# ReDREAM
# Change your Energy!

You make the difference!

ReDREAM – the European research project that empowers consumers to significantly and sustainably influence the use of energy.

**JOIN THE MOVEMENT !**

**ReDREAM**

ReDREAM presents a strategy for the creation of a value generation chain based on an innovative **service-dominant logic** in which prosumers' services are horizontally exchanged.

The project develops flexibility tools in energy & non-energy services that enable consumers to actively participate in the energy market. This will lead to the establishment of a new concept: a connected **USER-CENTERED FLEXIBLE ENERGY ECOSYSTEM**.

By introducing new energy services: smart plugs and a mobile app for the implicit flexibility & automatised smart algorithms and IoT devices with a mobile app for the explicit flexibility, as well as comfort and mobility non-energy services, **REDREAM ACTIVITIES INCLUDE:**

➔ Reducing energy bills;
➔ Networking and user interaction through an open Flex Community platform;
➔ Strengthening the local community through the involvement of people in the energy transition;
➔ Increasing energy efficiency and environmental protection;
➔ Giving citizens a major role in the energy transition by changing their user behaviour.

# 2. PILOT SITES

The goal of the ReDREAM project is to enable **greater consumer engagement (within the residential, industrial, and tertiary sectors) in the energy market, through an open Flex Community platform that allows direct communication between actors involved.** Addressing this challenge requires the use of advanced IT tools and services, to successfully respond to demand and improve the predictability of consumption patterns and consumer behaviour.

All these project innovations are being realised at **4 DEMONSTRATION SITES**. They are small energy cooperatives in Spain, Italy, Croatia and the UK. In these countries, our ambitious goals are focusing on consumers as key players. They help the scientists, researchers, developers and engineers to execute ReDREAM's objectives, producing together an indispensable tool to contribute to the climate change mitigation.



**ZEZ**, Croatian Green Energy Cooperative in Varaždin, is engaging citizens in the energy transition as they are the pillars of the shift towards sustainable development



**EnergÉtica**, Spanish non-profit cooperative of renewable energy consumers, is contributing to the flexible electricity consumption in Castilla y León



**BWCE**, Bath & West Community Energy, is a not-for-profit, Community Benefit Society, which puts people at the heart of the energy transition
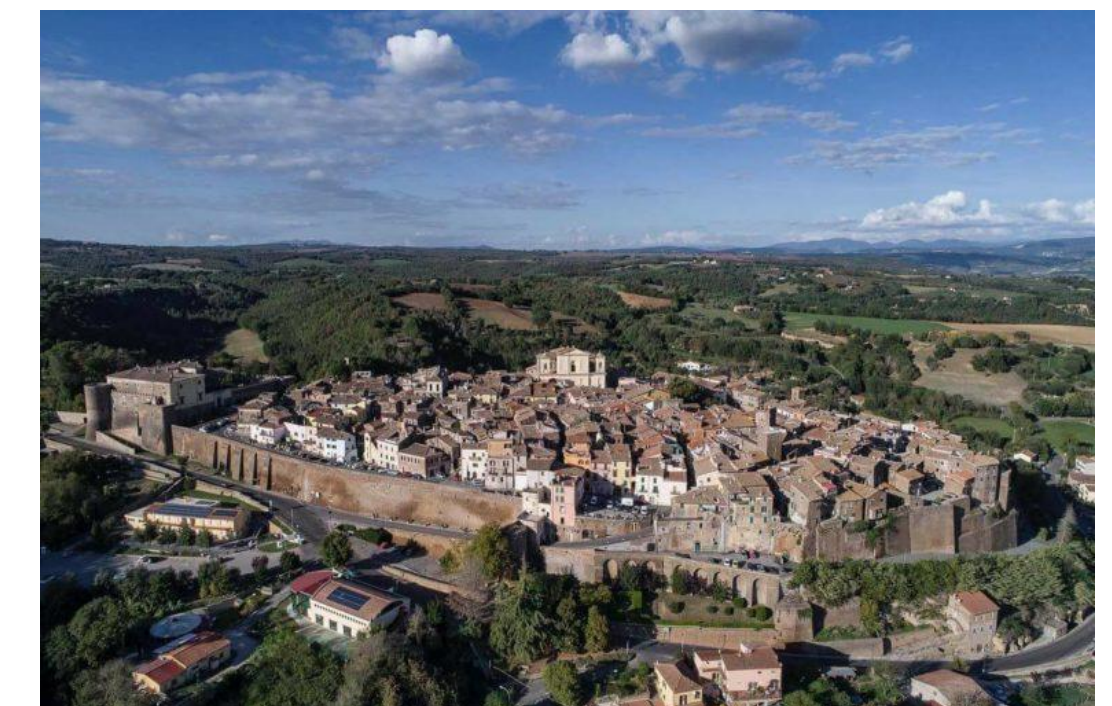


**BIO**, Italian Bio-distretto della Via Amerina e delle Forre in Gallese, is interested in monitoring the electricity consumption of private homes, companies and public sector

