



ReDREAM  
change your energy

# D7.5 Coordination with BRIDGE EU-funded projects [1/3]

24<sup>th</sup> September 2021



Authors:

*Mara van Welie; Patrick Rembe*



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## Technical References

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<b>Responsible Authors</b>	Mara van Welie; Patrick Rembe
<input checked="" type="checkbox"/>	COMILLAS: Alvaro Sanchez, Francisco Martín, Alessandra Porfido, Carmen Valor, Miguel Angel Sanz Bobi
<input checked="" type="checkbox"/>	STEMY: Carlos Becker, Carlos Vereterra, Miguel Martín Lopo, Miguel Berbegal.
<input checked="" type="checkbox"/>	SOULSIGHT: Juan Martin, Leonor Ruiz,
<input checked="" type="checkbox"/>	OLIVOENERGY: Niccoló Fattiroli
<input checked="" type="checkbox"/>	TIMELEX: Niels Vandezande



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<sup>1</sup>

PU = Public

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RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

## Review

<b>Reviewers</b>	Pete Carpenter, Andres Nikoglou
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V1.0	22.07.2021	<i>Alessandra Porfido, Alvaro Sanchez Miralles</i>	<b>Pre-Review by Project Coordinators</b> – Before the start of the review, adjustments were made to the introduction and some tables. Improvements made in the executive summary.
V1.1	09.08.2021	<i>Pete Capener, Andres Nikoglou</i>	<b>First Review</b> – In addition to some minor adjustments, the content of the report once again focuses more on the findings and results of cooperation's. In addition, the added value for ReDREAM was emphasised.
V1.2	27.08.2021	<i>Pete Capener, Andres Nikoglou</i>	<b>Second Review</b> – The most important changes include the merging of all previous activities into one table. The adjustment of the introduction and the addition of future measures. In addition, we have focused even more on the first results in the Conclusion.
V2.0	17.09.2021	<i>Alessandra Porfido, Alvaro Sanchez Miralles</i>	<b>Last review and approval by PC</b> – besides minor adjustments, the document history has been updated and the names of the co-authors have been added. Activities results added to section 3.2.
V3.0	24.09.2021	<i>Patrick Rembe, Mara van Welie</i>	<b>Final Version for submission</b>



## Summary

### ReDREAM Project

The energy market is rapidly transforming and so is the role of the consumer. Yesterday's passive consumers are central actors in today's energy markets. As new prosumers, energy markets can benefit from their generation, consumption, and storage capabilities. **The EU-funded ReDREAM project will enable the effective participation of consumers and prosumers in the energy market.** The project will develop a strategy for the creation of a value generation chain based on a revolutionary service-dominant logic in which services are exchanged. The project will foster the demand response tools and energy/non-energy services that enable consumers to participate in the energy market. This will lead to the establishment of a new concept: a connected user-centred energy ecosystem.

**The ReDREAM project's aim is to effectively move the consumer (as a residential, industrial, and tertiary consumer) participation to the centre of the energy market through an open and co-creative ecosystem where all stakeholders will actively interact.** This ambitious challenge will require the collection of demand response tools and services (energy and non-energy) capable of enabling the capacity for the consumers of participating in the energy market through an improvement of predictability of consumption patterns and consumer behaviour. A new solution based on an open co-creative energy ecosystem built upon a new paradigm where the user gives the value will centralise the portfolio of innovations to develop this new paradigm. Hence, **ReDREAM will introduce several different innovative solutions which range from novel Demand Response (DR) tools and Life-Cycle Assessment (LCA) methods to social innovation for boosting transition to Clean-Energy, as well as relieving energy poverty.**

### Summary of Deliverable

The digitalisation of the energy sector is one of the greatest current and future challenges. More efficiency, sustainability and flexibility are the most important goals. The complexity can be seen in the numerous European projects that are currently dealing with the topics and goals of a digital energy market. COMILLAS and ESCI will build relationships and interact with projects supported under the LC-SC3-ES-5, to form an "innovation network" that creates a real synergy by addressing challenges from both the user and the network operator perspective. **Expected outcome: Collaboration will be established with other projects funded under the LC-SC3-ES-5 theme, resulting in a powerful energy cluster.**

**The Deliverable 7.5 is a classic report that drafted 3 times (M12 / M24 / M36)** during the project time on all cooperations and collaborations of ReDREAM with the so-called sister projects from the BRIDGE Initiative, but also on all activities with partners and organisations outside. This report is the first and includes all actions from M1 (October 2020) to M12 (September 2021).

