Press Release
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OPENTUNITY combines innovation and collaboration to transform energy systems across Europe

OPENTUNITY Project, funded by the Horizon Europe Programme, is making waves in energy sector and user engagement. Through cutting-edge technological advancements and active participation in major industry events, OPENTUNITY is positioning itself as a transformative force for transparency, collaboration, and sustainability across Europe.

Pioneering Innovations in Energy Management

One of OPENTUNITY's flagship achievements is the development of a new state estimation model for energy grids using deep learning algorithms. This model enhances grid stability, efficiency, and flexibility by employing time series decomposition to analyze trends, seasonality, and exogenous factors like weather. It also incorporates Fourier series to predict seasonal energy demand fluctuations and external variables, such as energy prices and holidays, to improve prediction accuracy and adaptability. These advancements are being integrated into ETRA I+D's ÉTER software platform, significantly improving grid operations, particularly in environments with high renewable energy penetration.

In addition, OPENTUNITY has made strides in creating its Data Space (OPENSPACE). The consortium has collected essential data from the Energy Management Systems (EMS) to be connected to the platform and has defined the necessary APIs. The next steps will focus on finalizing the onboarding process and integrating the EMS into OPENSPACE. This innovative Data Space will provide stakeholders with real-time access to critical energy data, driving improved decision-making and operational efficiency.

OPENTUNITY on the Global Stage

OPENTUNITY's groundbreaking innovations have been presented at several key industry events, underscoring the project's impact and fostering collaboration with leading experts and stakeholders:

At MEDPOWER 2024, the team shared insights on energy flexibility, highlighting mechanisms that enhance adaptability and resilience in energy systems. These solutions are critical to supporting the energy transition by enabling effective supply and demand management.

During the 6th International Conference on Smart Systems and Technologies (SST) 2024, OPENTUNITY showcased advanced tools for low-voltage grid management, emphasizing the role of smart technologies in optimizing grid performance and integrating renewable energy sources.

The 7th International Grid Service Market Symposium featured OPENTUNITY's latest technologies addressing key challenges in the energy transition. The focus was on innovation, flexibility, and efficiency, with solutions that pave the way for a sustainable energy future.

At the SAEE Conference 2024, the team highlighted research on leveraging the flexibility of electric vehicle (EV) fleets to drive operational efficiency. The presentation detailed how Avantcar's EV-sharing service, integrated with OPENTUNITY's advanced aggregation platform, utilizes machine learning for consumption forecasting and flexibility optimization.

About the OPENTUNITY Project

OPENTUNITY aims to create a flexible energy ecosystem by reducing interoperability barriers and promoting the use of standards to decarbonize EU grids. The project empowers grid operators, prosumers, and market actors with innovative, interoperable software to enhance flexibility, optimize energy management, and improve grid operations, putting the end-user at the forefront of the energy transition.

By uniting 21 partners from 8 countries, the project is implementing innovative tools and methodologies to support local governments, energy operators, and citizens in creating a sustainable and inclusive future.

Further information:

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