# 3.1. CO-CREATION OF STRATEGY as the first step of the user adaptability

All the demo leaders have actively contributed to the definition of the engagement strategy bringing their knowledge and experience from *learning by doing* tactics in the first year of the ReDREAM project and their past experience in previous projects. That has fostered a positive acceptance and onboarding of the ReDREAM consumer engagement strategy. The exercise of co-creating the consumer engagement strategy with the partners from the very beginning has served to back the proposed final strategy on results and evidence. All the demos are committed to respect the fundamental design principles: *personalization, visibility, simplicity, discoverability and automatization* and engagement pillars, as well as the guidelines for the three participatory stages.
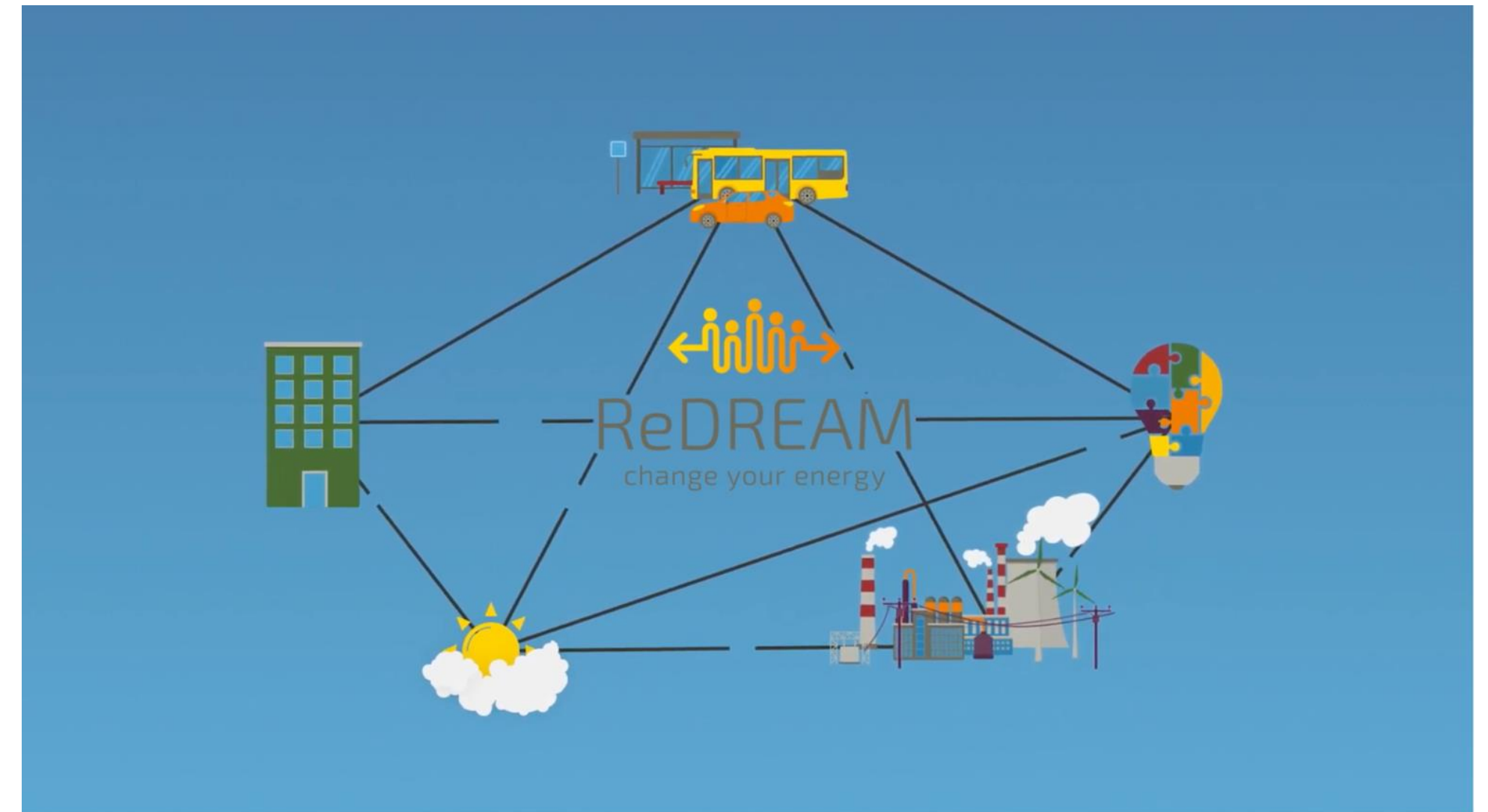


The three recruiting assessments conducted since December 2020 combined with the one-to-one conversations and collective online and offline workshops with the demo partners have served to gather learnings of the effectiveness of the recruiting actions and therefore iterate the recruiting strategy to define a **RELIABLE PROPOSITION**.

