

# WORKSHOP ON ENHANCED ENERGY SYSTEM ANALYSIS FOR SUSTAINABLE DEVELOPMENT

7 - 18 OCTOBER 2002

Miramare - Trieste, Italy

## CO-ORGANIZED BY the Abdus Salam ICTP & IAEA

The Abdus Salam International Centre for Theoretical Physics (ICTP), in cooperation with the International Atomic Energy Agency (IAEA), is organizing a *Workshop on Enhanced Energy System Analysis for Sustainable Development*, to take place **from 7 - 18 October 2002**. This Bulletin contains preliminary information and the Request for Participation form.

## PURPOSE AND NATURE

The purpose of the Workshop is (i) to provide training in the use of the IAEA's new model MESSAGE and its application to various scenarios reflecting exogenous factors such as environmental impacts and the economic implications of energy/electricity market restructuring; (ii) to discuss the concepts and theory required for incorporating such external factors into energy and power sector analysis; (iii) to discuss how to apply sound judgement about the choice of model and scenario structure most appropriate for analysis addressing these issues.

The Workshop will consist primarily of training in the use of MESSAGE with lectures and work sessions intended to provide an insight into the concepts and methodology employed in MESSAGE model. Discussions, guided by experts, will review the issues and problems that have to be addressed in electricity and energy system planning under the conditions of more stringent environmental constraints and deregulation of electricity market.

## MAIN TOPICS

- Discussion of energy/electricity issues in the context of sustainable development
- Detailed discussion of the MESSAGE approach and methodology
- Energy/electricity scenarios and their economic and environmental consequences
- Training in the application of this approach, together with the computer package, through examples and developing country-specific case studies using national data brought to the course by each participating team.

Teams will be expected to present a case study reflecting their efforts at the end of the course.

## PARTICIPATION

This Workshop is open to 25 scientists and students from all countries that are members of the United Nations, UNESCO or IAEA, with special consideration of developing countries and countries in transition. Preference will be given to group nominations of national teams comprising 2 candidates from each country who have a

strong understanding of the energy/electricity issues in their respective countries and have good familiarity with modelling techniques, as well as an ongoing interest in addressing various issues in electricity and energy system planning, incorporating economic, social and environmental aspects.

Applications should be presented in national teams of at least two persons with a strong basic facility and understanding of energy and electricity system modelling and analysis; a capability as intelligent users of the Agency's modelling tools, and a long history of experience and accomplishment in energy and power sector modelling and analysis. Applicants can be staff engineers, economists and computer analysts of electric utilities, ministries and specialised organisations, but they must be highly computer-literate, as this Workshop proposes a concentrated introduction to new software and time does not permit any remedial or basic training. It is therefore essential for applicants to have considerable experience with energy modelling, and to be conversant with various issues of energy and electricity sector development in their own countries. Participants will be required to bring to the Workshop detailed data on their national or regional electricity system and other relevant environmental and economic statistics, all of which will be specified to participants at least 4 weeks before the beginning of the Workshop.

**TARGET COUNTRIES:** Member States' countries whose energy/electricity sectors are/will be under restructuring and privatisation and facing stringent environmental constraints within the framework of various international agreements.

As the School will be conducted in English, participants must have a good working knowledge of that language.

As a rule, travel and subsistence expenses of the participants are borne by the home institution. However, limited funds are available for some participants from, and working in, developing countries, to be selected by the organizers. Such financial support is available only for those who attend the entire activity. Every effort should be made by candidates to secure support for their fare (or at least half fare) from their home country. There is no registration fee to attend the Workshop.

**PARTICIPATION BY INVITATION ONLY**

**the Abdus Salam International Centre for Theoretical Physics  
Workshop on Enhanced Energy System Analysis for Sustainable Development  
(smr1430)  
c/o Ms. Elizabeth Brancaccio  
Strada Costiera 11  
I-34014 Trieste, Italy**

**Deadline for receipt of applications: 10 June 2002**

The decision of the Organizers will be communicated to all candidates as soon as possible thereafter.

**Telephone:** +39 - 040 - 2240284  
**Telefax:** +39 - 040 - 224163  
**E-mail:** smr1430@ictp.trieste.it