

IndustRE project

Using the industrial electricity demand flexibility to facilitate further grid integration of variable renewable energy

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WIP Renewable Energies



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The challenge

The cost-effective integration
of variable renewable
electricity into the European
power systems

The rising cost of electricity
and its effects on the
competitiveness of the
European Industry

IndustRE sees the **industrial electricity demand flexibility**
as an opportunity to deal with both challenges at the
same time



Project objectives

The project brings together the large industry with the renewable energy community in order find common ground and create win-win situations.

- Formulate business models
- Develop tools to facilitate their adoption
- Quantify the potential benefits for the power system
- Formulate policy recommendations



Project Focus & Geographical Coverage

The project will be relevant to all industries in Europe, but the key focus is:



Chemicals



Non-ferrous metals



Steel



Cold storage



Water treatment

These five sectors - with 302 TWh/year - represent around **10%** of Europe's total electricity consumption.

The project will apply to all European countries, with particular focus in Belgium, France, Germany, Italy, Spain and the UK. These six countries represent more than **65%** of the EU population and almost **80%** of Europe's installed wind and PV capacity.



Project Phases

Outline all possible ways that the **electricity demand flexibility of industrial plants** can derive and deliver benefits to the power system

These “business models” are further detailed and adapted to the target countries

Tools are developed to advise industrial plants on concrete actions

Case studies will be implemented and policy recommendations formulated



Business models context

Modifying electricity consumption in response to external signals.

Industrial point of view for classification:

- A. Reduced energy bills
- B. Power system services

→ **Workshop Objective:** Your input to the applicability of the business models in the target countries



Workshop Stakeholders

Industry



Renewable Energy



Utilities



Authorities



Academics/Others

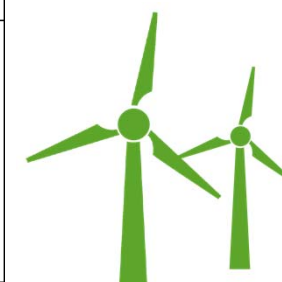


Demand Response



Agenda

13:45 14:00	Stakeholder Consultation <i>Creating win-win situations for Energy Intensive Industries and Variable Renewable Energy Plant Operators</i>	Fernando Nuño (European Copper Institute)
14:00 14:50	Interactive Discussion on the Applicability of Business Models within the current Regulatory & Market Framework (Part I) <i>Innovative Business Models making use of opportunities to reduce the Energy Bill of Energy Intensive Industries</i>	Tomas Gomez & Mercedes Vallés Rodríguez (Institute for Research in Technology - Universidad Pontificia Comillas)
14:50 15:10	Model Contracts <i>Possibilities for Bilateral Contracts between Energy Intensive Industries and Variable Renewable Energy Plant Operators</i>	Dörte Fouquet (Becker Büttner Held)
15:10 15:30	Coffee break	
15:30 16:20	Interactive Discussion on the Applicability of Business Models within the current Regulatory & Market Framework (Part II) <i>Innovative Business Models offering Services to the Power Market, creating Additional Revenue Streams for Energy Intensive Industries</i>	Tomas Gomez & Mercedes Vallés Rodríguez (Institute for Research in Technology - Universidad Pontificia Comillas)
16:20 17:00	Panel Discussion: <ul style="list-style-type: none"> • Henrik Dam, Policy Officer, European Commission, DG Energy, Unit C2 • Peter Claes, Vice-President, International Federation of Industrial Energy Consumers • Ivan Pineda, Director for Public Affairs, European Wind Energy Association • Hans de Keulenaer, Director, Energy & Electricity, European Copper Institute 	Discussion moderated by Michael Papapetrou (WIP Renewable Energies)





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