

NEWSLETTER



Executive Summary

As DE-RISK approaches its conclusion, the past months have been particularly dynamic and impactful. Alongside advancing our policy and regulatory work, this period has been marked by **tangible demonstrations of Local Flexibility Markets (LFMs)** through real-life pilots in Ireland, Spain, and Türkiye.

Our team has:

- Published two key strategic documents: a **Policy Report** offering recommendations to EU and national authorities, and a **Green Paper** outlining innovative financing mechanisms for LFMs.
- Engaged stakeholders across Europe in high-level discussions, including our **Regulatory Workshop in Ankara** and contributions to **EUSEW 2025 in Brussels**, reinforcing DE-RISK's role in shaping the EU's energy transition agenda.
- Organized multiple **User Engagement Workshops** in Spain and Türkiye, ensuring that citizen voices, needs, and feedback remain central to our solutions.

At the same time, **pilot activities have been scaled up and consolidated:**

- In **Kepez (Türkiye)**, an energy cooperative successfully tested household-level flexibility, cutting bills and strengthening community participation.
- In **Murcia (Spain)**, a crowdlending campaign mobilized 28 investors to expand renewable generation, proving the power of community financing.
- In **La Balma (Barcelona)**, cooperative housing residents monitored and adapted their energy use, achieving measurable savings and higher awareness.
- In **Galway (Ireland)**, university buildings were equipped with IoT devices and smart heating controls, turning education facilities into living labs for flexibility.

These achievements underline DE-RISK's commitment to not only designing frameworks but also **testing, refining, and validating them in practice**. With this newsletter, we particularly wish to highlight the pilots, as they showcase the **real-world impact of LFMs** and the strong potential for scaling them across Europe.



Insights from Recent DE-RISK Research

DE-RISK Pilots: Real-Life Testing of Flexibility Markets Across Europe

Our Project aims to validate and demonstrate a holistic, multidisciplinary approach to unlocking demand response potential and supporting the uptake of renewable energy through local flexibility markets (LFMs). The project carries out real-life pilot implementations across four case studies in Ireland, Spain (two sites), and Türkiye, selected for their diversity in climatic, regulatory, and market conditions.

The pilot activities collectively focus on:

- Setting up smart data acquisition systems, filling information gaps, including additional sensors, smart meters, and gateways, where needed.
- Developing digital twin models for buildings and communities to simulate “what-if” flexibility scenarios.
- Testing flexibility services, in both implicit (e.g., ToU optimization, self-consumption) and explicit demand response schemes—virtually and, where feasible, physically
- Engaging local communities and stakeholders through workshops, behavioral analysis, and participatory methods to co-design business models and foster user acceptance.
- Deploying and operating the DE-RISK platform in real-life settings to evaluate technical functionality and service delivery.
- Monitoring performance, using a harmonized KPI framework addressing technical, social, and economic impacts.

The pilots are hosted in:

- A university campus in Galway, Ireland (urban),
- Multi-apartment buildings in Espinardo, Murcia (peri-urban),
- An energy cooperative in Kepez, Türkiye (urban & peri-urban),
- The La Balma cooperative housing in Barcelona, Spain (urban), replacing a former pilot in France.



Insights from Recent DE-RISK Research

Spotlight on Türkiye: The Kepez Energy Community Pilot

In Türkiye, our Project is working with an **energy community in Kepez (Çanakkale)**, where households are testing new ways to manage their energy use collectively. The community model provides a unique setting to explore how local communities can actively participate in flexibility markets and benefit from shared solutions.

- **Technical performance:** With the installation of IoT devices across cooperative households, the system achieved **95% reliability** and enabled up to **17% energy savings** during demand response events.
- **Economic benefits:** Cooperative members saw their electricity bills reduced by an average of **22.9%**, with the payback period for investments estimated at around **7 years**—a strong signal of long-term sustainability.
- **Community engagement:** The cooperative structure fostered participation and transparency. Members used the DE-RISK web application to track their own and collective consumption, boosting awareness and trust in the system.

