

# Introduction to Panel 1

## Strategies and integrated policies

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**THE CURRENT ENERGY POLICY ARENA** is a complicated place, with many levels of activity and multiple objectives.

In some areas there are strong moves towards more substantial international agreements and implementation of trans-national policy instruments – for example in climate change, with the final ratification of the Kyoto protocol and the establishment of the EU Emissions Trading Scheme. In parallel however, we see decentralisation of many aspects of decision making to sub-national levels, empowering regional and local authorities for example to take greater responsibility for the delivery of national energy efficiency targets. These simultaneous increases and decreases in the levels of decision-making and scale of activity may be justified by both sound economic and political arguments. But several important questions are raised in this process for energy efficiency policy. For example, if the various drivers for efficiency (e.g. global climate and local fuel poverty) become divided between processes that are operating at such vastly different scales (e.g. inter-governmental negotiation and local authority), how can coherence be ensured in the activities pursued? Equally, what are the effects on public participation and attitudes, and resulting policy acceptance? There is surely a clue in the involvement of all decision-makers and namely all governance levels (from local to international), but exchanges of experience, co-operation, co-ordination and other frameworks to ensure consistency and comprehensiveness are to be developed.

The energy policy arena has always been characterised by multiple objectives. But after a decade in which many economies grappled primarily with certain tensions between the liberalisation agenda and climate protection, other policy dimensions are surging forwards. For example, continued liberalisation and rising oil and gas prices have brought sharper

focus to security of supply. Thus whilst national governments are starting to make very long term commitments to ambitious carbon emission reductions, they are simultaneously grappling in the short term with supply issues that can lead to major infrastructure investment, with that short-term decision-making often disconnected from their low carbon ambitions. An evolving policy agenda brings new conflicts but also the chance to develop new synergies.

Panel 1 deals with the role of energy efficiency within the development of integrated policy and actions that address strategic objectives as well as immediate needs.

Papers on the following topics in particular were sought:

- local/regional policy-making and its fit within national/international frameworks
- governance issues, public participation and policy acceptability;
- synergies and conflicts between, for example: supply- and demand-side policy and short- and long-term objectives.

The response was excellent, with the number of submitted papers far exceeding the Panel's capacity. The papers accepted for Panel 1 cover all of the above topics. In addition, a number of other topics emerged through the submissions as being of importance. The following outlines the contributions of the accepted papers and posters.

### **OVERVIEW OF ENERGY AND EFFICIENCY POLICY STATUS AND PROSPECTS**

Given the complexities identified above, a number of authors chose to review past, present and future performance and prospects for energy efficiency, often within a long term

scenario context. These papers serve as an invaluable backdrop for the more narrowly focused contributions elsewhere in the panel.

In 1,189 Waide *et al* review energy efficiency experience in the industrialised world, and explore its further potential. The paper also provides a brief review of policies used and quantifies their impacts.

In 1,208 Lebot *et al* review policy responses for a selected set of countries, developing a classification of approaches. The authors argue from this review that improvements are needed in existing standards of policy critique. The authors then look forwards, to suggest a selection of alternative future paths towards a sustainable energy future, based on a mix of ambitious policies combined with change in energy using behaviour.

Finally, in 1,223, Lechtenböhrer *et al*, describe a scenario analysis of the EU-25 energy system and other GHG-emissions until 2020, covering emissions, mitigation options and costs and possible policy measures. The analysis identifies the important role for energy efficiency, and explores a policy package to deliver ambitious post-Kyoto mitigation.

#### **LOCAL/REGIONAL POLICY-MAKING (AND ITS FIT WITHIN NATIONAL/ INTERNATIONAL FRAMEWORKS)**

A number of papers focus on aspects of the interplay between decision making at different levels, the trends towards greater regionalisation of power, and the growing importance of local delivery on national and international energy and environmental targets. Not surprisingly given the topic, each paper focuses on the conditions within a specific country or region.

