

# ENERGY SESSION

## **EUROPEAN REGULATIONS AND DIRECTIVES ON ENERGY EFFICIENCY, RENEWABLES AND CO<sub>2</sub> TRADING, AND IMPACT ON ELECTRICITY**

V. de Janeiro (Eurelectric)

The EU could save an additional ten percent of its energy consumption by 2013 through a broad-scale implementation of energy efficiency services and programmes. The European Commission's Initiatives and Directives to implement an energy efficiency policy are highlighted and evaluated. What are the main reasons why electricity companies invest in energy efficiency projects? What are the obstacles and also the risks to investing in energy efficiency projects? The impact of CO<sub>2</sub> trading on electricity use is also investigated.

## **ENERGY SAVINGS IN THE CHEMICAL INDUSTRY**

K. Van Reusel (Laborelec)

As an highly energy dependent industrial sector, the chemical industry has a reputation of well managing their energy needs. However, auditing the energy flows in these industries reveals that there is still a lot to improve, mainly in the utilities (cooling, compressed air, steam, heating, relighting, variable speed drives). What is the relation of possible energy savings to the energy consumption? What kind these energy savings are? "Primary energy" or "CO<sub>2</sub> emission" calculation? On the basis of practical experience in auditing the utilities in the chemical industry an answer to these questions is formulated.

## **CHOOSING RADIOFREQUENCY OR MICROWAVE IN INDUSTRY**

M. Willert-Porada (Universität Bayreuth)

For future development radiofrequency and microwave should not be seen isolated as a "stand alone" technology but as a part of a general concept of electricity utilisation in processing technology. With respect to fossile fuel utilisation as the often "state of the art" technology, radiofrequency and microwave will be coined to be the "microtechnology" of production technology in heavy industries. Special attention is given to the area of mineral processing and to PE and EG-silicon production technology.