

Climate Change – Challenges and Opportunities in Higher Education

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EU-ASIA HIGHER EDUCATION PLATFORM SYMPOSIUM
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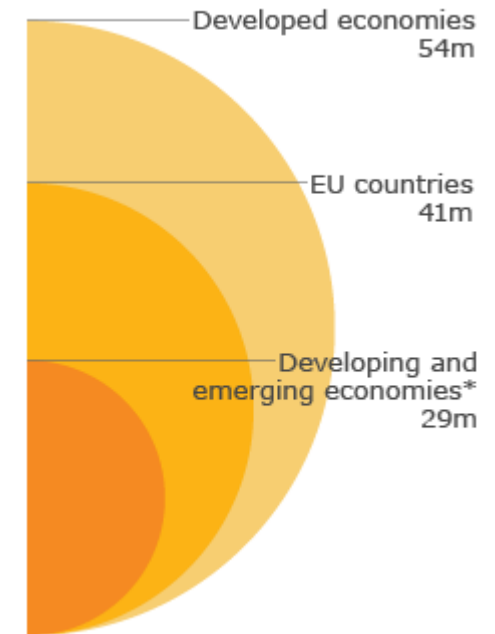


BBC News - EU – LISBON Meeting

“THE POLISH FINANCE MINISTER, JACEK ROSTOWSKI, TOLD THE BBC THAT NINE EASTERN EUROPEAN NATIONS WERE READY TO BLOCK A DEAL UNLESS THEY WERE ALLOWED TO CONTRIBUTE ACCORDING TO THEIR MEANS, NOT TO HOW MUCH THEY POLLUTE”

The emissions gap

Average total fossil fuel CO₂ 2006
(metric tons of carbon)



* As defined by the World Bank
Source: Carbon Dioxide
Information Analysis Center

AIT CHARACTERISTICS

- **Celebrating Golden Jubilee this year**
- **Postgraduate institute with strong research emphasis**
- **Internationality with an Asian orientation**
- **Interdisciplinary, agile academics**
- **Real-life development problems & industrial practice**
- **Capacity building for sustainable development**
- **Orientation towards professions**
- **Global network of partners (top international universities & research institutes)**

Centre of Excellence at AIT



“Sustainable development in the context of Climate Change” , focusing on:

Research programs at AIT are organized in closely linked multidisciplinary teams.

Through collaborative ways of working, we aim to establish creative partnerships in which research agendas can be driven by local perspectives.

II. Thematic Knowledge Focus

Institute wide thematic sub-groups under the broad area of SD in the context of climate

- **Vulnerability and Disaster Risk Reduction**
- **Water Resources and Coastal Adaptation**
- **Urban and Rural Sustainability**
- **Agriculture, Land Use and Forestry**
- **Low Carbon Society and Renewable Technology**
- **Cleaner Production and Waste Refinery**



WATER RESOURCES

One of the earliest programs at AIT

- Extensive work in the region in the area of integrated water resources management and integrated coastal zone management

Research projects

- An Assessment of the Socio-economic Impacts of Flood under Climate Change Conditions in Large Coastal Cities in South and South-east Asia
- Sediment Management in South and Southeast Asia
- Climate Change impact and Adaptation Study for Bangkok Metropolitan region
- **UNEP Water Vulnerability Assessment in South and South East Asia**

New Report: “Freshwater Under Threat: South Asia” produced by UNEP and AIT. Identifies key threats to water resources development and management, and assesses the challenges the region faces in coping with these threats



RESEARCH GAPS IN CLIMATE CHANGE

Climate Adaptation in Asia: Knowledge Gaps and Research Issues in South East Asia

Project on “**Adapting to Climate Change in Asia: Identifying Critical Knowledge Gaps**” supported through the Joint DFID-IDRC
Regional consultation to assess regional priorities, capabilities and research gaps on climate change and poverty reduction in Asia



Low Carbon Society and Renewable Technology

The Asian Regional Research Programme in Energy, Environment and Climate (ARRPEEC), started 1995 working with a network of European and Asian Universities

MAIN OBJECTIVES

Production of high quality policy oriented outputs in the selected areas of energy, environment and climate research.

Capacity mobilization and enhancement at National Research Institute (NRI) level through project level joint activities and fellowships.

Linkage of project level activities in the participating countries with national, regional and global **initiatives for reducing GHG and other hazardous emissions.**

Dissemination of results of the programme among policy personnel with a view to creating an impact on policy making.



Further examples of research opportunities in CC between EU and Asia

- Energy and Environment Project – MOFA Finland and NDF supported – funding local issues and projects
- Waste Refinery Project – converting wastes to value added products and energy – technology and knowledge exchange – taking into account conditions and cultures
- Erasmus Mundus – mobility of faculty, staff and students

PRACTICE IN HIGHER EDUCATION AND ACADEMIC RESEARCH:

- Education in discipline frameworks
- Academic cultural conditioning in discipline frameworks
- Peer evaluation in discipline frameworks
- Discipline over claim of domain (extent) of validity



INTER-DISCIPLINARY: , several related disciplines, identical (or very similar) research paradigms, very common approach in late 20th century

MULTI-DISCIPLINARY: many disciplines, similar research paradigms, very common approach in late 20th century;
(NOTE: term used for some time to describe pluri- or trans-disciplinary approaches)

PLURI-DISCIPLINARY: multiple disciplines, different research paradigms

TRANS-DISCIPLINARY: beyond, yet including disciplinary research, different paradigms



Academic courses in CC ?

- Create a new discipline in CC? Specialist?
Possible?

OR

- Add component to all disciplines a component of
CC?

Essential that all work together using each
disciplines strengths

Serve as source of knowledge

- UNEP / SEI knowledge platform on climate adaptation – supported by SENSA
- 3R Knowledge with UNESCAP – UNEP – supported by the ADB

Conclusion

Higher Education and Research Institutions can :

- Help build capacity to meet new challenges of CC
- Develop trans-disciplinary teams to address problems
- Help in technical transfer to help address local problems
- Form the core of a partnership between public, private and research institutions (from EU and Asia) required to face the new problems of CC change
- Contribute to knowledge and best practices – catalyze change

Thank you for your attention

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