

Presentazione del piano della ricerca, 19 Aprile 2011

**PROGRAM**  
**‘ENERGY RESOURCES AND MARKETS’**

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# MOTIVATION

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- Energy strategic area of action now, and in the coming decades
- A lot of new international research effort, mostly on the technical side
- Contribution of economic analysis to the understanding of energy problems important and scarce
- Energy crucial for:
  - environment
  - economy
  - security
  - poverty
  - Every-moment activities (including fun..)

## FEEM expertise and goals

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- FEEM's involvement in energy related projects has been substantial, though traditionally linked to environmental issues
- Strong synergies with the research on climate, but will also look further
- E.g. Focus on fast growing economies and their energy demand, with its repercussion on the global energy markets
- E.g. Focus on the role of technology and its change on the development of both demand and supply of energy, accounting for its impact on the management of natural resources and on the energy policies

## The research areas

	<b>Energy and the economy</b>	<b>Energy and the environment</b>	<b>Energy Policy</b>
<b>Energy Demand</b>			
<b>Energy Resources</b>			
<b>Energy Supply</b>			

## The research areas

	<b>Energy and the economy</b>	<b>Energy and the environment</b>	<b>Energy Policy</b>
<b>Energy Demand</b>	Determinants of energy consumption	The environmental impacts of energy demand	Energy policy and economic development
<b>Energy Resources</b>	Energy markets globally	Resource Management	Governance and institutions for energy
<b>Energy Supply</b>	Energy technologies and innovation	External costs of energy	Politics and policy of energy supply

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## RESEARCH TOPICS

- **Determinants of energy consumption** (*patterns and drivers of energy consumption at global and regional level, with a special emphasis on fast growing economies; energy efficiency*)
- **Energy markets globally** (*analysis of the development of global energy markets and its impacts on patterns and prices. The role of trading energy sources, accounting for global policies and uncertainty related to energy technology performance and to conventional and unconventional fossil resources*)
- **Energy technologies and innovation** (*assessing the portfolio of investments in energy technologies and technological change needed to match the growing energy demand and the transition to a low carbon energy supply*)

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## RESEARCH TOPICS

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- **Resource Management** (*environmental challenges of conventional and unconventional energy resource management; resource curse; interplay between energy and natural resources such as land and water*)
- **Energy policy and economic development** (*policies to improve and secure energy access in the developing countries and to alleviate the problem of energy poverty*)
- **Politics and policy of energy supply** (*interconnections between geopolitics and energy issues under evolving social and energy demand-supply conditions*)

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# PROJECTS

name	Subject relevant for the area
EC2	Sustainable energy in China
GLOBAL IQ	Natural gas markets
AMPERE	Clean energy R&D
POLINARES	Resources and conflict
MEDPRO	Energy policy in the mediterranean
THINK	Energy think tank
LIMITS	Energy investments and security
PURGE	Energy efficiency
Oil Price	Oil price determinants and recent markets developments
-	Integrating short and mid term modeling of energy demand
-	Status and future of renewable energy policies in the EU

## SYNERGIES BETWEEN THE TWO PROGRAMMES

	Climate Change Integrated Assessment Modeling	Climate Change Policy: Mitigation and Adaptation	Climate-related Innovation and Technological Change	Natural hazards and climate-related extreme events	Management of Natural Resources	Sustainability and Growth Beyond GDP
Determinants of energy consumption						
Energy market s globally						
Energy technologies and innovation						
Energy Policy and Development						
Resource management						
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Resource management						
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# CAPACITY

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- accumulated expertise on several energy subjects, especially on sustainable energy
- significant methodological skills (econometrics, IAM, markets, policy)

additional capacity will be added:

- human resources
- data base and models
- policy relevance

# COLLABORATIONS

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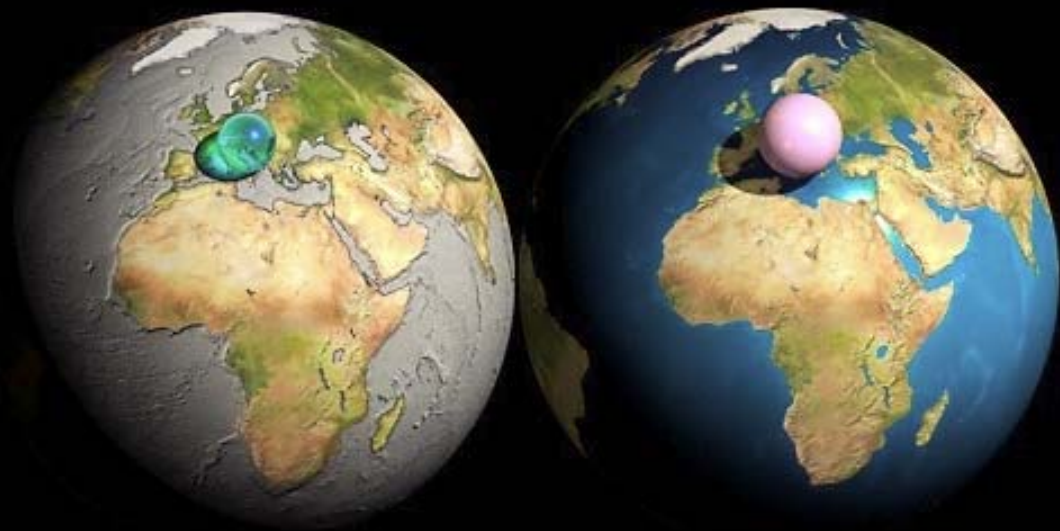
- foster collaboration with existing and newly established research institutes on energy (MIT, Princeton, Stanford)
- establish academic exchanges in the areas of rapid economic growth, especially China
- strengthen the role of link between research, industry and public decision making
- focus on outreach and dissemination











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