

WEBINAR: Next steps for energy systems integration

Linking policy and practice for clean energy transitions across sectors

Thursday, 2 April 2020, 4:00 – 6:30pm (CET / GMT +1)

Registration link: <https://register.gotowebinar.com/register/7934571092080378123>

~ This is a pre-recorded event with a LIVE discussion taking questions from the audience ~

Agora Energiewende and the International Energy Agency (IEA) are hosting a public event to discuss global perspectives for energy systems integration. The current trend towards electrifying transport, heating and industry represents a unique opportunity to decarbonise sectors, previously seen as hard to abate in terms of emissions. This, along with key resources such as hydrogen, contributes to broadening the scope of options to integrate ever greater shares of variable renewable energy (VRE) and accelerate the decarbonisation of the wider energy system. This event will shed light on the opportunities and challenges integrating electric vehicles into the power system and of synthetic fuel production and use.

The deployment of electric vehicles has been growing rapidly over the past ten years, with the global stock of electric passenger cars passing five million in 2018, an increase of 63 percent from the previous year. According to the IEA's EV30@30 scenario, global electric vehicle sales are set to reach 33 percent by 2030. Without concrete efforts for integration in the power system, this will have a significant effect on electricity consumption patterns and the associated requirement for additional network infrastructure. This workshop will provide an overview of innovative approaches – from long-term planning to concrete pilot projects – to better understand and enable the link between transport electrification and power system flexibility.

Electricity-based fuels – referred to in the following as “electrofuels” – can promote decarbonisation if they are produced with renewable power and if carbon inputs (when required) are climate-neutral. The most important electrofuel is hydrogen as the basic molecule, followed by methane and liquid fuels. The precise role that these fuels will play in the energy system of the future is still unclear, however. The answer to this question depends in large part on cost competitiveness, infrastructure development and favorable

policy frameworks. Clean, green hydrogen is becoming an important topic of political and business consideration, with the number of research, policies and projects around the world expanding rapidly.

What are the benefits and challenges of scaling up technologies? What is the potential role of electrofuels in 21st century power systems characterised by high shares of clean energy and increasingly electrified economies?

[Agora Energiewende is a joint initiative of the Mercator Foundation and the European Climate Foundation.](#)

PROGRAMME

4:00pm	Welcome and introduction Agora Energiewende and International Energy Agency (IEA)
Part 1	
4:05pm	Global perspectives for energy systems integration Enrique Gutierrez Tavaréz , Energy Analyst Electricity, IEA
4:20pm	Case study: Transport sector transformation: integrating electric vehicles into Turkey's distribution grids Deger Saygin , Director, SHURA – Turkey
4:35pm	Case study: Distribution grid planning for a successful energy transition – focus on electromobility Urs Maier , Senior Associate Energy and Infrastructure, Agora Verkehrswende
4:50pm	Case study: Fleet charging patterns and impacts on distribution grids Nicole Thompson , Optimise Prime Consortium Lead and Innovation Director, Hitachi Vantara
5:05pm	LIVE Discussion with questions from audience
Part 2	
5:25pm	Making the most of Power-to-X Matthias Deutsch , Senior Associate, Agora Energiewende
5:40pm	The role of hydrogen in clean energy transitions José Miguel Bermúdez Menéndez , Energy Technology Analyst, IEA
5:55pm	Case study: The potential role of hydrogen in Morocco (<i>to be confirmed</i>) Samir Rachidi , R&D Director, Institut de Recherche en Énergie Solaire et en Énergies Nouvelles (IRESEN)
6:10pm	LIVE Discussion with questions from audience
6:30pm	End of event



PARTICIPATION

In order to register for the event, please sign up using the following registration link:

<https://register.gotowebinar.com/register/7934571092080378123>

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This Power System Flexibility Campaign is organised in the framework of the Clean Energy Ministerial's 21st Century Power Partnership:

