

Dear {{ contact.FIRSTNAME }},

Welcome to the latest issue of the U2Demo project newsletter! As we move further into the new year, the project is entering an important phase where development is progressing rapidly and preparations for the upcoming pilot demonstrations are well underway.

In the months ahead, you'll receive updates on the digital platform, trading tools, and the community-driven approaches that continue to take shape as we bring these solutions closer to real-world implementation.

Thank you for staying with us on this journey. We're excited to share what's next as we work together toward a more open, fair, and resilient energy future.



Editorial



**A word from Lucila De Almeida, Professor
at EUI, Florence School of Regulation**

As U2Demo enters its most decisive phase, one truth becomes clearer: technology will not **scale energy sharing** on its own. **Governance** will. The moment you compare Member States, it becomes evident how **rules, roles, and responsibilities**—not algorithms—determine what communities can actually do.

Our mapping shows that **regulatory differences** shape the entire **user journey**: who can join, how data moves, how benefits are calculated, and who is accountable when things go wrong. These variations can slow adoption—or make a solution genuinely trustworthy.

The pilots confirm this. Communities welcome innovation, but only when there is **transparency** about how sharing works and how results appear on their bills. Clarity builds **trust**; opacity undermines even the most advanced tools.

That’s why the next phase is about embedding governance directly into product design—configurable, explainable, and aligned with **operational realities** across countries. Only then can energy sharing truly scale across Europe.



Project Overview

Turning Plans into Pilots: Scaling from Design to Deployment

Building on the foundations laid in the first project phase, U2Demo is now moving into its second stage: **development, testing, and integration**. After mapping the regulatory and business landscape and designing the core P2P trading and energy sharing approaches, the consortium is shifting from “blueprint” to “build” — turning concepts into working digital tools that can be validated in real settings.



Internally, this new phase is taking shape through several key work packages:

- **WP1 concluded in August 2025**, delivering the harmonised regulatory, social, and business framework that continues to steer both technical development and pilot preparation.
- **WP2 is approaching completion**, with finalisation planned for **end of February 2026**, ensuring the last modelling and methodological elements are in place to support algorithm roll-out and platform functionality.
- **WP3 is progressing from design to implementation**, developing the open-source, blockchain-enabled platform that will host peer-to-peer energy sharing and trading. Current work focuses on a reliable digital backbone, strong cybersecurity, interoperability, and smooth integration of data streams needed for the pilots.
- **WP4 is translating models into operational algorithms**, implementing robust P2P trading and energy-sharing algorithms based on the frameworks created earlier, and preparing them for integration into the WP3 platform and future market interaction.

Together, these advances mark a clear step forward: U2Demo is now actively assembling the open, scalable P2P trading and energy sharing ecosystem that will be tested and refined across the pilots.

Explore All Work Packages



Progressing
Pilots

Energy Café in Otterbeek: local solar, real-life support

As **U2Demo's development work picks up speed**, our pilot communities are ramping up alongside it. In Otterbeek (Mechelen, Belgium), community solar is already delivering tangible results, with **Klimaan's 1,795 solar panels** operating across **197 rooftops**. To make sure those neighbourhood benefits feel clear and personal for residents, Klimaan organised an **Energy Café on 6 November** under the U2Demo umbrella.

Social housing tenants could stop by for an informal chat, share questions about solar power and self-consumption, and get practical, one-to-one advice tailored to their own energy bill or supplier portal. The session also introduced what Klimaan

will roll out in the pilot: **open-source energy-sharing tools** that let residents actively exchange and manage renewable energy, supported by **behavioural approaches and light gamification** to encourage participation among social tenants.

The café underscored a lesson emerging in several pilots: **technology alone isn't enough**. Even where self-consumption using solar energy is happening, energy pricing and billing can still be confusing in daily life. Bringing people together in person helps build confidence and understanding — and creates a stronger base for local participation in U2Demo's work on **smarter local energy sharing**. Read the full story on our website: [Energy Café in Otterbeek: local solar, real-life support.](#)



