



## Invitation

The Danish Technical University and the Danish Intelligent Energy Alliance invite you to a virtual workshop evaluating the progress of demand response activities especially in the EU and present how the Mission Innovation program aims to support and share experience on demand response across countries engaged in the Mission Innovation challenge on smart grid and demand response. The potential of Citizen Energy Communities or Local energy Communities (CEC/LEC) ability to support the local balancing of energy and interact with the grid is an issue with increasing focus in the EU following the EU Clean Energy Package's framework conditions for CECs/LECs. Hence, we put particular focus on Citizen Energy Communities at the workshop.

This workshop is aligned with the Mission Innovation program activity on demand response and is supported by the Danish research program EUDP (Energy Development and Demonstration Program).

The Mission Innovation demand response activity recognizes demand response or flexibility in demand to be of key importance in order to ensure balancing in an energy market with increasing amounts of intermittent renewable energy resources and to enable intelligent reinforcement of grid infrastructure where capacity utilization is maximized.

We hosted a first workshop of this kind in Copenhagen, Denmark in June 2019. Our second workshop – which is virtual due to COVID-19 - wish to take stock on how demand response regulatory framework and commercial activities are progressing, especially looking at the past two years in the EU and activities within Citizen and Local Energy Communities.

Quoting Fatih Birol, WEO 2018, IEA: *Flexibility is the corner stone of the future energy system*. Activating flexibility and balancing the energy system will enable the energy system to drive increasing amounts of intermittent RE-resources from wind and solar into our energy system. However, identifying how we encourage asset holders to engage, and what assets will be more important in driving this development, needs further exploration. And here *Citizen Energy Communities* may be a key-enabler.

Around the time of the first workshop in June 2019, the EU Clean Energy Package had been adopted. Since then it has been in an implementation phase in all EU member

states. This phase is finalized by the end of 2020. At the same time the EU Green Deal as well as enhanced EU-ambition on reducing greenhouse gasses by 2030 has been decided. This will drive even more RE into our energy system through direct consumption in heating, transportation and industrial processes as well as into e-fuels, increasing the need for demand response.

At the workshop we take stock on the EU member state implementation and look into new commercial cases that engage the active customer, including the ability for Local Energy Communities to engage consumers.

## **MI-EUDP Workshop – stock-taking on how demand response is progressing in the EU, with particular focus on Local Energy Communities**

22 April 2021 10:00 – 15:20

Virtual conference

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Moderator: Helle Juhler-Verdoner, m.d. The Danish Intelligent Energy Alliance

10:00 **Welcome and introduction to the program of the workshop**  
by moderator

10:05 **Welcome address by Luciano Martini chair of the Smart grid Innovation Challenge IC#1 (TBC)**  
Mission Innovation is in its current program focusing on the Smart Grid Innovation Challenge also referred to as the IC#1, Denmark is co-chairing the demand response task. We have invited the chair of the IC#1 to share with us what his expectations are for the future development of his work on demand response across the various member states.

*The Clean Energy Package's new electricity directive aimed at engaging the customer through the independent aggregator. How far has the implementation in separate member states come, and how coherent an EU market are we facing?*

10:25 **Post Electricity directive implementation stock-taking**  
by Joao Coelho, DELTA-EE  
*EU member states have worked to implement the Clean Energy Package's electricity directive. Having entered 2021 ELTA-EE has*

*analysed the progress of implementation in members states and will share their findings with us.*

10:50

**Nordic regulators view on the EU member state implementation**

By Karin Tvingsjö, Nordreg (TBC)

*Many EU member states are in the process of implementing the Clean Energy Packages electricity market directive, including the independent aggregator in the market. The Nordic electricity market is a well functioning common market place. What impact may the on-going implementation have from a Nordic regulators perspective*

*The new electricity market directive is focusing on engaging the consumer, and the regulatory framework for Citizen and Local Energy Communities have been developed. From a demand response point of view there is an interest in CECs/LECs as a potential mean to support balancing of energy markets and supporting the need of local grid. Market development is progressing and we wish to look into the new framework and some specific cases to reveal how CECs /LECs can interact in the best way with the energy market and local grid.*