The Kepez pilot demonstrates how **community-led energy models** can deliver real savings, support the grid, and empower citizens. It highlights the potential of energy communities to become key players in future local flexibility markets.



Spotlight on Spain: La Balma Cooperative Housing Pilot

In Barcelona, the **La Balma cooperative housing project** joined DE-RISK as a late but highly committed pilot site. La Balma, known for its strong social and environmental focus, was a perfect match to test **community-driven flexibility models**.

- **Community participation:** Out of 20 “coexistence units,” **9 households actively joined** the pilot to better understand renewable energy use, tariffs, and consumption patterns. One unit is dedicated to providing temporary housing for vulnerable groups, reinforcing La Balma’s social mission.
- **Renewable infrastructure:** Since 2024, the building has operated with **17.36 kWp solar PV** and an **11.1 kWh battery**, supporting both **collective self-consumption** and common areas.
- **Smart monitoring:** Each participating unit was equipped with **Shelly 3EM PRO smart meters**, gathering 15-minute data on total, kitchen, and plug consumption. This data was integrated into the DE-RISK platform, alongside **time-of-use tariffs**.
- **Web app integration:** Residents used an **interactive dashboard** to track disaggregated energy consumption, energy balance, costs, and savings. The tool helped increase awareness and encouraged responsible consumption.
- **Flexibility actions:** Since June, residents received **10 tailored recommendations** on adjusting their usage. Results showed a **2.1% increase in PV self-consumption**, **1.66% energy savings**, and **2% monetary savings**, alongside a measurable **CO₂ reduction**.
- **Engagement:** A **July 2025 workshop** provided training, explanations, and feedback opportunities. Users responded very positively, reporting greater interest in how their behavior could impact energy efficiency.

The La Balma experience shows how **cooperative housing and community engagement** can accelerate Europe’s energy transition. Even with a late start, the pilot achieved strong participation, measurable results, and a boost in residents’ awareness and motivation.



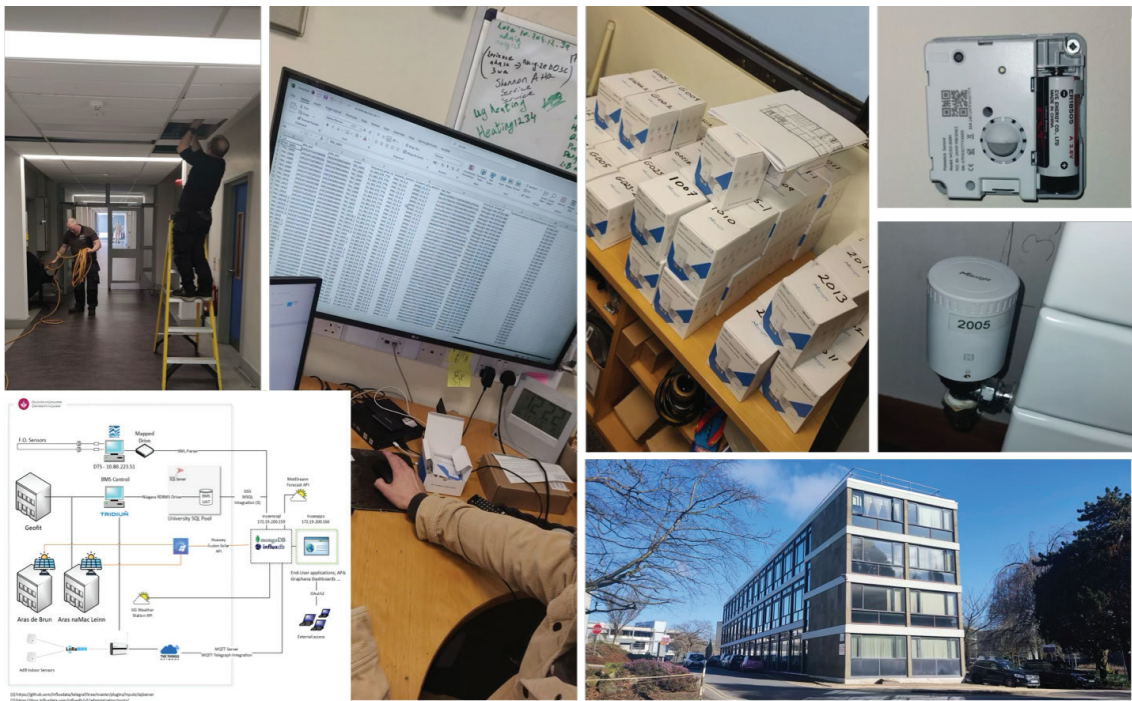
Spotlight on Ireland: Áras de Brún Pilot: Smart Heating, Smarter Buildings

The DE-RISK pilot at Áras de Brún, University of Galway, is gaining momentum. This Irish demonstration is proving how existing educational buildings can unlock energy flexibility through digitalisation and user-driven strategies essential ingredients for Europe’s transition to smarter energy systems.

Since March 2025, the building has been equipped with over 120 IoT devices, including 80 smart Thermostatic Radiator Valves (TRVs) and 40 multi-sensor occupancy nodes measuring temperature, humidity, and room presence. These installations support real-time monitoring and allow for adaptive heating control based on room usage.

The pilot’s first strategy focused on applying an occupancy-based heating setback: if a room remains unoccupied for 3 hours, the heating setpoint drops to 14°C. This seemingly simple rule helps reduce overheating and aligns heating demand with actual occupancy. Early issues—such as stuck hydronic TRVs, have been resolved thanks to extensive troubleshooting and remote diagnostics.

Beneath the surface, a robust IT architecture now supports this effort. A redundant data pipeline integrates TTN (The Things Network), MQTT messaging, and secured, redundant databases. The semantic data model, developed in partnership with the INSIGHT SFI Centre for Data Analytics (insight-centre.org), lays the foundation for advanced analytics and interoperability across platforms.



Visual dashboards are currently under development to provide users and facility managers with intuitive access to room-level data and system performance. A user engagement workshop is planned for early July, combining a webinar, clinic-style poster session, and feedback gathering. This initiative will engage office users, facility staff, and public authorities each with their own priorities ranging from comfort to sustainability reporting.

Áras de Brún an SEAI Pathfinder-retrofitted building is also preparing for the next phase: quantifying its flexibility potential. This includes comparing real occupancy patterns with baseline heating profiles and applying simplified forecasting models. Results will inform the design of fair and replicable flexibility services within the broader DE-RISK innovations.

With each room and radiator becoming a node in an intelligent network, Áras de Brún is not just being retrofitted it is being reimaged as an active player in Ireland’s clean energy future.

Latest News from DE-RISK

New Report: Policy and Regulatory Recommendations for Local Flexibility Markets



The DE-RISK project has released its latest policy report. The report provides **strategic recommendations for the EU and ten countries** including Spain, Portugal, Ireland, Greece, Bulgaria, Türkiye, the Netherlands, Romania, France, and Italy on how to accelerate the deployment of **Local Flexibility Markets (LFMs)**.

Key highlights include:

- Identifying common barriers such as fragmented regulations, weak DSO–TSO coordination, and limited consumer incentives.
- Outlining opportunities linked to digitalisation, regulatory sandboxes, and growing societal readiness for energy communities.
- Recommending harmonised EU-level frameworks alongside tailored national actions for 2025–2030.

This roadmap is designed to **support a flexible, resilient, and consumer-driven energy system across Europe.**

