

Clean energy for EU islands



#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, incredibly weak or non-interconnected ones, face technical barriers that often hinder the integration of renewable energy generation. This leads to a 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, various 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's stability. Such assets include EV 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

Workshop intention

This workshop aims to enhance the islands' knowledge of 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.

Workshop approach & Desired outcomes

To reach this goal:

- We will first present and analyse the current situation of the islands' electrical systems to better understand their boundaries and possibilities.
- We will then present the findings and recommendations of the secretariat's recent study on possible ways to integrate more renewables into islands' grids.
- 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 EU's legislative framework, its adoption at the Member State level, and the experience acquired from relevant EU-funded projects will also be discussed.
- The participants will join a participatory role-playing session, which will allow them to experience the challenges, benefits, and potential risks of actively engaging with the electricity market services presented.
- The workshop will close with a round table session, where representatives from relevant organisations and associations will reflect on the content presented, focusing on the specificities of the islands.

AGENDA (VERSION 17/10/2024)

Wednesday 29th January 2025

09:00 – 09:05	<ul style="list-style-type: none">• Welcome and Introduction
09:05 – 09:10	Introduction to the "Clean energy for EU islands" initiative <i>Edita Dranseikaite, DG ENER</i>
09:10 – 9:15	Workshop agenda setting <ul style="list-style-type: none">• <i>Martina Cannata, CE4EUI (3E)</i>
Morning session	
09:15 – 09:45	Why do smartening islands' electrical systems matter? <i>Examples of island electrical systems, their characteristics and conditions to enable flexibility and demand side management services.</i> <i>DAFNI</i>
09:45 – 10:15	How do flexibility and demand-side management increase RES penetration in islands? <i>Presentation of the secretariat's "Study on connection policies and management of energy systems under conditions of asynchronous generation in the non-interconnected islands."</i> <i>Th!nkE</i>
10:15 – 11:00	Island testimonies – The voice of the islands

	<p>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 be discussed during the final roundtable and on policy and advocacy day to follow the workshops.</p> <p>Moderation: DAFNI</p>
11:00 – 11:30	Coffee break
11:30 – 11:45	<p>EU legislative framework on flexibility and demand side management</p> <p><i>Do Member States follow?</i></p> <p>Th!nkE</p>
11:45 – 12:15	<p>What are the DSOs supposed to do to enable the smartening of the islands?</p> <p><i>Examples from DSOs</i></p> <p>Moderation: DAFNI</p>
12:15 – 12:45	<p>The voice of the market</p> <p><i>Experience from tools and methodologies applied to enable the flexibility and DSM market</i></p> <p><i>Service providers</i></p> <p>Moderation: Th!nkE</p>
12:45 – 13:00	<p>QA session with the islands</p> <p>Moderation: Th!nkE</p>
13:00 – 14:00	Lunch break
Afternoon session	
14:00 – 15:00	<p>EU projects working on smartening EU islands</p> <p>Moderation: DAFNI</p>
15:00 – 16:00	<p>Taking stock of your island's electricity market – Role-playing game</p> <p><i>The participants will be divided into groups and participate in a role-playing game. They will simulate participating in an island's electricity market that provides flexibility and DSM services and products. Decisions must be taken, leading to potential collective and individual benefits.</i></p> <p>Moderation: CE4EUI secretariat</p>
16:00 – 16:50	<p>Wrap up round table discussion</p> <p><i>Representatives from EU organisations and associations</i></p> <p>Moderation: DAFNI / Th!nkE</p>
16:50 – 17:00	Conclusions and Final Remarks
17:00 – 18:00	Networking cocktail