In 1,129 Zavody takes a broad look at the regionalisation agenda within the UK, and considers its implications for sustainable energy.

In 1,116 Mathie and Wade look at England and Wales where some local authorities are using broader community development strategies to facilitate greater uptake of sustainable energy. Through case studies the paper examines the effects of this planning effort on community participation, and the overall fit of the approach with national policy.

In 1,202 Broc *et al* consider new laws in France that increase local responsibility for energy matters. Seeking to test the practical impact of theoretical schemes, the paper compiles a typography and reports on an inventory of 100 local schemes. Trends are found in which actions move from specific building-related efficiency measures to integrated policies targeting local sustainability.

In 1,295 Lafolie and Tillerson explore the experiences of the regionalisation agenda as applied for the Nord-Pas de Calais region of France. The authors discuss the challenges of moving beyond innovative projects to the integration of best practice within everyday activities.

In 1,173 Webber *et al* describe Commission-funded activities to share European local authority experience in climate protection and sustainability with local areas in developing countries. The paper reviews a partnership between the UK city Leicester, a local energy agency in Portugal and a city in Gujarat, India, during which actions have been identified to improve energy management and raise awareness

In 1,280 Üрге-Vorsatz and Miladinova describe the accession process for the eight former communist countries of

central and eastern Europe which joined the EU in May 2004. The paper reviews the current status of energy efficiency and related policy in this region and the problems faced during accession. The importance of decentralisation of policy, and implementation sensitive to local context is highlighted.

#### **GOVERNANCE ISSUES, PUBLIC PARTICIPATION AND POLICY ACCEPTABILITY**

Continuing the broad theme of the importance of local activity and engagement, another set of papers focus on the participation of individuals and other stakeholders in energy efficiency policy, planning and delivery.

Åstrand *et al* study implementation difficulties for energy efficiency in paper 1,098, arguing for greater attention to the decision making process during which policy is developed. The importance of wide stakeholder engagement and the implications of this for policy acceptance are considered. The theoretical approach is complemented by examples drawn from Sweden.

Pett and Guertler adapt a framework in paper 1,008 for stakeholder behaviour from the theory of reasoned control and social network theory, to identify success factors for energy efficiency programme delivery. A rich evidence base from 46 efficiency and renewables programmes across seven European countries is used to test the framework.

In paper 1,069, Timmins and Crowley describe the focus within the UK's energy strategy on influencing individuals and other decision makers to change their purchasing decisions in favour of sustainable energy options. Implementation of this approach is in part through the development of a Sustainable Energy Network of local management agencies, seeking to improve information flow and linkage of consumers to solutions and incentives. The paper reviews the overall concept and the presentation will present early evidence from initial pilots.

In 1,135 Nordqvist is also concerned with the influence of the variety of stakeholders on the practical implementation of energy policy. In this case the setting is China, and the authors argue that despite the appearance of policy integrated across timescales and from national level to local actors – driven by strong central government direction – in reality there is a confusing set of conflicting incentives influencing decision makers at the local level. The authors suggest that future scenario development needs to be better attuned to these practicalities.

In 1,230 Connor *et al* describe an approach to improve the involvement of individuals in energy decision making, through the establishment of Citizen Councils. Experience is reviewed from various national examples, and future application in France is discussed.

In 1,269 Norgard explores the correlations between increasing use of commercial energy and decline in individual activity – described as the use of 'body' energy. The authors discuss a variety of ways to reduce commercial energy use through substituting personal activity, and policy and planning approaches to encourage this. Such measures will ultimately require public acceptability, and the author explores some of the implicit incentives, including health benefits.

### SYNERGIES AND CONFLICTS WITHIN ENERGY AND ENVIRONMENTAL POLICY

The papers submitted cover a range of topics, from broad reviews of conflicts within energy and efficiency policy, to more focused analysis of particular issues or sectors.

