

## LIMITS Consortium

### PARTNERS



**Fondazione Eni Enrico Mattei (FEEM)**, Italy  
[www.feem.it](http://www.feem.it)



**Internationales Institut für Angewandte Systemanalyse (IIASA)**, Austria  
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**Potsdam-Institut für Klimafolgenforschung (PIK)**, Germany  
[www.pik-potsdam.de](http://www.pik-potsdam.de)



**Universiteit Utrecht (UU)**, Netherlands  
[www.uu.nl](http://www.uu.nl)



**London School of Economics and Political Science (LSE)**, United Kingdom  
[www.lse.ac.uk](http://www.lse.ac.uk)



**Energy Research Centre of the Netherlands (ECN)**, Netherlands  
[www.ecn.nl](http://www.ecn.nl)



**Joint Research Centre, Institute for Environment and Sustainability, European Commission (JRC-IES)**, Italy  
[ies.jrc.ec.europa.eu](http://ies.jrc.ec.europa.eu)



**Central European University (CEU)**, Hungary  
[www.ceu.hu](http://www.ceu.hu)



**Energy Research Institute of the National Development and Reform Commission (NDRC-ERI)**, China  
[www.eri.org.cn](http://www.eri.org.cn)



**Indian Institute of Management (IIM)**, India  
[www.iimahd.ernet.in](http://www.iimahd.ernet.in)

### ASSOCIATED RESEARCH ORGANISATIONS



**Battelle**  
*The Business of Innovation*  
**Pacific Northwest National Laboratory, Joint Global Change Research Institute at the University of Maryland (PNNL)**, USA  
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**National Institute for Environmental Studies (NIES)**, Japan  
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LOW  
CLIMATE  
IMPACT  
SCENARIOS  
AND THE  
IMPLICATIONS  
OF REQUIRED  
TIGHT  
EMISSION  
CONTROL  
STRATEGIES

## THE CHALLENGE

Implementing an effective response to climate change is a tremendous challenge, especially when dealing with stringent objectives such as those compatible with the 2°C target.

Such a transformation would require a fundamental restructuring of the way energy and land are managed, which would not be costless and would require unparalleled policy commitment and coordination. Putting a climate strategy into action will require the involvement of all the major economies, which account for most of the emissions and host the largest mitigation capacity.

Research can highlight a series of critical questions which are especially relevant for climate policy making and which will be the cornerstone of the LIMITS project:

- What is the economic, technical and political feasibility of attaining stringent climate policies ?
- How can we jump start investments and innovation into clean energy technologies?
- What is the role of policies in promoting mitigation and adaptation, recognizing the diversity of regional and national interests?
- What is the role of technologies and their advancements to meet the change in energy infrastructure?

By using state-of-the-art methodological instruments to assess climate policies, LIMITS aims at carrying out a rigorous assessment of what a stringent climate policy entails, and what is needed to overcome major impediments.

## LIMITS

Low climate **IM** pact scenarios and the Implications of required **T**ight emission control **S**trategies

LIMITS' main objective is to provide an assessment of the emissions reductions strategies at the level of the world and the major global economies, and to assess their implementation in terms of:

- Defining the feasibility of low carbon scenarios and the associated emission reduction pathways according to different assumptions about technology availability, policy regimes, implementation obstacles, and level of commitment at the regional level
- Assessing the investment requirements to implement these transformation pathways and the financing mechanisms such that these resources can be best raised and allocated. Evaluating the national and international policies which are needed to ensure that the transition to a low carbon energy infrastructure is attained efficiently, given specific obstacles in the respective economies
- Quantifying the changes in the energy infrastructure and land use which major economies would need to implement to attain stringent climate policies, and assessing the feasibility and risks of such changes
- Evaluating the linkages of climate policies with other pressing social and environmental issues such as energy security, air pollution and economic development

## PROJECT STRUCTURE

LIMITS is a 3-year research project (starting in October 2011), with ten partners from Europe, China, India, and collaborators from the US and Japan. The project brings together experts in several different domains which include integrated assessment modelling, energy system analysis, finance, economic development, land use and agriculture. Many of the researchers involved in the project are also authors of the IPCC for the 5th assessment report.

LIMITS is articulated in 7 main workpackages and aims at carrying out and disseminating original and innovative research in the field of climate and energy policies.

Several meetings will be held in Italy, Austria, Germany, the Netherlands, China and Belgium. Key stakeholders from both private and public sectors, covering a wide range of expertise, will be involved throughout the project, and especially in 3 dedicated workshops.