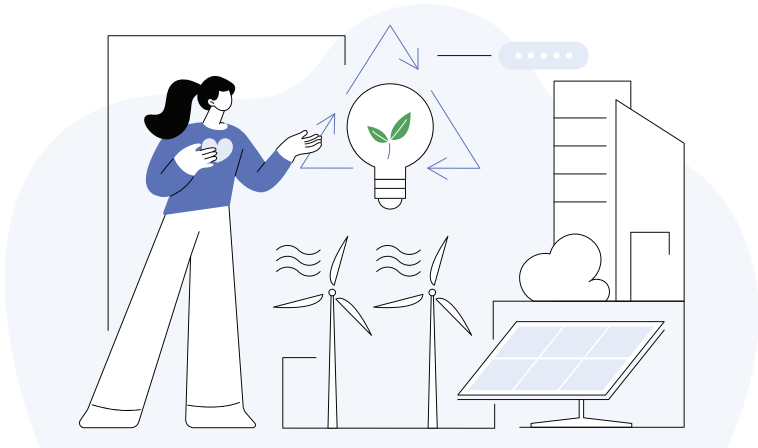
New Green Paper: Financing Local Flexibility Markets

The DE-RISK project has published its **Green Paper on Financing Local Flexibility Markets (LFMs)**, a strategic document exploring how communities, investors, and policymakers can mobilize resources for the energy transition.

The paper highlights:

- The **financing needs** for enabling technologies such as smart meters, sensors, controllers, and storage units.
- The **challenges** of traditional financing, including high upfront costs, complex procedures, and limited access for small energy communities.
- **Innovative solutions** like crowdfunding, crowdlending, blended finance, and public-private partnerships that democratize energy investments.
- Real-life examples, including the **Murcia pilot crowdlending campaign**, which successfully raised funds to expand renewable energy installations.

By addressing both barriers and opportunities, this Green Paper provides a roadmap for **inclusive, community-driven financing models** that can accelerate Europe's clean energy transition.



The DE-RISK Final User Workshop Held On July 28, 2025

On July 28, 2025, DE-RISK project hosted its final explanatory workshop with end users at the pilot site in Murcia, Spain, organised by partner MIWenergia. The session aimed to address questions about the use of the mobile application provided through the DE-RISK project, as well as to explore broader opportunities arising in the evolving energy sector.

Discussions covered a range of topics, including how to take advantage of price variability in dynamic tariffs, participate in energy communities, engage in individual and collective self-consumption of electricity, and benefit from storage equipment. The workshop provided a platform for participants to deepen their understanding of these concepts and their potential applications within their own communities.

Participants also shared their reflections on the project and the insights they had gained throughout its implementation. They highlighted the key elements they believe are essential for ensuring that both the community and the wider neighbourhood continue to benefit from energy flexibility in the future.

This closing workshop marked an important step in consolidating the knowledge and experiences generated during the project, ensuring that the momentum for community-driven energy solutions is maintained beyond DE-RISK's formal activities.



The DE-RISK User Engagement Workshop Held in Barcelona, Spain on July 1, 2025

On July 1, 2025, the DERISK project successfully hosted a User Engagement Workshop at the La Balma pilot site in Barcelona, Spain. Organised by R2M Spain, the threehour session brought together residents of La Balma cooperative housing to explore the project’s digital tools and share their perspectives and needs.

The workshop centred on gathering detailed feedback on the usability of VisualiCE, DE-RISK’s innovative WebApp visualization tool. This tool is designed to enhance users’ awareness of their energy consumption and encourage active participation in the energy transition.

Through dynamic, interactive exercises, participants navigated VisualiCE’s key features. They identified areas for UI improvement and suggested refinements to enhance clarity, accessibility, and overall user experience.

To capture the workshop’s immediate impact, attendees completed a survey assessing their awareness of and attitudes toward DERISK initiatives. The results of this survey are expected to provide critical insights into user needs and preferences, guiding the next iteration of VisualiCE development and informing the project’s ongoing community engagement strategy.

This event represents a significant milestone in DERISK’s commitment to cocreation and social acceptance, ensuring that enduser input remains at the heart of its energy transition solutions.



MIWenergía Engages Citizens In Energy Efficiency Through DE-RISK Pilot In Murcia, Spain June 6, 2025

MIWenergía, one of the key partners of the DE-RISK project, was recently featured in La Verdad, a leading regional news outlet in Spain, highlighting its work in helping households reduce energy consumption and take an active role in the local flexibility market.

