



ReDREAM
change your energy

D7.6 Coordination with BRIDGE EU-funded projects [2/3]

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- ¹
- PU = Public
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Review

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V1.0	05.10.2022	Rubén Rodríguez Vilches	<i>I think Alessandra is not in Comillas anymore. Some months are misspelled: Mai, Juni. It would be possible to add some outcomes from each meeting? (I've seen D3.12 from InterFlex and from each WG and activities they present outcomes). In the conclusions, add lessons learnt from BRIDGE until now.</i>
V1.1	07.10.2022	Patrick Rembe	<i>Implementation of the comments of the 1st Review. The most important additions are the learnings from the different BRIDGE activities. The conclusion was also supplemented, as was the chapter on "Planned activities".</i>
V1.1	07.10.2022	Rubén Rodríguez Vilches	<i>No comment, The report is in very good condition and has been approved by me.</i>
V2.0	10.10.2022	Patrick Rembe	<i>Final correction and formatting. Last participations of the consortium members added and all contents checked again. The report now includes all activities from months 13 to 24.</i>
V2.1	17.10.2022	Alvaro Sanchez Miralles / Bad'r Ghorbal	<i>Approved without concerns.</i>



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 consumers' capacity to participate 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 the 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 with other projects funded under the LC-SC3-ES-5 theme will result in a powerful energy cluster.**

Deliverable 7.6 is the second of a total of 3 reports on the ReDREAM activities related to the BRIDGE Horizon 2020 Initiative. During the project time all cooperation 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 second and includes all actions from M13 October 2021 to M24 September 2022.

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**

After the first small joint activities with our sister projects HESTIA, SENDER, iFLEX and accept and the participation in the BRIDGE working groups in months 1 to 12, the cooperation and collaboration deepened further in months 13 to 24.

The intensive participation in the BRIDGE working groups played a relevant role in the second year. Especially in the task of regulation and customer engagement, the competence and experience from the **ReDREAM** project were successfully disseminated.

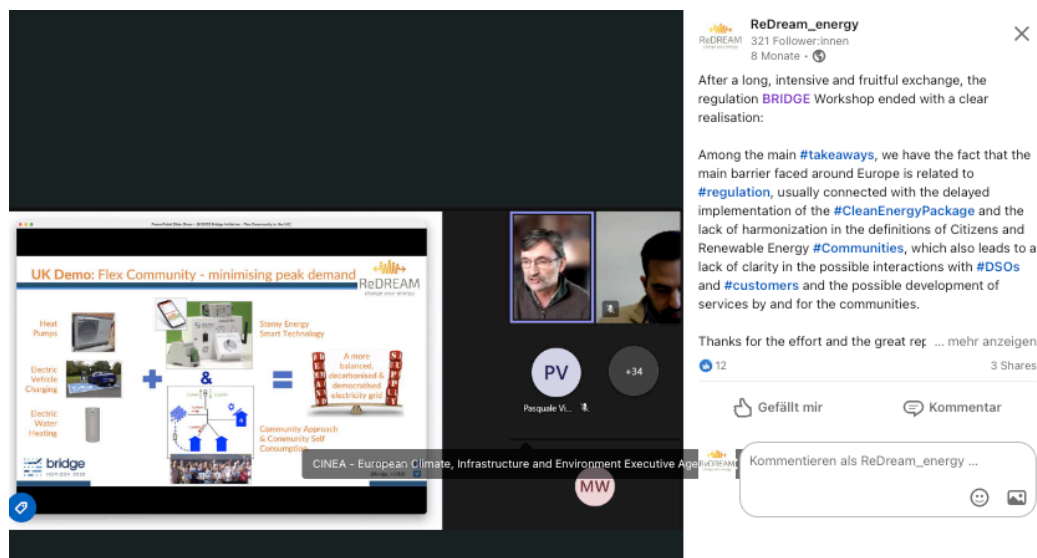


Figure 1. Pete Capener from ReDREAM partner BWCE showed insights from his community.

The first joint initiative with our sister projects also developed into an excellent collaboration resulting in a scientific paper. The paper was successfully published on 29 November 2021 under the title: [A Social Engagement Fast Track on Energy Communities-Key Lesson Learned from H2020 EU Projects.](#)

In 2022, the joint initiative during the Sustainable Places Conference 2022 in Nice in September was also an important and ground-breaking collaboration. Above all, the form of the joint exchange and the added value achieved again led to the decision to subsequently publish a scientific paper.



