

COURSE FOR SUSTAINABILITY STRATEGIES, METHODOLOGIES, POLICIES AND ACTIONS FOR CENTRAL AND EASTERN EUROPE

Session 2

Energy and Industry

November 7 - 20, 2004

Location: Venice International University, San Servolo Island, Italy











Session Two: Energy and Industry

Objectives:

Energy.

- o To develop understanding of the key aspects in energy production, distribution and use; as well as the role of energy policies in sustainable development including their environmental, social and economic aspects.
- To learn about the key EU energy policies (including the EU Emission Trading Scheme (ETS)) and successful examples of their national implementation in Western and Eastern Europe.
- o To develop skills in introducing and evaluating various (economic, administrative, voluntary) energy policy tools at the national, regional and local levels.
- o To develop knowledge of various energy renewable sources and their comparison.

Industry.

- o To understand the role of industry in sustainable development at the regional, local and national level, including economic, social and environmental aspects.
- o To learn about key EU policies addressing effects of industry on SD.
- o To understand the importance of non-regulatory approaches to enhancing industry's contribution to SD and to develop skills in promoting such approaches.

Outputs:

Energy

- o Participants will be able to understand the sustainability impacts of different forms of energy production, including conventional (fossil-fuel based, hydro, nuclear, etc.) and emerging (solar, wind, refuse power generation etc.)
- Participants will be familiar with the key EU policies in the field of energy (energy markets, EU ETS, etc.) and be able to design and evaluate the schemes for their implementation at the national level
- Participants will be able understand different policy tools for addressing the sustainability of the energy sector (including administrative, economic and voluntary)

Industry

- o Participants will be familiar with the environmental and social impacts of the main types of European industries
- o Participants will be familiar with the key EU policies in the field of industrial sustainability, such as the IPPC, IPP, EMAS, etc.
- Participants will understand, in detail, voluntary approaches to addressing impacts
 of industry on sustainable development (corporate environmental and social
 strategies, voluntary standards (the ISO 14000 series, EMAS, GRI, etc.), eco-labeling,
 product policies, government-industry covenants, eco-efficiency, cleaner
 production, etc.)
- o Participants will also be able to facilitate voluntary industrial activities for sustainable development in their regions

Course Agenda

Theme: The Economics of Energy - Policies in Italy

<u>Lecture</u>: Policy Drivers and Administration of the Energy Sector in Italy: The Role of the Regulator (Marcella Pavan, Italian Regulatory Authority for Electricity and Gas)

<u>Lecture</u>: Case Study on the Promotion of Energy Efficiency in End Use Sector (Marcella Pavan)

Lecture: The Global Energy Challenge (Diana Urge-Vorsatz, Central European University)

Theme: Sustainable Energy for CEE

<u>Lecture</u>: Renewable Energy: an Overview (Diana Urge-Vorsatz, Central European University)

Lecture: Sustainable Energy for Central and Eastern Europe (Diana Urge-Vorsatz, CEU)

Theme: The Economics of Energy — Assessment Methods

<u>Lecture</u>: Energy Conservation and the Environment (Giancarlo Pireddu, Bicocca University of Milan)

<u>Lecture</u>: Market Mechanism, Subsidies Incentives and Emission Trading (Giancarlo Pireddu)

Case study: Wind Farm Evaluation: the Business Plan (Giancarlo Pireddu)

Theme: Ingredients of Sustainable Energy Policy

<u>Lecture</u>: Ingredients of Sustainable Energy Policy: Instruments to Promote Energy Efficiency (Diana Urge-Vorsatz, CEU)

<u>Lecture</u>: Ingredients of Sustainable Energy Policy: Instruments to Promote Renewable Energy (Diana Urge-Vorsatz, CEU)

<u>Lecture</u>: Kyoto Flexible Mechanisms in an Enlarged EU: will they make a difference? (Diana Urge-Vorsatz, CEU)

Theme: Energy Policies and Management Case Studies

<u>Lecture</u>: EU Energy Efficiency and Energy Policy (Paolo Bertoldi, European Commission - DG JRC)

<u>Lecture</u>: The Vesta Integrated Treatment Plant in Fusina: Refuse Power Generation (F. Faraon, Idecom)

<u>Site visit</u> to Fusina Thermal Power Station (A. Barbieri, Enel)

Theme: Renewable Energy

<u>Lecture</u>: Geothermal Energy Discovery. Market in CEE. Geothermal Energy in Russia (Ruggero Bertani, Enel Green Power)

<u>Lecture</u>: Photovoltaic Activity: Advanced Practical Application of Solar Energy and Case Studies (Francesca Tilli, EniTecnologie)

Lecture: Biomass: Problem or Opportunity? (Bruno Fierro, Bono Cannon)

Theme: Industry and Sustainable Development

<u>Lecture</u>: Corporations and Sustainable Development: Businesses' Role in a Globalizing World (Aleg Cherp, CEU)

<u>Lecture</u>: When the Elephants Learn to Dance: Business Case for Sustainable Development (Eric Ezechieli, the Natural Step in Southern Europe)

<u>Workshop</u>: Triple Bottom Line - Analysing Corporate Performance Against Economic, Social and Environmental Parameters (Aleg Cherp, CEU)

Theme: Policies and Practices for Sustainable Industry

<u>Lecture</u>: European Policies for Sustainable Industry: an Overview and Some Examples from Environmental Product Policy (Naoko Tojo, International Institute for Industrial Environmental Economics at Lund University)

<u>Lecture</u>: Eco-management and Corporate Social Responsibility in the Industrial Sector: Policies and Case Studies (Aleg Cherp, CEU)

Lecture: Italian Policies for Sustainable Industry (Paolo Soprano, IMET)

Themes: Non-Regulatory Approaches for Industry: Unindustria and Edison

Site Visit to Unindustria and Meeting with Representative of Edison

<u>Site Visit</u> to Edison (a Thermal Power Plant that has Already Approached to Eco-Management)

Theme: Industrial Sites: Case Study & Risk

<u>Lecture</u>: Brownfield Redevelopment: Promise and Obstacles (M. Turvani, IUAV University of Venice)

Panel Discussion: Environmental Risk, Brownfields, Economics of Site Reclamation and Industrial Site Reclamation (Chairman Prof. G. Zanetto, Ca' Foscari University of Venice, Dr. G. Mattiello, Director of Marketing, External Relations & Special Projects, VEGA, Venice, Dr. Carlo Azzi, Head of Administration, Finance, Control and Organization, Bagnolifutura SpA of Urban Transformation, and Dr. M. Turvani, IUAV University of Venice)