The article, titled “MIWenergía, a partner in the DE-RISK Project, to generate energy savings systematically and intelligently”, presents how MIWenergía is implementing the DE-RISK pilot in Murcia by directly engaging with residents, analysing their electricity usage patterns, and offering tailored guidance to support energy savings. Through this effort, citizens are empowered to better understand their consumption behaviours and are supported in shifting their energy use to off-peak hours or towards renewable sources—ultimately contributing to a more efficient and sustainable energy system.

This initiative forms part of the DE-RISK activity on the Consumer Journey in the Local Flexibility Market, which focuses on enhancing citizen participation, building trust in demand-side flexibility, and demonstrating the value of active involvement in energy transition efforts.

The DE-RISK pilot in Spain serves as a valuable model of how collaboration between technology providers and end-users can lead to meaningful behavioural change, measurable savings, and greater resilience in local energy systems.

Read the original article in Spanish: [La Verdad](#)



DE-RISK at EUSEW 2025: Showcasing the Future of Local Flexibility Markets



On June 11, DE-RISK took part in the European Sustainable Energy Week — the EU’s flagship event on renewables and energy efficiency..

Our partners SEA SOFENA and R2M Spain were in Brussels to represent the project, share our work on Local Flexibility Markets, and engage with others working toward a fair and competitive green transition.

At the policy session “Energy communities’ potential for the future of electricity markets: robust and green energy for all,” Nadya Nikolova Deme (SEA SOFENA) presented DE-RISK’s policy roadmap and recommendations to help scale up flexibility across Europe.

The session brought together voices from the European Commission, European Renewable Energies Federation, the Reschool Project, Housing Europe, and other leading initiatives, with a clear message: regulatory bottlenecks and outdated legislation continue to slow the growth of energy communities.

Empowering citizens, modernizing grids, and enabling flexibility are key to building a fairer and more resilient energy future and DE-RISK is proud to contribute to that vision.

The DE-RISK Team Gathered in Ankara for the 5th General Assembly May 22, 2025

Held on May 21, 2025 in Ankara, the DE-RISK Regulatory Workshop part of the 8th International Energy Cooperatives Conference brought together leading experts to explore how Local Flexibility Markets (LFMs) can enable a just and scalable energy transition.

The DE-RISK Regulatory Workshop tackled a critical question: How can regulatory frameworks enable secure, transparent, and inclusive Local Flexibility Markets (LFMs)?

The session brought together energy cooperatives, grid operators, policymakers, private sector leaders and research institutions to dive into:

- ▶ The role of regulation in unlocking both market- and network-based flexibility
- ▶ Technical standards and data governance for secure LFM operations
- ▶ Aligning EU-level policy with Türkiye’s national strategy for decentralized energy
- ▶ The DE-RISK roadmap for embedding citizen participation into energy regulation.

Key takeaway: Regulation isn’t just a boundary it’s a tool for enabling system-wide trust, innovation, and democratic participation in the energy transition.



The DE-RISK Regulatory Workshop Held In Ankara, Türkiye May 21, 2025

On May 21, 2025, the DE-RISK Regulatory Workshop took place in Ankara as part of the 8th International Energy Cooperatives Conference. Organized by the DE-RISK Project Team, the session gathered policy experts, regulators, and project partners, alongside representatives from the private sector, research institutions, and civil society organizations to discuss the future of Local Flexibility Markets (LFMs) and their role in enabling a just, secure, and citizen-driven energy transition.

The workshop focused on regulatory and technical frameworks required to unlock flexibility in energy systems. Speakers addressed both network- and market-based flexibility solutions, emphasizing the need for transparent, inclusive, and secure mechanisms. Key technical requirements including data sharing protocols and real-time decision support systems were explored in detail. Project partners presented findings from the DE-RISK project.

The event also offered a broader perspective on the role of energy cooperatives in the transition to renewable energy systems. Emphasizing that cooperatives are not only beneficiaries but also active agents of change, the workshop highlighted the importance of inclusive regulation and local participation in shaping sustainable energy futures.



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5th *Overview of DE-RISK*
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