

STREAM

3RD NEWSLETTER | May 2024

Welcome to the third edition of our STREAM project newsletter! It is hard to believe that we are already eighteen months into this journey. During this time, we have reached important milestones, with a strong focus on enhancing user-centric citizen services and developing innovative business models. Our commitment remains firm on advancing tools that support the innovation ecosystem, a central goal of our project.

At the beginning of this year, we welcomed two new partners from Slovenia — [Inden](#) and [Comsensus](#) — to the STREAM consortium. This edition of our newsletter offers an update on the key activities over the past six months.

HIGHLIGHTS FROM THE 4TH STREAM GENERAL MEETING IN ZAGREB

The STREAM consortium held its 4th General Meeting in Zagreb, Croatia, between 13th and 14th of February. This gathering brought together all project partners from different EU countries to review progress, tackle challenges, and strategize for the upcoming six months. Highlights included in-depth reviews of work packages and a special visit to the [Rimac factory](#), where participants marvelled at the cutting-edge technology behind the Nevera, Rimac Automobili's electric hypercar.

Following these engaging sessions, the focus shifted to a workshop on developments at four pilot sites across Europe and efforts to enhance the STREAM project's human-centric approach. The event wrapped up with insights into Avant Car Croatia's innovative car-sharing system.

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A PEOPLE AND STAKEHOLDER CENTRED APPROACH TO STREAMINNOVATION PROCESS

While the energy system is traditionally viewed through the lens of its technological and economic characteristics, a substantial body of literature advocates for a more holistic approach, recognizing the energy system as a socio-technical system. This perspective focuses on the interplay **between society and technology**, indicating a shift away from linear models of technological innovation. The socio-technical framework takes into account the complexity of the energy system, where technologies are entangled with people's energy practices, needs, and values. This highlights the **need for innovations within the energy transition to align the technological solutions** (whether products or services) more closely with the needs and preferences of their intended users, as this supports their successful adoption and integration into existing daily practices.

In STREAM, we adopted a **people-centred development (PCD) approach** to ensure that the services developed in the project address the needs of the key target and stakeholder groups and are well integrated into their unique social or organisational contexts. A three-step approach, led by our partner [IRI UL](#), was based on **social science methods and anthropological research techniques** and it guided the **engagement strategy** across our pilots in Finland, Italy, Slovenia, and Spain. The activities implemented included stakeholder identification, characterisation of the pilots, outline of the research topics and questions, interviews and exploratory meetings with key stakeholders, and a co-design process, i.e., customised workshops and focus groups with end-users and stakeholders. Consequently, the approach shaped the definition of STREAM services, including the design of customer and technical services and an outline of the energy system services. By actively involving stakeholders, our pilot partners could verify assumptions, refine strategies based on feedback, and optimise the approach to developing the local flexibility market.

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STREAM'S NEW COLLABORATION IN THE ENERGY NEXUS CLUSTER

In January 2024, STREAM became a part of the [Energy Nexus Cluster](#), a collaborative platform under the **GLocalFlex initiative**. This platform supports and enhances energy systems across Europe through the integration of projects focused on **energy management, flexibility, and sustainability**. STREAM, along with other projects like [Resonance](#), [Senergy nets](#), [Reeflex](#), and [Beflexible](#), contributes to developing efficient and integrated energy solutions. These projects aim to optimize energy distribution and consumption, promoting a sustainable energy future.

Being part of this cluster also allows STREAM and similar projects to scale their solutions more effectively and garner attention from the public and regulatory bodies, potentially increasing support and funding opportunities.

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Energy Nexus

STREAM

Streaming Flexibility to the Power System



STREAM project aims to create an innovative and robust flexibility ecosystem on the low voltage grid side of existing power markets connecting data, technologies, stakeholders and markets, thus facilitating the flexibility provision.



ENERGY NEXUS CLUSTER

STREAM ANIMATION VIDEO RELEASED!

We are thrilled to announce the release of our very first video animation titled “**Empowering Flexibility in the Energy Market.**” This animation provides an overview of STREAM’s efforts to enhance grid flexibility using innovative technologies and intelligent systems.

The video aims to educate viewers on how STREAM is actively shaping a sustainable future and bolstering energy resilience. By watching this animation, you can gain a deeper understanding of our innovative approaches and the significant impact they can have on energy systems worldwide.

[watch video here](#)

Stay tuned for more insightful videos from STREAM, and don’t forget to like, comment, and share to show your support!

STREAM EVENTS

The STREAM Project team participated in the [Enlit Europe 2023](#) conference, held in Paris, which took place from the 28th to the 30th of November and brought together a diverse group of experts, innovators, and leaders from across the energy sector. STREAM Project played an important role in the conference's session titled **Unlocking Flexibility Markets: Are Customers Ready to Embrace Innovation?**

The session, a collaborative effort with our sister projects, BEFLEXIBLE and ENFLATE, drew in over 150 industry professionals. Over the three days at Enlit Europe, the STREAM Project team engaged in numerous insightful discussions, network with peers, and exchanged ideas that are set to shape the future of energy.



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Looking ahead, the STREAM Project will continue to make its mark at major industry events across Europe. We are delighted to confirm **STREAM's participation** in the upcoming [European Sustainable Energy Week 2024](#). Don't miss our session on **"Exploring Flexibility in Power Systems: How Customers Can Make a Difference"** on June 13th. Join us for this important discussion as we explore how customer involvement is key to advancing energy flexibility.

PILOT SITE SPOTLIGHT #2: CREVILLEN'T'S RENEWABLE ENERGY ECOSYSTEM

In our previous edition, we presented the efforts at the **Slovenian pilot site**, showcasing its innovative approaches to harnessing electrical flexibility without significant network upgrades. Continuing our journey through Europe's forefront of energy innovation, this issue highlights our **second pilot site located in Crevillent, Spain**.

[The Spanish pilot](#) site is located in the Spanish municipality of Crevillent. With a total population of 30,000, Crevillent is located in the south of the province of Alicante in the Valencia Region, where Enercoop Group (ENER) is also located, an electric cooperative organization owned by 11,000 members. **The cooperative has presence in practically the entire value chain of the electricity sector, production of 100% of renewable energy, distribution of electricity in the municipality of Crevillent, electricity supplier and group of energy purchases for other electricity suppliers' companies.**

[Enercoop group](#), manages the grid of the municipality and 14,315 consumers (13,047 households and 1,268 companies) in the low voltage network and 30 consumers in the medium voltage network (mainly industrial and service sector companies). All households in Crevillent are equipped with smart meters, facilitating data collection of electricity consumption. The local energy grid is fed through a 40 MVA substation. Energy is distributed through more than 150 transformers 20/0.4 kV.



The electric grid of Crevillent has **more than 75,000 PV panels in solar plants and 2,000 modules of PV panels in solar roofs**. The PV plants connected to the Cooperative Distribution Network produce a total power of 13.4 MW. Enercoop also manages a first Energy Community (EnC) in Spain, owning 7 PV installation (600 kW) and a lithium-ion energy storage system (240kWh) for collective self-consumption. These installations are shared between 600 supply points (1500 citizens). For the piloting of STREAM tools, 10 residential flexibility providers, with a total PV power of 43 kW and a storage capacity of 90 kWh, signed agreements to participate.

The combination of all these assets will serve to test the STREAM ecosystem deployed in the pilot. This ecosystem will establish a flexibility market to provide the DSO with tools to manage the grid more efficiently and sustainably, avoiding issues arising from the connection of Distributed Energy Resources.

In our upcoming newsletters, we will unveil two more pilot sites, each with its own progress to tell.



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