PRESS RELEASE

From data to decisions: ORION brings its human-centric digital twin to Enlit Europe 2026

The ORION project joined the "Integrating Energy Futures" EU projects cluster with a booth, a speaker session and a first look at its platform.

In recent years, digital twins have been widely used for energy assets, often as a polished 3D version of the real asset. At Enlit Europe 2026 held in Vienna, 10–12 November, the ORION project made the case for something more useful: a digital twin that helps operators make better decisions every day. Through its booth, a speaker session and a first look at its platform, ORION introduced its modular digital tools to the energy community gathered in Vienna.

Meeting and connecting with energy stakeholders at the booth

ORION exhibited in the EU Projects Zone as part of the INTEGRATING ENERGY FUTURES cluster, which grouped EU-funded projects across two booths. Booth C1 EU-S08, dedicated to Smart Communities & Positive Energy Districts, featured InterPED, PEDvolution, ExPEDite, BiPED and TIPS4PED. ORION was based at Booth C1 EU-S09, Connecting Renewable Energy, Intelligent Technologies and Distributed Energy Resources, alongside POSIFIT, INTELLIGENT, INTEREST and ECS4DRES. The booth drew a varied audience, from energy industry stakeholders to researchers and students, all keen to learn what ORION does and how its digital tools can support renewable energy operations.

ORION in the speaker session

On 11 November, Filipe Tadeu Oliveira (INESC TEC) represented ORION in the session "Integrating Energy Futures: Digital, Flexible & Resilient Energy Systems" at EU Projects Zone Hub 1 (Hall C). Moderated by Ben Loma (POLIS), the session paired five-minute project presentations with a round-table discussion, alongside speakers from fellow EU projects POSIFIT, INTELLIGENT, INTEREST and ECS4DRES.

Oliveira outlined four key elements of ORION's approach to improving decision-making through digitalisation

- A digital twin you work with, not just look at. Instead of a passive visual replica, ORION offers a human-centric environment where operators can ask questions, test "what-if" scenarios, spot emerging faults and train on realistic simulations.

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- One data space across the value chain. ORION brings together sensor readings, asset and transmission data, port stakeholder inputs and operational context. It then applies interoperable data models, asset management tools and AI, for example for predictive maintenance.
- From the whole system to a single asset. Operators can move from a system-wide view to asset-level detail, see at once what is working and what is failing, and compare alternative operating scenarios.
- Built to travel. ORION's tools are modular and designed for very different infrastructures, not a single demonstration site. They cover ports in Cabo Verde and Norway, photovoltaic farms in Iberia, a wave energy converter in Slovenia, grid co-simulation in Brazil, and generation, transmission and distribution operations in Canada.

The key takeaway from this session was clear: Digital tools should be measured not by their sophistication, but by how well they help operators coordinate complex power systems, anticipate failures and integrate more renewables.

See the platform in action

During the session and at the booth, ORION presented a series of short videos showcasing its use cases and offering a first glimpse of the platform in action. **Watch the videos on YouTube.**

For a full account of ORION's participation at Enlit Europe 2026, including the round-table discussion, read the article on the ORION website: **https://he-orion.eu/orion-at-enlit-europe-2026-integrating-energy-futures-in-vienna/**

About ORION

ORION is a Horizon Europe Research and Innovation Action (RIA) funded by the European Union under grant agreement No. 101158432. ORION delivers a modular toolbox of digital breakthrough components, including human-centric Digital Twin applications, advanced sensor technologies, and AI-driven data systems to accelerate the twin energy transition. . The project validates these innovations across unique use cases in hydro, solar, and wave energy operations globally, empowering energy stakeholders to make informed decisions, increase renewable energy adoption, and reduce fossil fuel dependence.

For more information, visit www.he-orion.eu/

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