**All reports are therefore structured the same way:**

- **How did ReDREAM participate in the last 12 months?**
- **Which other EU projects were involved in the activities?**
- **What did the cooperations and collaborations look like?**
- **What is scheduled for the next 12 months?**

ReDREAM has set several first steps towards cooperation with its sister projects (HESTIA, iFLEX, Sender, Bright, Accept, TwinERGY), moreover, the consortium has been involved in several BRIDGE working groups and task forces, namely:



- **WG Data Management**
- **WG Regulations**
- **WG Customer Engagement**
- **Task Force Replicability & Scalability**

**ReDREAM aims to intensify and expand its contribution to BRIDGE activities in the coming years, based on the development of the project.** Further interlinking of partner projects, sharing of information, experiences and results are foreseen, as well as the participation in events and contribution to working groups. The aim for the next 12 months is to contribute to BRIDGE with the first results and learnings from the project (M12 - M24).

Some of the first noteworthy results, besides the exchange in the working groups of the BRIDGE initiative, are the **intensive cooperation with the sister project HESTIA**. Due to a similar project focus, there are first synergies in the field of communication and technical development. **The first joint campaign ideas to increase consumer perceptions have already been considered. In addition, the HESTIA project was given an insight into the current status of technical development in the ReDREAM project.**

The continuation and further development of the open exchange and knowledge transfer with the sister projects and other partners is the goal for the coming months. The resulting network will develop a knowledge database in addition to workshops and other formats for sharing knowledge and insights in the coming years.



## Table of acronyms

Abbreviation	Description
DR	Demand Response
EC	European Commission
EV	Electric Vehicle
GA	General Assembly
LCA	Life-Cycle Assessment
R&I	Research and Innovation
WG	Working Group

### Disclaimer

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# 1 ReDREAM participation in BRIDGE

## 1.1 BRIDGE initiative

The [BRIDGE Initiative](#) is established by the European Commission to bring together HORIZON 2020 Smart Grid, Energy Storage, Islands, and Digitalisation projects. Within the initiative, cross-cutting issues are evaluated and discussed. **BRIDGE fosters knowledge sharing, experience, and best practices, and gives these projects a single voice to speak to the Commission about recommendations regarding smart grids. The four main working groups of BRIDGE are focused on:**

- **Data management**
- **Business models**
- **Regulations**
- **Customer engagement**

Specific Task Forces have been in place since 2019, which work on the following topics:

- **Energy communities**
- **Replicability & scalability analysis**
- **Joint communication and R&I priorities**
- **Islands**
- **Electric mobility**

BRIDGE consists of more than 80 projects (22 new projects joined BRIDGE during the General Assembly in March 2021).

## 1.2 ReDREAM participation

Being a BRIDGE member contributes to the development of ReDREAM: **The exchange with other projects with a similar approach, or focused on similar topics, offers ReDREAM opportunities to learn from expertise from other consortia and to share the results and learnings in this thematically focussed community.** Collaborations with other projects contributes to increase ReDREAM's dissemination and outreach at an early stage.

Table 1 shows which consortium members of ReDREAM are already involved in the activities of BRIDGE and in which working groups and task forces they are active.

