Introduction to Panel 1 Policies and programmes to drive transformation

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Introduction

Taking into account the extreme challenge that lies ahead in trying to achieve decarbonisation of industry by 2050, we must more than ever now consider how to bring about a dramatic step change in how we design and implement industrial energy efficiency policies and programmes. This panel explores topics that look beyond the way we typically develop policies and programmes to ensure that, once implemented, they follow an adaptative and continuous improvement process, and, most importantly, manage to connect the economics of business with the reality of climate change.

Two key questions that this panel therefore focuses on addressing are:

- How can we deliver a more effective multi-stakeholder approach, that is keeping the business realities of the energy end-user perspective at the core, while developing industrial energy efficiency policies that have transformative impact on decarbonisation?
- Decarbonisation has energy efficiency at its core, but also depends heavily on renewable energy as well as other solutions such at the Internet of Things and artificial intelligence. How can we therefore best develop transformative energy efficiency policies and programmes that most effectively interconnect with other relevant areas such as financing, emerging technologies, and renewable energy?

Understanding what really needs to be done and sharing the necessary knowledge

The first topical area considers how we can both get a clearer picture of what really needs to be addressed within industry to accelerate energy efficiency measures and ways in which the necessary knowledge can be more easily shared.

Kulterer & Riesen (extended abstract 1-072-20) present the European project IMPAWATT, an online platform designed to support increased industrial energy efficiency awareness and motivation. The project has focused on providing a range of key supporting material for companies and is testing the concept with 150 companies in six participating countries.

Jeanneret et al (extended abstract 1-124-20) introduce the concept of a collaboration platform consisting of a complementary set of tools, strategies and support for facilitating structured and efficient knowledge transfer among European energy stakeholders.

Pawelas (extended abstract 1-138-20) brings the industry perspective to the table by presenting the key needs of companies to be able to pursue effective energy efficiency actions as part of their overall decarbonisation journey.

Büttner et al (extended abstract 1-151-20) present five key steps to be addressed to be able to deliver an effective decarbonisation strategy and implementation plan, and which are based on experiences, examples & empirical demand-side data.

Taking the pulse of key industry programme approaches

Building upon lessons learned from existing industry programmes is an important step towards ensuring that future policies and programmes can meet the demands of our 2050 decarbonisation targets. This second topical area presents a variety of programmes experiences from different countries.

Di Santo & De Chicchis (extended abstract 1-129-20) present the additionality and outcomes of the Italian white certificate scheme for industry, with particular consideration of the role monitoring and verification played in measuring real savings.

Skoczkowski & Rosenow (extended abstract 1-140-20) follow on to present an evaluation of the Polish white certificate scheme that is delivered through its Energy Efficiency Obligation programme (EEO). Their evaluation also includes key recommendations on how to improve the existing EEO.

de Fontaine & Cornelis (extended abstract 1-025-20) present insights and best practices from voluntary energy efficiency agreements in Europe and the United States. They also present a set of best practices relevant to each region that could support policymakers improve existing programme approaches.

Pedersen (extended abstract 1-049-20) presents a study on the development of the voluntary agreements system in the Ukraine. The study focuses on the incentive mechanisms, the necessary finance sources and the regulatory framework that would be required to reduce energy consumption in the Ukrainian industry.

Connecting with industry to be able to support them more effectively

This third thematic block underlines the importance of building a stronger connection between industry, policy makers and other key supporting organisations in order to be able to offer them the most effective support through targeted policies and programmes.

Rohde et al (peer-reviewed paper 1-089-20) present how energy efficiency networks have been successfully rolled out across a number of different countries around the world. In particular, insights from the monitoring of the German Initiative Energy Efficiency Networks (IEEN) are used to describe the actors which seem to contribute to the successful or less successful operation of the networks.

Cornelis & Goldstein (peer-reviewed paper 1-004-20) provide the outcomes of a series of roundtable meetings with industry initiated by the European Commission to identify barriers to energy efficiency and renewable technology uptake in the EU, and the solutions needed at the local, national and EU level.

Linhart et al (extended abstract 1-015-20) present a case study on Ennshafen, an Austrian industrial business park where an energy cooperation model was tested to see how it could provide a way to enhance sustainability and primary energy efficiency within industrial business parks.

Egger & Öhlinger (extended abstract 1-114-20) present an overview of the "Industrial Leaders in the Energy Transition" initiative developed by the Austrian OÖ Energiesparverband (ESV). A focus of the initiative is how company internal processes and dedicated collaboration activities can lead to finding ways for companies to achieve their energy transition.

Learning how to do it better through experience

This fourth topical discussion focuses on how to ensure that existing experience is put to best use in supporting cost-effective and viable energy efficiency projects within industry as well as the development of best practice policies and programmes.

Cooremans & Rohde (extended abstract 1-150-20) present the importance of valuing and communicating the multiple benefits of energy-efficiency projects within the context of the H2020 project M-Benefits that has the goal of increasing the capacities for actual implementation of energy-efficiency measures in industry and services.

Johansson et al (peer-reviewed paper 1-021-20) provide insights from a review of energy efficiency policies targeted towards industrial SMEs within Europe, taking into account that while SMEs represent about 99 % of companies in Europe, there is still a lack of research and policies to support energy efficiency uptake within this sector.

Lankford & Kruiten (extended abstract 1-058-20) representing the DOW chemical company provide the results of an assessment to determine the most attractive technological and commercial options for lowering the company's CO, emissions.

Rahmani & Alizadeh Sani (peer-reviewed paper 1-116-20) presents the outcome of a comparative study on a low-carbon transition in steel industry between Iran and Sweden. A focus is made on how the Swedish lessons learnt and experiences can be taken into account to identify best approach to be undertaken in Iran.