Clean energy for EU islands
#CE4EUIslands

ON-SITE WORKSHOP
CAPACITY BUILDING WORKSHOPS

European Commission

#CE4EUislands – Workshop: Smart electricity systems for facilitating the decarbonisation of islands: demand-side management and flexibility

29 January 2025 | 09:00-17:00 | Brussels | Belgium

Abstract

Islands' electrical grids, especially weakly or non- interconnected ones, face technical barriers that often hinder the integration of renewable energy generation. This leads to limited installed capacity of RES systems and curtailments of the already installed ones. One of the solutions to this problem is the increase of the electrical system flexibility through the introduction of storage systems and the activation of demand side management services. By putting in place the necessary regulatory framework and financial incentives, a variety of consumer assets can be turned into flexible loads providing flexibility to the grid, thus alleviating pressure on the distribution system, increasing absorption of RES and even contributing to the system stability. Such assets include EVs fleets (either through V1G or V2G), electrified heating and cooling and other smart appliances, desalination plants, pumping stations, street lighting and other local level infrastructures.

This workshop aims to enhance the islands' knowledge on the technological and regulatory framework around the smartening of islands' electrical systems and the subsequent enabling of flexibility, demand side management and ancillary services in general.

In the morning session we will present and analyse the current situation of islands electrical systems, to better understand their boundaries and possibilities in reaching the electrical system smartening goals. We will then present the findings and recommendations of the Secretariat's recent study on possible ways to integrate more renewables in islands' grids. Following up we will hear whether these recommendations resonate with the experience acquired from relevant EU funded projects.

In the afternoon session we will present the legislative framework at EU level regarding flexibility and demand side management, while its adoption at Member State level will also be discussed. We will listen to DSOs who will shed more light on the essential asset development needed to enable these services, and we will bring on board aggregators and software developers to understand how the market is preparing itself.

The workshop will close with a round table session, where the representatives of the islands' transition teams will reflect on the content presented.

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Wednesday 29th January 2025

09:00 – 09:05	**Welcome and agenda setting** *Martina Cannata,* CE4EUI (3E)
09:05 – 09:15	**Introduction to "Clean energy for EU islands" initiative** *Edita Dranseikaite,* DG ENER
	Morning session
09:15 – 09:45	**Why smartening islands' electrical systems matters?** *Examples of island electrical systems, their characteristics and conditions to enable flexibility and demand side management services.* *DAFNI*
09:45 – 10:45	**Island testimonies – The voice of the islands** *The participating islands will be invited to share their experiences on the workshop topic during a round table open discussion. The objective of this session is to collect key takeaways to fuel the discussions and presentations during the workshop day.* *Moderation: DAFNI - 3E*
10:45 – 11:15	**Coffee break**
11:15 – 11:30	**EU legislative framework on flexibility and demand side management** *Do Member States follow?* *Th!nkE*
11:30 – 13:00	**EU projects working on smartening EU islands** *Projects: REEMPOWERED (DAFNI), HiHELIOS (FlandersMake), Crete Valley (FEDARENE)* *Followed by a discussion amongst the participants* *Moderation: ESIN*
13:00 – 14:00	**Lunch break**
	Afternoon session
14:00 – 14:45	**What is there for the DSOs to do to enable the smartening of the islands?** *Examples Madeira, Gotland, Greece*

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	Moderation: 3E
14:45 – 16:00	**The voice of the market** *Experience from tools and methodologies applied to enable the flexibility and DSM market* - *Energynautics* - *Energypool* - *Energytix* - *Watt4Ever* *Moderation: Th!nkE*
16:00 – 16:50	**Q&A session with the islands** *Moderation: DAFNI - Th!nkE*
16:50 – 17:00	**Conclusions and Final remarks**
17:00 – 17:30	**Networking coffee**