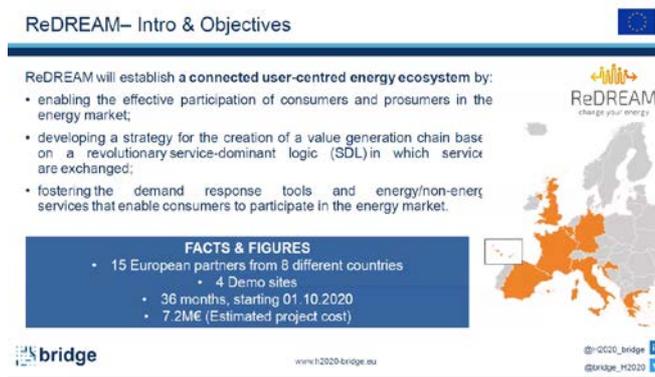
*Table 1. ReDREAM consortium members participating in BRIDGE*

Last name	First name	Partner	Working Group / Role in ReDREAM
<b>Sánchez Miralles</b>	Alvaro	Comillas University	WG Customer Engagement / Project coordinator
<b>Porfido</b>	Alessandra	Comillas University	N/A / ReDREAM general Project Manager
<b>Vanderzande</b>	Niels	Timelex	WG Data Management /



Last name	First name	Partner	Working Group / Role in ReDREAM
			Legal Consultant
<b>Fattioli</b>	Niccolò	Olivo Energy	WG Regulations / Electricity market Expert
<b>Martino</b>	Juan	Soulsight	WG Customer Engagement / Research and Strategy
<b>Ruiz</b>	Leonor	Soulsight	WG Customer Engagement / Research and Strategy
<b>Rembe</b>	Patrick	European Science Communication Institute	Task Force communication / cooperation & collaboration with sister project
<b>van Welie</b>	Mara	European Science Communication Institute	Task force replicability & scalability / WG Business Models Exploitation

In the most recent BRIDGE General Assembly (GA) in March 2021, ReDREAM was introduced as a new project and participated in the special session on EV energy flexibility (Figure 1).



**ReDREAM- Intro & Objectives**

ReDREAM will establish a **connected user-centred energy ecosystem** by:

- enabling the effective participation of consumers and prosumers in the energy market;
- developing a strategy for the creation of a value generation chain based on a revolutionary service-dominant logic (SDL) in which services are exchanged;
- fostering the demand response tools and energy/non-energy services that enable consumers to participate in the energy market.

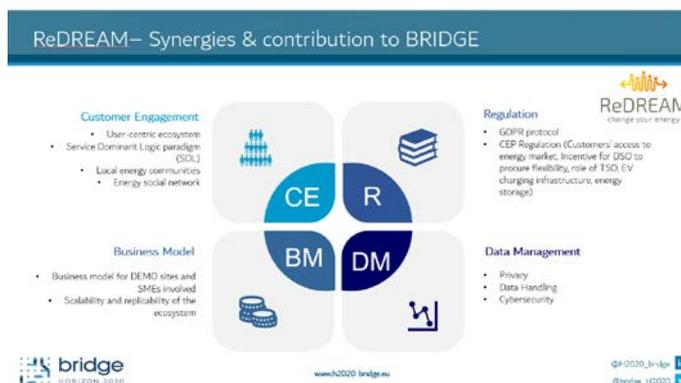
**FACTS & FIGURES**

- 15 European partners from 8 different countries
- 4 Demo sites
- 36 months, starting 01.10.2020
- 7.2M€ (Estimated project cost)

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Figure 1. ReDREAM participation in BRIDGE GA 2021

During the presentation of ReDREAM at the General Assembly, the impact and synergies of the project on the BRIDGE initiative were also explained (Figure 2).



**ReDREAM- Synergies & contribution to BRIDGE**

**Customer Engagement**

- User-centric ecosystem
- Service Dominant Logic paradigm (SDL)
- Local energy communities
- Energy social network

**Regulation**

- GDPR protocol
- CEP Regulation (Customers' access to energy market, Incentive for DSO to procure flexibility, role of TSO, EV charging infrastructure, energy storage)

**Business Model**

- Business model for DEMO sites and SMEs involved
- Scalability and replicability of the ecosystem

**Data Management**

- Privacy
- Data Handling
- Cybersecurity

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Figure 2. ReDREAM synergies and contribution to BRIDGE.



