

## SCIENCE FOR ENERGY

### *Improving Linkages to Accelerate Energy Technology Breakthroughs*

4-5 May, 2009

Venue: International Energy Agency Secretariat, Paris, France

Sponsor: the International Energy Agency,  
Committee on Energy Research and Technology (CERT),  
Experts Group on Energy for Science (EGSE)

#### Background

The International Energy Agency (IEA), through its Experts Group on Science for Energy (EGSE), is bringing together scientists and energy technologists to explore phenomena, brainstorm solutions and mine advances in basic science which could have energy applications. EGSE's goal is to facilitate breakthroughs in energy technology by bridging the gap between basic science research and applied energy research and development. The EGSE works closely with the IEA network of technology experts, including the IEA Energy Technology Implementing Agreements. This workshop is designed to confirm priority activities of the EGSE.<sup>1</sup> Participants from the science and energy communities will engage in active discussion, including a brainstorming session about priority focus areas for the EGSE and for the science and energy research communities generally, to accelerate scientific breakthroughs for energy.

#### Who Should Attend

The target audience for this event are international research scientists in the basic science areas of interest to energy (including biotechnology, advanced materials, advanced computing, and other areas), as well as applied energy researchers. In addition, members of the IEA network, including Implementing Agreements and Working Parties, as well as industry, government, and national academic institutions are invited to provide their perspectives. Participants will benefit by leaving the meeting with an enhanced understanding of energy and climate change challenges, expanded networking with peers, and identification of policies and mechanisms for increasing positive linkages and collaboration between science and energy.

<sup>1</sup> The work of the former IEA Ad-Hoc Group on Science for Energy Technologies (AHGSET) has created a foundation for the EGSE.

Participation is free of charge. To register, visit IEA's website at [http://www.iea.org/textbase/work/workshopdetail.asp?WS\\_ID=408](http://www.iea.org/textbase/work/workshopdetail.asp?WS_ID=408). Note that as space is limited, your attendance will be confirmed by the IEA Secretariat after your registration.

*For more information*

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## Agenda

### Day One

- 9:00 - 9:30 **An Energy Technology Revolution is Needed**  
**Mr. Nobuo Tanaka**, Executive Director, International Energy Agency
- 9:30 - 10:00 **Science for Energy – the Scientist’s Perspective**  
**Mr. Douglas Ray**, Pacific Northwest National Laboratory, Fundamental and Computational Sciences Directorate
- 10:00 - 10:30 **Science for Energy Activities:  
A Corporate and Academy Approach**  
**Mr. Robin Batterham**, the International Council of Academies of Engineering and Technological Sciences
- 10:30 - 11:00 **Coffee Break**
- 11:00 - 12:30 **Existing Science for Energy Efforts:  
Science and Energy: A European Perspective**  
**Mr. Jacques Bonnin**, European Commission DG RTD-Research  
**Strategic Research Agenda for Solar Thermal: New Applications and Materials for Collectors and High-Density Thermal Storages**  
**Mr. Werner Weiss**, Institut für Nachhaltige Technologien  
**Japan Science for Energy: Leadership, Practices, and Expectation**  
**Mr. Kazuhiko Ogimoto**, the University of Tokyo, Institute of Industrial Science, Collaborative Research Center for Energy Engineering  
**USA: the Department of Energy’s Basic Science for Energy Effort**  
**Mr. Jerry Simmons**, US Department of Energy, Sandia National Laboratories
- 12:30 - 14:00 **Lunch**
- 14:00 - 16:00 **Facilitated Breakout Sessions to Discuss  
Three Strategic Plan Key Activities**  
Chair: **Mr. Tom Kerr**, International Energy Agency  
*14:00 – 14:30: Present Background Paper and Frame Issues for Discussion*  
**Dr. Peter Taylor**, Director, IEA Energy Technology Policy Division  
**Mr. Tom Kerr**, IEA Energy Technology Policy Division  
*14:30 – 16:00: Breakout Group Discussion (30 minutes on each topic)*  
1. Breakthroughs in Science for Energy: What is Needed?  
2. Mapping Science for Energy Efforts  
3. Expanding International Collaboration and Linkages between Science and Energy
- 16:00 - 16:30 **Break**
- 16:30 - 18:00 **Breakout Sessions Report Back to Group**
- 18:00 **Cocktail reception**



## Day Two

9:00 - 11:00

### EGSE Members Meeting

*Goals: (1) Assess previous day's findings. (2) Discuss strategic issues related to outreach and make decisions on messages and timing. (3) Make decisions about priorities and summarize points of agreement. (4) Vote on EGSE Chair, Vice Chair, and other administrative issues. (5) Agree to future schedule, roles & responsibilities and implementation next steps.*

*Note: This session is to discuss EGSE member business; however, any and all EGSE workshop participants are welcome to attend.*

11:30

### Wrap-up and Next Steps

Close of meeting