Simões *et al* review and analyse the synergies and conflicts inherent in EU energy and environmental policy related to electricity systems in paper 1,143. A framework is proposed for structuring trade-offs between policies, and the requirements for quantification of the impacts of policy interaction are identified.

In 1,152 Boonekamp also develops a framework within which to analyse policy interactions, but in this case the focus is more tightly on measures for household efficiency, with one example application for the Netherlands, and another for a set of EU countries.

In 1,240 Boardman approaches the issue of policy interaction through analysis of a variety of policy 'packages', exploring for example the appropriate order in which measures are put in place.

In 1,113 Salomon *et al* have prepared a scenario for France to follow a sustainable energy path. Drawing on energy sufficiency, efficiency and renewable energy to develop the NegaWatt approach, the paper illustrates the need for actions of all sorts across all sectors to achieve very ambitious long term targets – including stronger energy conservation, and investigates synergies between policies and measures at all levels.

In 1,047 Eyre and Staniaszek undertake a detailed study of the process of energy policy development in the UK which led to the 2003 White Paper. The narrative discusses the historical development of supply side and efficiency interests and the conflicts between them, and sets out how energy efficiency emerged as a major winner.

In 1,288 Solem *et al* explore the practical reality that long-term aims are frequently pursued through setting a series of short-term objectives. Using examples from the Norwegian energy fund and the EU energy services directive, the authors illustrate the danger that this approach fails to maximise the long-term energy efficiency potential, and they offer suggestions for the appropriate design of short term goals.

### POLICY/PLANNING TOOLS AND OPTIONS

A number of papers discuss or develop particular tools which may be used to assist energy efficiency planning and policy development.

In 1,099 Neves *et al* develop a multi-criteria approach to help classify energy efficiency initiatives and their impacts. The technique is used to help the decision maker explore the multiple effects of different measures and hence contribute to more effective policymaking.

In 1,105 Raimund *et al* present the klima:aktiv programme for long-term climate protection in Austria. The approach is based around market transformation, and the paper reviews experience in a number of sectors.

Thomas and Irrek investigate in paper 1,224 the options for, and likely performance of, an energy efficiency fund in Germany.

In 1,258 Hamilton *et al* describe the experience in the state of Vermont in the creation of the first 'Energy Efficien-

cy Utility', which is a non-utility body implementing the state efficiency programme, through competitive awards of performance-based contracts.

Sorrell develops a transaction cost-based theoretical framework in paper 1,005 for analysing energy service contract opportunities, and tests the framework through a survey of such contracts in the UK. The paper illustrates how the analysis can help inform the future development of policy to affect the energy services market.

In 1,102 Mårtensson *et al* explore the benefits for energy planning of the recent application of Strategic Environmental Assessment. The paper looks at the Swedish example, where considerable emphasis is placed on the local development of energy systems as a way to meet national emission targets.

### POSTERS

Panel 1 has a set of contributions for the poster sessions, in which specific activities are described.

In Poster 1,037 Lees outlines the work of the EDF Energy Trust, which is the first independent charitable trust to be established in the UK with funds from an energy company. The Trust aims to help EDF customers who have difficulty paying their bills, and it will operate through a variety of mechanisms including improvements in energy efficiency.

In Poster 1,134 Stenitzer describes the European Energy Award – a quality management system in use in Switzerland, Austria and Germany where it adds credibility and legitimacy to efficiency measures and policies within communities.

In Poster 1,180 Karbo and Fjordbak Larsen describe the further development of an existing internet based service offering households advice on appliance use, through the integration of 15-minute consumption monitoring data gathered by a impressive network of measurement devices. This will allow advice to be tailored the real circumstances of individuals.

In Poster 1,197 Schouw describes the Climate Landscapes® concept in the Netherlands, through which process apparently conflicting interests are being reconciled at the local level towards sustainable development goals.

In Poster 1,291 Constantinescu *et al* describe the activities of Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects, monitoring and evaluating policy developments across Europe.