## 2 Related EU-funded projects

The main sister projects of ReDREAM are the projects that got funded under the same call (H2020-LC-SC3-2020-EC-ES-SCC). All projects have a similar focus, they put the consumer and its behaviour at the centre of their developments as well as the possibility to introduce demand response and other energy-related services to the customer. However, the projects differ in terms of technical approach and the establishment of the respective demo sites and their participants. Table 2 shows the six projects belonging to the same call.<sup>1</sup>

Table 2. ReDREAM sister projects

Project acronym	Description	Project coordinator
<b>HESTIA</b> <a href="#">Project website</a>	HESTIA is an EU funded project developing a mix of Technological, Innovative and Social Sciences & Humanities models approaches to improve the management and use of energy by and for residential consumers. HESTIA aims to develop a cost-effective solution for the next-generation demand-side response services by encouraging residential consumers to engage in flexibility sharing and grid balancing. User-personalised services will help lay the foundation for an open marketplace and new grid reality	Sinloc (Italy, private)
<b>iFLEX</b> <a href="#">Project website</a>	The aim of the iFLEX project is to empower energy consumers by making it as easy as possible for them to participate in demand response programs, in which they adjust their energy consumption in response to signals or incentives coming from energy actors, such as price signals or bonuses.	Teknologian Tutkimuskeskus (Finland, research)
<b>Sender</b> <a href="#">Link to Cordis</a>	The EU-funded SENDER project will develop energy service applications for proactive demand response (DR), home automation convenience and security mechanisms. By engaging customers in a co-creation process, the project will shift DR from a reactive to a proactive approach. Consumer data will be collected and processed to identify typical consumption	Smart Innovation Norway (Norway, research)

<sup>1</sup> Annex 1 provides more details about the focus of these projects, as well as the technologies used, and the countries in which the demos take place.



	patterns, mirror them by digital twins (DTs) based on artificial intelligence technologies and aggregate the DTs' supply/demand characteristics.	
<b>Bright</b> <a href="#">Link to Cordis</a>	The EU-funded BRIGHT project will work to maximise the potential of DR at the consumer level, harnessing the potential of blockchain technology to deliver data-driven cross-stakeholder and cross-domain energy fingerprinting services. Specifically, it will design a co-creation process that lifts individual consumers to centre stage in order to deliver a DR that is multi-layered, community-centred, cross-domain, adaptable and multi-timescale.	Engineering – Ingegneria Informatica SPA (Italy, private)
<b>Accept</b> <a href="#">Link to Cordis</a>	The EU-funded ACCEPT project intends to develop and deliver such a digital toolbox that allows energy communities to offer innovative digital services and access revenue streams that can financially support their functions and secure their sustainability and effectiveness. The ACCEPT framework will be demonstrated and validated in four pilot sites in Greece, the Netherlands, Spain and Switzerland involving more than 3 000 people and 750 residences.	Hypertech (Greece, private)
<b>TwinERGY</b> <a href="#">Project website</a>	TwinERGY wants to prove that a better energy ecosystem is possible. It introduces a first of its kind Demand Response Framework, a solution that incorporates digital intelligence so that citizens can actively adapt their consumption to market fluctuations through the help of data and automation.	University of Patras (Greece, research)



Another project with which ReDREAM collaborates, as it is coordinated by Comillas as well, is the **CoordiNet project** (Table 3).