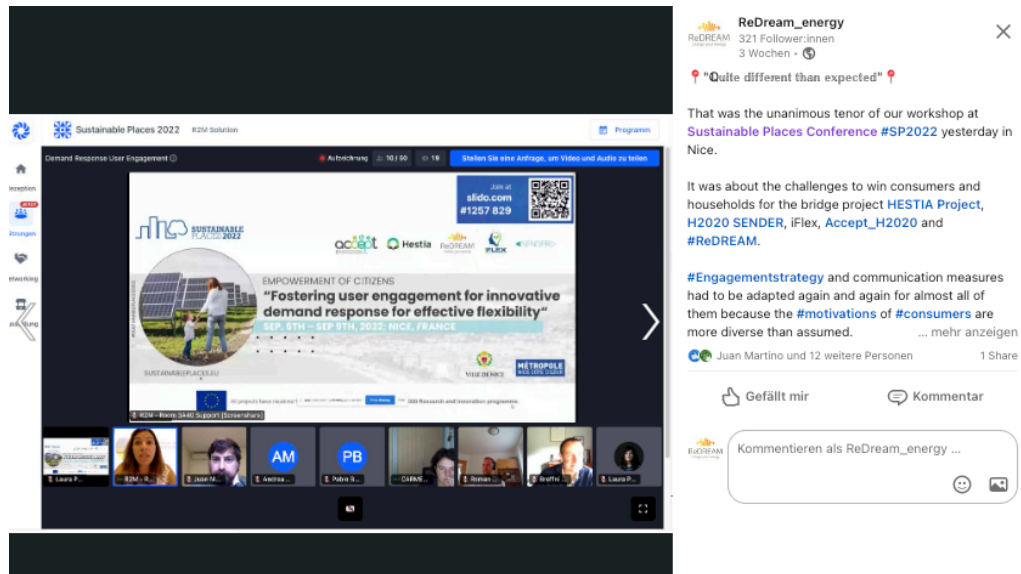


Figure 2. Sustainable Places Workshop 2022 – Panel discussion

The entire panel discussion on YouTube: [click here!](#)

Basically, however, the months M13 - M24 were still under the influence of the worldwide COVID pandemic. Even though we were again able to achieve respectable results, it must be mentioned that the challenges in the respective projects and the resources tied up, as a result, meant that we were not able to realise all the planned goals for this period.



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

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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

After the first initiatives and smaller cooperations and collaborations with the sister projects, as well as the participation in the BRIDGE working groups, the second **ReDREAM** project year could already be **used for numerous sustainable disseminations of experiences, results and learnings**. The number of our active partners from the **ReDREAM** consortium doubled. Among others, **Pete Capener** and **Lucija Nad** took on more active roles in the **BRIDGE working groups Regulation and Consumer Engagement**.

Table 1 shows which current consortium members of **ReDREAM** are already involved in the activities of BRIDGE (M19 – M24) and in which working groups and task forces they are active.

Table 1. ReDREAM consortium members participating in BRIDGE

Last name	First name	Mail Contact	Organisation	Working Group /role
<i>Sánchez Miralles</i>	<i>Alvaro</i>	<i>alvaro@comillas.edu</i>	Comillas University	Consumer and Citizen Engagement WG /



Last name	First name	Mail Contact	Organisation	Working Group /role
				Project Coordinator / Coordination Team
<i>Fattiroli</i>	<i>Niccolò</i>	<u>niccolo@olivoenergy.com</u>	Olivoenergy	Regulation WG
<i>Vandezande</i>	<i>Niels</i>	<u>Niels.vandezande@timelex.com</u>	Timelex	Data Management WG
<i>Giordano</i>	<i>Angelo</i>	<u>Angelo.giordano@civiesco.it</u>	Civiesco	Business Model WG
<i>Nad</i>	<i>Lucija</i>	<u>Lucija.nad@zez.coop</u>	ZEZ Green Energy Cooperative	Consumer and Citizen Engagement WG
<i>Valor Martínez</i>	<i>Carmen</i>	<u>cvalor@icade.comillas.edu</u>	Comillas University	Consumer and Citizen Engagement WG
<i>Rembe</i>	<i>Patrick</i>	<u>pr@esci.eu</u>	European Science Communication Institute	Communications
<i>Van Welie</i>	<i>Mara</i>	<u>mvw@esci.eu</u>	European Science Communication Institute	Business model WG / Coordination Team
<i>Ghorbal</i>	<i>Bad´r</i>	<u>bghorbal@comillas.edu</u>	Comillas University	Project Management
<i>Abbasi Mofrad</i>	<i>Hamed</i>	<u>hamed.abbasi@rimond.com</u>	Rimond	Smart tools / Engagement Team