Discover the Belgian Pilot

Project Update and Pilot Use Case Preview

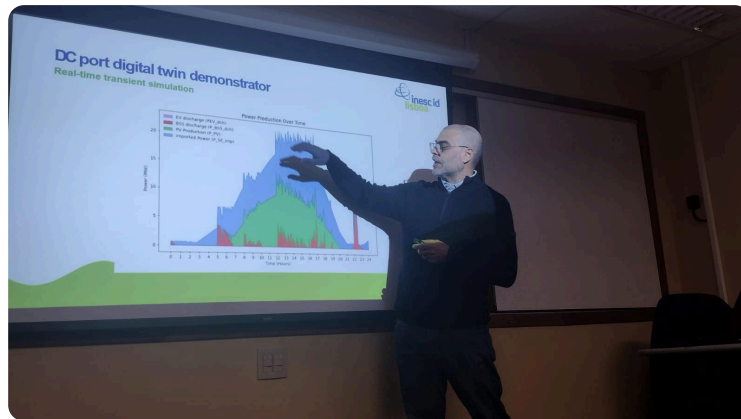


Discover Our Pilots

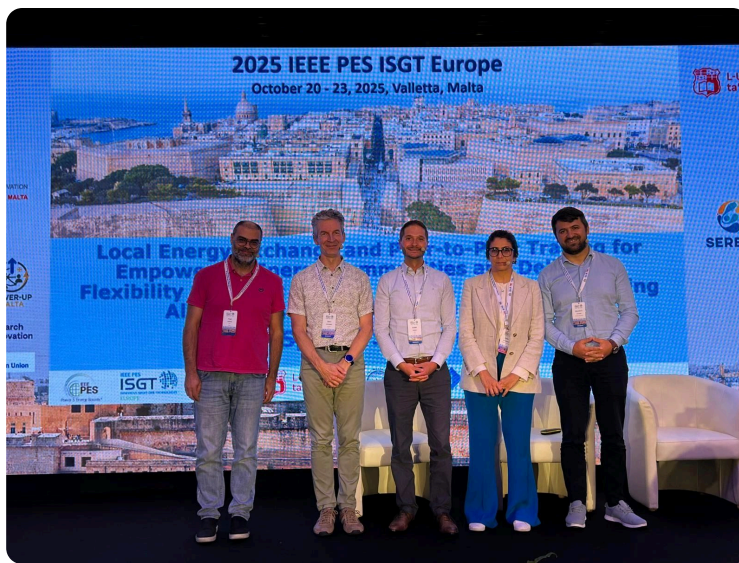


Progressing
Science

From Concept to Conference: U2Demo Research on Stage



In June 2025, U2Demo was featured in an international academic setting when Dr. Hugo Morais (INESC-ID) presented the project during the [PSE 2025 Seminar Series at the University of Campinas \(UNICAMP\)](#) in São Paulo, Brazil. His talk highlighted U2Demo's ongoing work on energy communities, energy sharing, and peer-to-peer market approaches, and explored how these frameworks and methodologies can be adapted to different regulatory, socio-economic, and geographical contexts. [Read the full story on our website.](#)



In October 2025, U2Demo hosted a Special Session at [IEEE PES ISGT Europe 2025](#) on Local Energy Exchange and Peer-to-Peer trading. Chaired by Anibal Sanjab and Hugo Morais, the session spotlighted U2Demo and guest experts on the regulatory foundations of energy sharing (Lucila de Almeida), grid-supporting P2P market models (Sanjab), decision-support tools for community members (Morais), and privacy-preserving, secure architectures (Geert Deconinck, Mustafa A. Mustafa). [Read the full story on our website.](#)



Meet our
Partners

Building the Evidence Base for Fair Energy Sharing



In this issue, we shine a light on [TNO](#) and [VITO](#) — two **research-driven** partners helping turn U2Demo's local energy-sharing ideas into practical, people-centred solutions that can be tested in pilots and scaled across Europe. Keep an eye out for our "**Partner Spotlights**" on social media, where we showcase the expertise driving U2Demo forward.

TNO

We develop solutions for smart grid integration and decentralized energy systems, with a strong focus on scalability and replicability.

By connecting ICT, regulation and consumer needs, we create a valuable link between technology, policy, and everyday energy use.



Aliene van der Veen
Digital Energy Systems Expert



vito

We are honored to lead the development of efficient, grid-aware, and consumer-centric energy-sharing mechanisms within U2Demo.

Our focus is on designing local energy-sharing models and peer-to-peer matching mechanisms to facilitate the widespread adoption of energy sharing within energy communities.

Anibal Sanjab
Senior Researcher and Project Manager

U2DEMO

Meet Our Partners



News and Events

Mapping the Future of Energy Sharing — Webinar Highlights

U2Demo recently hosted a webinar on **Mapping Legal and Regulatory Frameworks for Peer-to-Peer (P2P) Energy Sharing**, bringing together legal, policy, consumer, and community perspectives to explore how Europe is making space for citizen-led energy exchange. While energy communities are expanding rapidly across the EU, persistent **differences in national regulations still hinder interoperable and cross-border solutions**, making a

clear understanding of these rules essential for scaling fair and effective local energy markets.