*Table 3. Other related projects*

Project acronym	Description	Project coordinator
<p><b>CoordiNet</b> <a href="#">Project website</a></p>	<p>The purpose of CoordiNet is establish different collaboration schemes between transmission system operators (TSOs), distribution system operators (DSOs) and consumers to contribute to the development of a smart, secure and more resilient energy system. Special emphasis will be on the analysis and definition of flexibility in the grid at every voltage level ranging from the TSO and DSO domain to consumer participation.</p>	<p>Comillas</p>



### 3 12-months report and further actions

#### 3.1 Sister projects collaborative activities

Together with HESTIA, SENDER, ACCEPT and the iFLEX project, ReDREAM has planned a series of thematic meetings to identify best practices, exchanging about challenges, and brainstorming about the barriers that are being faced. The idea is to meet on a regular basis and build-up a collaborative effort that can benefit all projects. Moreover, shared possibilities for communication and dissemination efforts will be discussed and planned in these meetings. The meetings have started in May 2021 (Table 4) and will be continued in the next years.

#### 3.2 Activities and results

This section reports on the specific activities that have been conducted so far related to the coordination with BRIDGE and other related EU-funded projects (Table 5).

Table 4. Specific activities with sister and other related projects

Type	What	When	Link	ReDREAM partners
Meetings	Meeting with DELTA, ebalance-plus, and HESTIA project.  <b>Task:</b>  Sharing ideas on a white paper on flexibility.	25 May 2021		ESCI
	ReDREAM meets HESTIA project  <b>Task:</b>  First exchange between project coordinators	25 May 2021		ESCI, Comillas
	First ReDREAM sister project meeting with HESTIA, Sender, Accept, iFLEX, ReDREAM –  <b>Tasks:</b>	26 May 2021		ESCI



	<p>Start to collaborate with common activities.</p> <p>Special focus on user engagement (current status and future challenges)</p>			
	<p>Participation in various meetings of BRIDGE working groups and task forces</p>	<p>May 2021</p>		<p>ESCI, Comillas, Olivo, Soulsight, Timelex</p>
	<p>2 weekly meeting series with HESTIA</p> <p>Planning and creating common communication and dissemination activities.</p>	<p>June 2021</p>		<p>ESCI</p>
	<p>Sustainable Places 2021</p> <p>Brainstorming for the common activities at the Sustainable Places Event (Oct 2021)</p>	<p>24 June 2021 -</p>		<p>ESCI</p>
	<p>Sharing technology insides with HESTIA</p> <p>Insides of the current technical development status of ReDREAM project</p>	<p>7 July 2021</p>		<p>ESCI</p>
<p><b>Website</b></p>	<p>ReDREAM website page with links to sister projects &amp; Coordinet, and explanation BRIDGE</p>	<p>Launched on 31 May 2021</p>	<ul style="list-style-type: none"> <li>• <a href="https://redream-energy-network.eu/the-project/">https://redream-energy-network.eu/the-project/</a></li> </ul>	<p>ESCI</p>
<p><b>Social media</b></p>	<p>Energy ABC</p> <p>First content collaboration of ESCI energy projects</p>	<p>February 2021</p>	<ul style="list-style-type: none"> <li>• <a href="#">LinkedIn</a></li> </ul>	<p>ESCI</p>



<p>ebalance-plus, Innoveas, R-ACES and ReDREAM</p>		<ul style="list-style-type: none"> <li>• <a href="#">Twitter</a></li> </ul>	
<p>Following and interaction with sister projects and other relevant projects on Twitter.</p>	<p>May 2021</p>	<ul style="list-style-type: none"> <li>• <a href="#">Kick-off cooperation with all sister projects</a></li> <li>• <a href="#">BRIDGE Grand Assembly 2021</a></li> </ul>	<p>ESCI / Comillas</p>
<p>Following and interaction with sister projects and other relevant projects on LinkedIn.</p>	<p>May 2021 -</p>	<ul style="list-style-type: none"> <li>• <a href="#">Poll about project cooperation</a></li> <li>• <a href="#">News about cooperation with sister projects</a></li> <li>• <a href="#">BRIDGE Grand Assembly 2021</a></li> </ul>	<p>ESCI</p>
<p>LinkedIn post after the technical meeting of ReDREAM and Hestia. The content was focused on cooperation activities and why they are important. The post was supplemented by a LinkedIn survey. It asked about the importance of transparent collaboration and how important it is for sustainable digital project success</p>	<p>12 July 2021</p>	<ul style="list-style-type: none"> <li>• <a href="#">Link to post</a></li> </ul> <p><b><i>More than <u>2.200</u> impressions</i></b></p>	<p>ESCI</p>
<p>Various consortium members are member of LinkedIn group “Flexibility, from demand response in</p>	<p>Jan 2021</p>		<p>e.g. Francisco Martin Martinez,</p>



