators

| | Submitted | Ranked list |
|--|---|----------------------|
| Number of proposals & % of New v Trad Instruments | 250 30% - 70% | 46 39% - 61% |
| EC Contribution & % of New v Trad Instruments | 1347 M€ 72% - 28% | ~200 M€ 78% - 22% |
| Available budget | ~200 M€ | |
| Ranked projects (after mergers) | 14 IPs, 4 NOEs, 4 CAs, 18 STREPs, 2 SSAs | |

Number of Proposals vs. Instrument

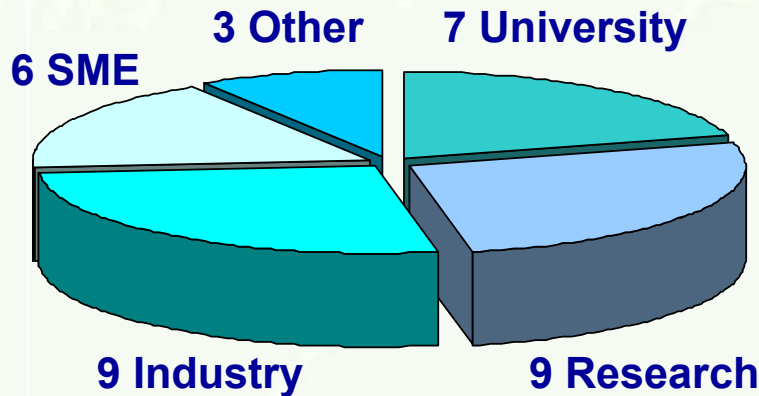


Ranked list/Eligible: IP 30% NoE 20% STREP 14% CA 37% SSA 18%.

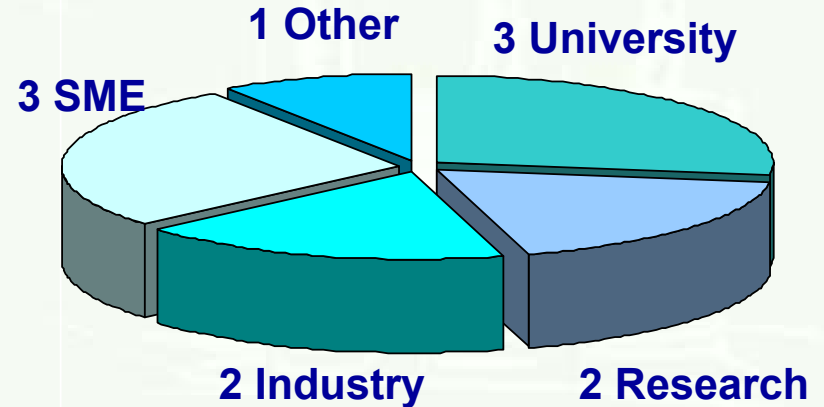
Types of organisation in a typical IP or STREP

(average values for ranked list proposals)

IP



STREP



Requested contribution (submitted)
Recommended (ranked list)
Number of partners

| IP | STREP |
|-------|--------|
| 13 M€ | 2.5 M€ |
| 9 M€ | 2 M€ |
| 34 | 11 |

Biomass and bio-energy in the first call

Received eligible proposals: 20% (€)

Ranked projects: 20% (€)

Biomass and bio-energy

IP and NoE

- × Biofuel production systems from ligno-cellulosic feedstock
1 IP under negotiation
- × Hydrogen rich gas from multiple biomass feedstocks
1 IP under negotiation
- × Overcoming barriers to the development of bio-energy production systems
1 NoE under negotiation

STREP

- × Environmentally friendly biomass combustion technologies
3 STREPs under negotiation
- × Production and coupling of biofuels to fuel cells
2 STREPs under negotiation
- × Energy from bio-residues and energy crops
1 STREP under negotiation

Reserve list: 1 NoE (Biofuels), 8 STREPs

Preparing for the next ML call

- × Mid-term review of the work programme
(including the road map and the call text)
- × Call text will specify which areas are open and for which instruments
 - ✓ *list of topics for IP and NoE proposals*
 - ✓ *specified areas for STREP proposals*
- × FP6 evaluation principles, procedures and criteria

Revision of the Work Programme Preliminary planning

- × **Informal stakeholders consultations**
- × **Eol call (end November 03 - end February 04)
*to be confirmed***
- × **Consultations with Advisory Group on Energy;
parallel consultations with an ad hoc group
of the Programme Committee**
- × **Drafting and approval procedure, including
positive opinion of the Programme Committee**
- × **Call for proposals (September 04 - December 04)**

Important considerations

- × **Policy context, research and energy policies**
 - ✓ **Creation of European Research Area**
 - ✓ **Increased contribution of renewable energy sources (from 6 to 12% in 2010), green electricity (22%), liquid bio-fuels (5.75%)**
- × **Implementation principles:**
 - ✓ **Focus on priorities, selective calls**
 - ✓ **Priority use of the new instruments**

Staying informed

- **CORDIS:**

<http://www.cordis.lu/fp6/>

- **EUROPA:**

http://europa.eu.int/comm/dgs/research/index_en.html

http://europa.eu.int/comm/research/energy/index_en.html

http://europa.eu.int/comm/energy/index_en.html

- **Programme Committee members and National contact points**

- **Information days and similar events**

- ***Call for experts:***

http://www.cordis.lu/experts/fp6_candidature.htm