11:10

**The Clean Energy Package and Citizen Energy Communities**

By Achille HANNOSSET, European Commission, DG ENER (TBC)

*A key element in the implementation of the CEP is to enable the prosumer in taking part in the green transition. CEPs elements on LECs is a tool to enable pro-sumers. What are the key elements of the LEC framework of the directive and what challenges do the EU Commission foresees.*

11:30

**The new regulatory framework of Citizen Energy Communities from a Danish perspective?**

By Jonas Katz, Energistyrelsen

*As all member states Denmark has recently implemented new framework conditions for Citizen Energy Communities through executive order. What have been the challenges to overcome in the adapted framework in the Danish context?*

11:50

**Overview of EU developments on Citizen and Local Energy Communities**

By Andreas Tuerk, Joanneum Research (TBC)

*Following the new CEC/LEC EU framework and looking across the EU Horizon2020 has supported the Bridge Task Force on Energy Communities to analyse the progress made in the EU. What trends are observed, what is the scale of projects, how do they interact with energy markets and the grid?*

12:10

**LUNCH BREAK**

13:10

**UK & International implementation of energy communities: drivers & barriers**

By David Shipworth, professor Energy and Built Environment, UCL Energy Institute (TBC)

*What are the insights into energy communities on their ability to promote the use of renewable energy sources also in existing buildings. Furthermore, how may the involvement of communities and their participants in the electricity market have a positive impact on grid stabilization and flexibility management*

13:30

**Sol over Byen - a Danish Citizen Energy Community case**

By Øystein Leonardsen, Copenhagen Municipality

*"Sol over Byen – is a work launched by Copenhagen municipality on Citizen Energy Communities. The aim is to explore possibilities of involving citizens in the green transition incl. strengthening social cohesion. Furthermore, the aim is to create collaboration between the CEC and the energy system to optimize utilization of energy sources and the electricity grid in order to minimize production and infrastructure investments.*

13:50

**socialRES**

by Iban Lizarralde, Ecole superieure des technologie industrielle avancees (TBC)

*Expansion of renewable energy implies a switch from centralised to decentralised energy production and greater social participation. Businesses associated with social innovation within the RE-sector are Cooperatives, Aggregators and Crowdfunding platforms. This may facilitate consumers to take a more active role in the electricity system. SocialRES aims to devise more effective ways of increasing social innovation. What may this project provide in terms of demand response business model development through co-operation between citizens and aggregators.*

14:10

**REScoop.eu**

By Josh Roberts (TBC)

*For REScoop.eu, the European federation of renewable energy cooperatives, an energy community is not created simply by involving local citizens in some type of technological innovation in the energy sector. It is the commitment to social innovation that defines an energy community as a distinct market actor apart from other traditional commercial energy companies.*

14:30

**ADVEDØRE GREEN CITY**

By Erik Christiansen EBO Consult A/S

*Avedøre Green City is a citizens' driven initiative which aims to fulfill 13 of UN's 17 Sustainable Development Goals. Goal no 7 (Sustainable Energy) is the foundation of the future local energy supply systems (heat and power) based on renewables. The initiative challenges the flexibility of both systems. The initiative is supported by the European Investment Bank (ELENA).*

14:50

**Debate amongst presenters– what are the key take aways from the presentations**

By all presenters

*Aiming at developing a list of action points to include in the work on demand response as well as the ability to engage consumers e.g. in LECs we invite presenters of the day to debate with the participants. We wish to conclude on efforts to enhance flexibility framework conditions and engage Local Energy Communities as flexible asset owners*

15:20

End of workshop

*The current Mission Innovation program is supported by the involved governments, and the particular MI-activity concerning demand response is co-chaired by Finland and Denmark. The Danish EUD-Program supports this workshop in order to support the cross country sharing of demand response activities. DTU and Intelligent Energy Alliance applied for funding in 2018 to host two workshops among other activities during the MI program-period of 2018-2021.*