	buildings to renewable energy communities” to exchange with other related EU-funded projects			Alicia Carrasco, Mara van Welie, Patrick Rembe
<b>Events</b>	Participation in the BRIDGE GA 2021	2-4 March 2021		Comillas, Timelex, Olivo, ESCI
	<p>ETIP SNET Regional Workshop</p> <p>Presenting national and regional RD&amp;I projects of significant added value addressing energy system integration issues, in line with the thematic priorities of the ETIP SNET</p> <p>The ReDREAM project was presented by Alvaro Sanchez Miralles and Alessandra Porfido</p>	22 June 2021		Comillas



### 3.3 Planned activities

The following table summarizes all activities and events that are already fixed or planned in the M13 - M24. (Table 6)

Table 5. Planned activities in M13-M24 of the project.

Type	What	When	Partner / other projects
<b>Conferences</b>	Participation in Sustainable Places Conference 2021 together with sister projects in thematic sessions.	29 Sept - 1 Oct 2021	Cooperation of ReDREAM and HESTIA
<b>New cooperations</b>	Due to the joint project management by Comillas University, a close cooperation is to be established with CoordiNet. Together, synergies are to be used in order to achieve the respective project goals efficiently and sustainably.	October 2021	ReDREAM / CoordiNet
<b>Meetings</b>	Thematic meetings series with HESTIA, Sender, Accept, iFLEX projects. The meetings aim to develop joint activities and then work together in small specific groups to address specific challenges.	on going	HESTIA, Sender, Accept, iFLEX projects
	BRIDGE working groups – we will continue to be actively involved in the BRIDGE Initiative working groups. Our goals are to share the insights and experiences from ReDREAM and to benefit from other projects.	on going	ReDREAM Partner
<b>Content</b>	Due to the very similar objectives of ReDREAM and our sister project HESTIA, we are planning a joint communication with a focus on consumer engagement.	October 2021 -	ReDREAM / HESTIA



	By bundling the activities, we achieve a greater reach and hope to have a higher impact		
	Develop joint energy content (such as the Energy ABC) with the energy projects managed by ESCI. The joint activities are intended to use human and financial resources more efficiently.	October 2021	ReDREAM, ebalanceplus, Innoveas, R-ACES
<b>Workshop / Webinar</b>	Tbd.	Summer 2022	ReDREAM and Sister Projects

The first initial communication, dissemination and collaboration activities within the BRIDGE Initiative have produced the following results:

- Gathering of partners and project accounts to expand our cooperation and collaboration efforts.
- Development of a joint communication strategy to efficiently reach consumers and activate them for the energy transition with our sister project HESTIA.
- Significant increase in the reach of our social media channels and websites (approx. 25% more traffic).
- Knowledge transfer of the developed techniques, through our partner STEM Y, to the BRIDGE sister project.



## 4. Conclusion

After the first 12 (Oct 2020 – Sep 2021) months of the ReDREAM project, the first joint activities have been initiated, especially with the sister projects. Especially with the HESTIA project, which follows a very similar approach as ReDREAM, there is already an intensive exchange. The initiative focuses on the transfer of technical developments and joint communication activities. Through the first participation in the BRIDGE working groups and the two conferences (BRIDGE GA & ETIP SNET regional workshop), the project has succeeded in spreading its aims and priorities within the BRIDGE community. In the coming months, the exchange with related projects, the participation in working groups and conferences will be intensified. A workshop or webinar (depending on the pandemic situation) with our sister projects is also being planned.