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.¹

Table 2. ReDREAM sister projects

Project acronym	Description	Project coordinator
HESTIA Project website	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)
iFLEX Project website	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)
Sender Link to Cordis	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)

¹ 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.	
Bright Link to Cordis	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)
Accept Link to Cordis	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)
TwinERGY Project website	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
CoordiNet Project website	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.	Comillas



3 12-months report and further actions

In this section, we report on **all activities** implemented by **ReDREAM** from **months 13 to 24**. The section is divided into two parts and documents the participation in the BRIDGE Initiative activities and all collaborations with other BRIDGE projects.

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, exchange about challenges, and brainstorm about the barriers that are being faced.

In the months 13 to 24, the exchange with the sister projects could be further intensified. **We focused on cooperation and collaboration with HESTIA**. HESTIA has a very similar approach and therefore similar challenges, questions, and solutions, especially in the field of **recruiting people to participate** in the demo sites. The issue of private **consumer engagement** and activation emerged as the key challenge in the energy sector in both other sister projects

3.1.1 Activities and Results

One of the central activities of BRIDGE's cooperation with the ReDREAM sister projects was the focus on a **regular exchange format**. The aim is to significantly increase the efficiency of the projects through regular creative hybrid meetings. **Sharing, learning, and improving** - three crucial attributes are at the forefront of this approach. Together with the HESTIA team, **ReDREAM** developed an initial idea of how and in which format this concept could be implemented.

The kick-off was a panel discussion of the **HESTIA, Sender, iFlex, ACCEPT and ReDREAM** projects during Sustainable Places 2022 in Nice – **"Fostering user engagement for innovative demand response for effective flexibility"**. The open discussion instead of classic presentations, which mainly talked about current challenges, was gratefully received. In the Q&A session that followed, the **audience participated intensively** and thus benefitted from the experiences of the **ReDREAM** sister projects outside of ReDREAM. This joint work will result in a scientific white paper in the coming weeks.

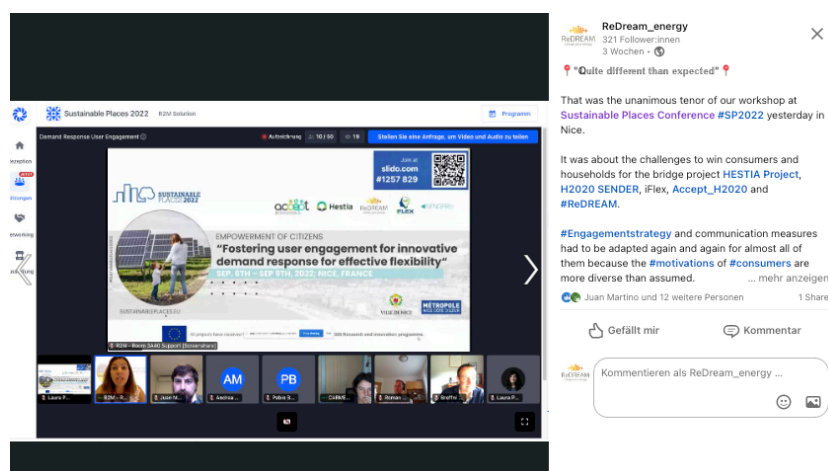


Figure 3. Sustainable Places Workshop 2022 – Panel discussion ([LinkedIn](#))



For efficient and transparent cooperation, the sister project initiative has set up a joint TEAMS channel. Here, information and public documents are regularly shared, and joint projects and ideas are documented and accompanied.

The following **Table 4** describes all activities implemented in cooperation and collaboration during months 13 - 24.

Table 4. All activities in M13-M24 of the project.

