







MI-EUDP Workshop: Stock-taking on how demand response is progressing in the EU, with particular focus on Citizen Energy Communities

22 April 2021, 10:00 am – 3:30 pm Virtual conference

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

10:25

by Luciano Martini, Ricerca sul Sistema Energetico - RSE S.p.A., who is co-leader of MI IC1 smart grids, which is co-led by China, In-

dia and Italy

Mission Innovation is in its current program focusing on the Smart Grid Innovation Challenge also referred to as the IC#1, Denmark is cochairing the demand response task. The co-leader of the IC1 will present MI goals and International Challenges (ICs), highlighting some of the IC1 activity achievements, as well as the Tasks in focus, where Denmark and Finland has co-lead the Demand Response task.

The Clean Energy Package's new electricity directive is aiming at engaging the customer, especially through the independent aggregator. How far has the implementation in separate member states come, and what are the typical implementation models in the various European markets?

Post Electricity directive implementation stock-taking

by Joao Coelho, DELTA-EE

Over the years demand response has developed in the EU, and during 2019-2020 member states have worked to implement the Clean

Energy Package's electricity directive. Having entered 2021 DELTA-EE has analysed the progress of implementation in members states, as well as the general development in the DR market. This analysis was released end of March and the findings will be shared with us.

10:50 Aggregator implementation models across Europe

By Aurora Saez and Hans de Heer, DNV

Member states are implementing the role of the aggregator in different ways. DNV will present the outcomes of the report "Impact assessment of different models of independent aggregator financial responsibility and compensation in Sweden". A report made for the Swedish Energimarknadsinspektionen (Ei). In addition, DNV will present the overview of aggregator implementation models seen across Europe as per the findings in the USEF white paper - Flexibility deployment in Europe.

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

The Clean Energy Package and Citizen Energy Communities

By Achille HANNOSET, European Commission, DG ENER A key element in the implementation of the CEP is to enable the consumer in taking part in the green transition. An important vehicle in this regard are Citizen Energy Communities (CEC) and Renewable Energy Communities (REC). This session will provide an overview of the key elements of the CEC and REC framework of the directive and what challenges the EU Commission foresees.

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

By Jonas Katz, The Danish Energy Authority

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?

Overview of EU developments on Citizen and Local Energy Communities

By Andreas Tuerk, Joanneum Research

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?

11:10

11:30

11:50

12:10 LUNCH BREAK

13:15 International implementation of energy communities: drivers & barriers

By David Shipworth, Chair of the User-Centred Energy Systems Technology Collaboration Programme by IEA.

Energy communities offer substantial potential for deeper renewables integration through local balancing and grid flexibility provision. Realising this potential however depends heavily on local contexts. Understanding the drivers and barriers arising in power systems, ICT, markets, economics, social value, regulation and policy is key in unlocking this potential.

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.

14:05 socialRES

by Mikhail Hamwi, Ecole superieure des technologie industrielle avancees

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.

14:30 AVEDØRE 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 and participants— what are the key take aways from the workshop presentations

Aiming at developing a list of action points to include in the work going forward on demand response as well as the ability to engage consumers in CECs/RECs and 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-IC-activity concerning demand response is co-chaired by Finland and Denmark. The Danish EUD-Program supports this workshop to support the cross country sharing of demand response activities. DTU and Intelligent Energy Alliance applied for funding in 2018 to host two workshops (in 2019 and 2021) as part of the Danish activities during the MI program-period of 2018-2021.