

# Introduction to Panel 3

## Matching policies and drivers: Policies and Directives to drive industrial efficiency

Panel leader: **Miett Tajthy**  
DNV KEMA  
The Netherlands  
Miett.Tajthy@dnvkema.com

Panel leader: **Rob Kool**  
ecee  
The Netherlands  
Werk@kooltiel.nl

### Introduction

The EU Energy Efficiency Plan 2011 is very ambitious. Making it happen will take an immense effort. This panel is looking at the effects of the different Directives and policies that have been in place so far, and that have had an impact on the industrial sector. What can we learn from monitoring & evaluation of Directives like ETS, CHP, Ecodesign and ESD? And what may we expect from the Lead Market Initiative, SET Plan, and the 2050 Roadmap? How do they influence industry and its energy efficiency and CO<sub>2</sub> goals? And how does industry influence energy efficiency policy development?

This is not a strictly European panel. Policies and drivers are discussed in the broadest possible way.

Neither is this panel showing a one-way street, where policies dictate industrial efficiency. The role of industry itself, their effort, results and feedback to policymakers are an integral part of this panel, "Matching policies and drivers: Policies and Directives to drive industrial efficiency".

### Industrial energy efficiency policies over the world

This panel shows national policies and drivers in a number of countries, notably the two biggest economies, China and US and several European countries.

- Lu and Price (3-009-12) will tell us about China's industrial CO<sub>2</sub> emissions in manufacturing sub-sectors and in selected provinces. With a growing economy, China wants to curve CO<sub>2</sub> emission. The policy plans to do this have a clear goal, set in the 12<sup>th</sup> five year plan.
- Aden (3-057-12) presents the regulatory approaches to industry emissions mitigation in the United States: OBES in the Boiler MACT.

- Schlomann et al. (3-067-12) will look at the evaluation of different policy instruments to promote industrial energy efficiency in a national context, starting with the EU-ETS and zooming in on the German situation.
- Al-Mansour et al. (3-139-12) look at prospects of energy efficiency in the Slovenian industry, the use the National Energy Efficiency Plan (NEEAP) to achieve a 5,151 GW reduction by 2030.
- Bonduelle and Métivier (3-090-12) will explain how to tap the huge saving potentials in the French industry, which they estimate to be around 46 % in the long term.
- Napp et al. (3-133-12) discuss effectiveness of policies in enabling energy efficient technologies in the UK industrial sector.

The key questions will be:

- What has already been achieved and learned?
- How can policies like the ones presented fit in mid and long term policies like 5 year planning, the European Energy Efficiency Directive etc.?

### Industrial determining factors

Focussing on industry itself, the panel discusses the possible opportunities and challenges of industry to achieve energy efficiency.

There is a high efficiency potential. This is shown time and time again, by different studies and the evaluations of projects. Tapping into this potential is based on management decisions that are led by margins, options and faith in good technical,

organisational and financial solutions. Knowing these solutions and their determinating factors is the biggest step to make decisions towards a sustainable enterprise.

- Rosenberg et al. (3-066-12) will present their research on energy efficiency targets for industry, demonstrating that energy efficiency is a sustainable option.
- De Ruijter and Huenges Wajer (3-084-12) focus on the plastic industry in “Industry takes the lead: voluntary agreement on energy efficiency in the EU plastic converting sector”. In this case industry itself drives policy developments.
- Wang et al. (3-103-12) analyse CO<sub>2</sub> mitigation policies in the Chinese cement industry, thereby looking at possibly the largest industry in China for the moment.
- Plötz and Fleiter’s paper (3-099-12) is not on the sectoral approach. They link efficiency options to size in “Energy efficiency policies for different firm sizes: challenging current policies with empirical data”.
- Vetromile (3-155-12) look at the financial core of the topic in “It’s all about the margins: Where does energy efficiency fit for industrial segments”.
- Daniëls et al. (3-134-12) look at collaboration options in “Dutch industrial waste heat in district heating: Waste of effort?”.

### Approaches to business models

In a more theoretical approach this panel also discusses how to change policies and drivers to pave the way for a sustainable, and as such energy efficient industry.

- Nilsson et al. (3-106-12) debate that we are lost if we don’t develop new business-models, looking at models that show vision and a long-term approach.
- Herbst et al. (3-145-12) continue in depth with “Bridging macroeconomic and bottom up energy models – the case of efficiency in industry”.
- Heffner et al. (3-127-12) coordinated a review on energy provider-delivered energy efficiency. This paper takes us back to a more global approach.
- Shen et al. (3-153-12) will be addressing what China can learn from international experiences in developing a demand response program.

Within the three days available we want to achieve a good overview of existing and near future energy efficiency policies and of the way industry is playing its leading role in the effort to make the world more sustainable ... and the pictures to prove it.