Type	What	When	Partner / other projects
Meeting	Regular exchanges for development and creation of new collaboration activities	October 2021 – July 2022	Cooperation of ReDREAM and HESTIA
Meeting	Kick-Off White Paper in the context of the joint initiative under Sustainable Places 2022.	Mai 2022	ReDREAM all Sister Projects
Meeting	Preparation Sustainable Places Workshop / White Paper topic	June 2022	ReDREAM and Sister Projects
Meeting	Preparation Sustainable Places Workshop	July 2022	ReDREAM and Sister Projects
Meeting	Pre-run Panel Discussion last change requests	Sep 2022	ReDREAM and Sister Projects
Workshop / Webinar	Sustainable Places 2022 (Panel Discussion and Q&A Session)	Sep 2022	ReDREAM and Sister Projects

3.1.2 Learnings

Collaboration with sister projects was an important initiative given the analogue challenges in consumer engagement. It was possible to share and benefit from valuable information already during the meetings through joint preparation and regular exchange.

For **ReDREAM**, the focus was to put the user engagement strategy to the test once again and to **review it with external "experts" from the sister projects** and their experiences. One of the most important



findings - the complexity of the onboarding process must be significantly reduced. **Any ambiguity or any additional effort for the consumer could lead to rejection and non-participation.**

3.2 BRIDGE initiative activities

During months 13-24, partners from the **ReDREAM** consortium significantly increased their participation in BRIDGE activities. In the **ReDREAM**-relevant working groups Regulation and Consumer Engagement, the important **sharing of valuable insights contributed significantly to an efficient knowledge transfer.**

Particular attention was paid to the presentation by Pete Capener of our partner BWCE. In a workshop of the Regulation working group, **Pete Capener shared his experience and knowledge on the central topic of the so-called Flex Community.** This is a form of energy community that only exists in the United Kingdom due to country-specific regulations.

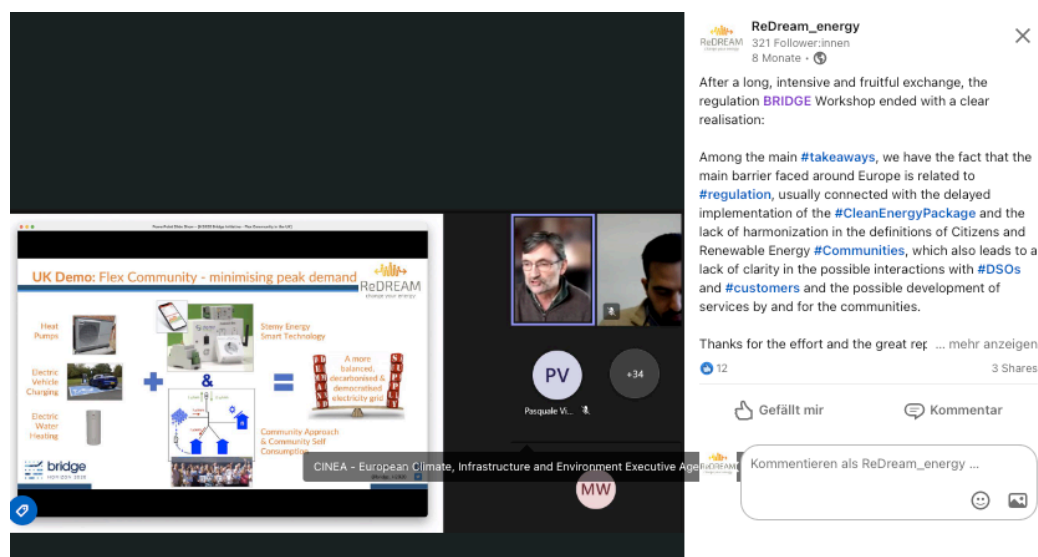


Figure 4. Pete Capener from ReDREAM partner BWCE showed insights from your community. (Screenshot LinkedIn)

3.2.1 Activities and Results

The following (Table 5) shows all ReDREAM participation in BRIDGE activities from months 13 - 24

Table 5. BRIDGE Meetings attended (M13 – M24)

Meeting	Attendees	Date
BRIDGE general assembly	Niccolo Fattiroli, Mara van Welie, Patrick Rembe, Lucija Nad	23, 24, 25 March 2022