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Energy sharing is not just technical — it's a legal relationship among citizens, regulated entities, and data systems.

- Prof. Lucila de Almeida, [EUI/FSR](#)



Key takeaways from the session

- **Deliverable 1.1** compares energy sharing frameworks in **Portugal, Italy, Belgium, and the Netherlands**, showing major differences in eligibility, governance, asset ownership, and billing rules.
- **All pilots rely on DSOs** for metering and settlement, but countries vary on what communities can do with pricing and compensation.
- Speakers stressed that **interoperability + consumer protection** are essential if energy sharing is to scale democratically.

What's next

The full legal mapping report and U2Demo's **open-source energy sharing tools** are coming soon, informed directly by real-world pilots. [Read more.](#)

U2Demo's General Assembly Sets Next Phase in Motion

The U2Demo consortium met on 10–11 September 2025 in **Bratislava**, hosted by [IEPD](#), for its second General Assembly, marking a key step from research to **real-world energy community implementation**. Partners discussed regulatory frameworks, consumer engagement, and open-source platforms for peer-to-peer energy sharing.

[Four pilots](#) across [Belgium, Italy, the Netherlands, and Portugal](#) will test U2Demo's approach in diverse settings — from rooftop solar sharing in social housing to rural cooperative energy management. A highlight was [the visit to Bratislava-Petržalka's municipal energy community](#), showcasing over 400 kWp of shared solar capacity powering public buildings and EV charging.

The General Assembly set the stage for the next phase: developing user-friendly platforms and algorithms that make energy communities scalable and accessible across Europe.



ENLIT 2025 Bilbao

Our team brought **powerful insights** on P2P trading and energy sharing to Bilbao—connecting with industry leaders, showcasing our **latest innovations**, and highlighting how U2Demo is shaping the **future of decentralized energy systems**.

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Just like a great U2 song, a successful platform starts with understanding stakeholders, is built to be interoperable, and evolves by testing and building on what works — that’s the U2Demo approach to energy sharing and P2P trading.

- Helena Gerard, [VITO](#)



Helena's words captured the spirit of our presence at ENLIT: **collaborative**, **forward-thinking**, and driven by **real-world impact**. With strong engagement at the booth, valuable exchanges with partners, and growing interest in our **user-centric P2P model**, U2Demo continues gaining momentum across Europe's energy innovation landscape. [Read the full story here.](#)

Also Featured In

U2Demo has recently been featured in two new publications from the **BRIDGE Regulation Working Group**, recognizing the project's contribution to Europe-wide thinking on energy sharing and sector integration. The reports highlight regulatory barriers and best practices across the EU, and draw on U2Demo's work to help shape policy pathways — from **frameworks for active consumer roles to interoperable trading models and real-world insights from the pilots**. You can explore both BRIDGE reports via the links in [our news story on the website](#).

EU Launches €1 Million Prize

The European Commission has announced a new [€1 million prize recognising energy communities that pioneer fresh, inclusive models for governing and managing renewable energy](#). The initiative aims to spotlight forward-thinking approaches that strengthen citizen participation, transparency, and trust—key ingredients for resilient, community-driven energy systems. Up to **ten winners** will be awarded, with the top prize set at **€350,000**. Applications open on **20 January 2026** and run until **25 June 2026**, offering energy communities across Europe an opportunity to gain EU-level visibility for innovative governance models that accelerate the clean-energy transition.

Revisit Our
Milestones

Relive Our
Events



Next
Events

Scientific Conferences and Workshops

- [BRIDGE EU General Assembly](#) - March 23rd and 24th in Brussels, Belgium
- [YEEES 37](#) - April 16th and 17th in Florence, Italy
- [MCEE 2026](#) - May 10th and 20th in Mannheim, Germany
- [EURELECTRIC Power Summit](#) - June 3rd and 4th in Helsinki, Finland - Registration open

- [CIRED 2026 workshop](#) - June 9th and 10th in Brussels, Belgium - Registration open
- [EEM26](#) - June 22th to 24th in Trondheim, Norway - Registration open
- [WCERE 2026](#) - June 29th to 3rd July in Carcavelos, Portugal
- [IEEE PES GM](#) - July 19th to 23rd in Montreal, Canada



If you'd like to **stay informed** about U2Demo's progress, insights, and upcoming events, feel free to subscribe to the newsletter or **share it with others** who might be interested.

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