Meeting	Attendees	Date
BRIDGE Indicators of Engagement Subgroup Meeting	Carmen Valor	27 th April 2022
BRIDGE CCE WORKING GROUP MEETING I	Carmen Valor	11 th May 2022
BRIDGE Indicators of Engagement Subgroup Meeting	Carmen Valor	7 th June 2022
BRIDGE Smart tools - Subgroup Meeting	Hamed Abbasi Mofrad	27 th April 2022
BRIDGE CCE WORKING GROUP MEETING I	Hamed Abbasi Mofrad	11 th May2022
BRIDGE Indicators of Engagement Subgroup Meeting	Hamed Abbasi Mofrad	7 th June 2022
BRIDGE Smart tools - Subgroup Meeting	Hamed Abbasi Mofrad	8 th June 2022
BRIDGE Indicators Consumer engagement	Carmen Valor	8 th July 2022
BRIDGE Indicators Consumer engagement	Carmen Valor	7 th Septmeber 2022
BRIDGE Indicators Consumer engagement	Carmen Valor	28 th September 2022

3.2.2 Learnings

The participation and partly active role in the individual BRIDGE working groups led to a lively exchange within the **ReDREAM** consortium.

One of the focus topics – is flexibility. The **flexible energy market** with the "new" consumer players is also one of the most important topics in the **ReDREAM** project. How can flexibility be increased, and which regulations slow down change where are there already examples of flexibility and how are they implemented?

While **ReDREAM** already provided valuable input with its **DEMO site in Bath** (BWCE), we also learned how other projects and their European DEMO locations deal with the topic.

This often involved the topic of simulation. If there is no real flexibility on the market, but important scientific findings are based on it, a partial simulation is inevitable.



3.3 Planned activities

The last period **M25 - M36 is characterised by sharing the findings from the implementation in the DEMO sites**. Therefore, BRIDGE activities in the last 12 months of the project should not be limited to disseminating valuable content and information to the BRIDGE community. **Increasingly, relevant target groups should benefit from the know-how.**

However, the planning of all activities is subject to the as-yet incalculable influence of the massive change in public perception on the topic of energy. **ReDREAM** will closely observe how, when and with what content the project can participate in the change. **Especially regarding the dissemination in our most important target group, the consumer, this may lead to the planned measures having to be reconsidered.**

The following table summarizes all activities and events that are already fixed or planned in the M24 – M36. (Table 6)

Table 6. Planned activities in M24-M36 of the project.

Type	What	When	Partner / other projects
BRIDGE Working groups	In the months M25 - M36, the consortium partners will again actively participate in the BRIDGE working groups. This period also focuses on the project-relevant topics of consumer engagement and regulation. However, specific focal points, such as gamification, will also be actively disseminated within the BRIDGE community.	Oct 2022 – Jun 2023	ReDREAM / Sister projects
Conferences	ENLIT – Europe The ENLIT conference is the central event for us in 2022, also in relation to our BRIDGE activities. An important event to share first "real" results with a large relevant audience.	29 Nov – 1 Dec 2022	ReDREAM BRIDGE_H2020
Co-Creation Sessions	We will take up the idea of the " Energy Talk " again. We want to use this medium-format open format to involve the sister projects and make the	Jan – Sep 2023	ReDREAM / Sister projects / Energy Community



	valuable content of the exchange available to other groups such as universities, industry, and communities.		
Meetings	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
International Conferences	In 2023, we will intensify the dissemination of our project and possibly participate in 2-3 more relevant conferences with our sister projects.	Jan – Aug 2023	ReDREAM / Sister projects
Final Conference	ReDREAM is planning a final Project Conference. From and contents are currently still being planned. The BRIDGE activities are to be included in any case.	Sep 2023	ReDREAM / BRIDGE



4. Conclusion

In the project's second phase, the BRIDGE Initiative work also contributed to a more effective and sustainable project process. The focus of the cooperation with the sister projects was always on consumer engagement. Almost all BRIDGE partner projects succeeded in optimising measures and strategies and benefiting from each other through a regular exchange.

The BRIDGE working groups developed into an excellent platform for **ReDREAM** to successfully share special experiences in the areas of Energy Flex Community and Gamification within the initiative.

The last 12 months of the project have been very important for **ReDREAM** and the work in the BRIDGE initiative. Results, learnings, and dissemination will be crucial for **ReDREAM**. But also, the current political situation and the resulting possible disruption of the entire energy sector could have a massive impact on **ReDREAM** activities in the BRIDGE initiative.