# 3.2. CO-CREATION OF VALUE
## and its importance for the second step of the user adaptability

Based on a deep understanding of users' needs, their context and value sought gained during the initial qualitative research, we have concluded that there are significant differences between the different consumer **ARCHETYPES**. We identified four consumers' archetypes based on their energy awareness and participation and another four depending on their use of technology. Then we have described them accordingly. The design principles we were mentioning before apply to all consumer archetypes and ensure that the relationship between users and energy, facilitated by the ReDREAM ecosystem, is engaging and transformative. The ReDREAM ecosystem aims to be the space where the users, who were traditionally passive, become active prosuming actors in the energy services.
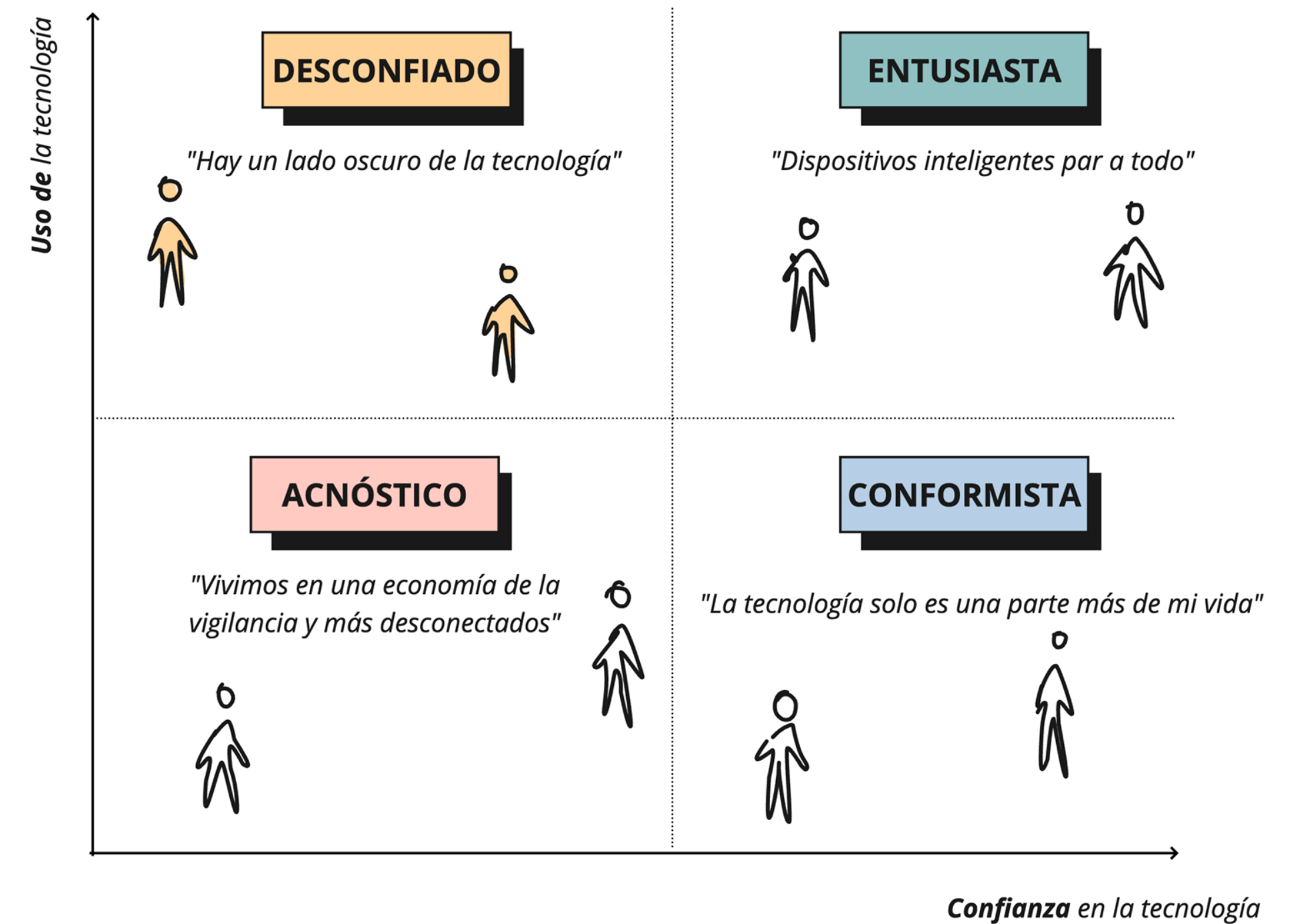


The ReDREAM ecosystem must ensure that all market actors, and especially users, **CO-CREATE VALUE** to meet the decarbonization goals. Prosumers should be able to play an active role **ACCORDING TO THEIR RESOURCES, CAPACITY AND WILLINGNESS**.

## 3.3. CO-CREATION OF INTERFACES
## as the third step in the user adaptability

The objective of the ReDREAM ecosystem is to enable actors' active and intuitive participation, albeit different archetypes have different engagement behaviour with the ReDREAM services. Consequently, the interfaces of the ecosystem are to allow the users to perceive the value that they seek thanks to the type of information and language that better meets their needs. We are confident that this personalized approach strengthens the engagement of each archetype, customer type (residential, commercial or industrial) or type of user inside the ecosystem (administrator or observer). Our firm conclusion is that all functionalities and content are to be adapted to the archetypes. The ReDREAM ecosystem aims to restore **TRUST** among its actors towards energy transition by making the digital interfaces **UNDERSTANDABLE** for consumers.
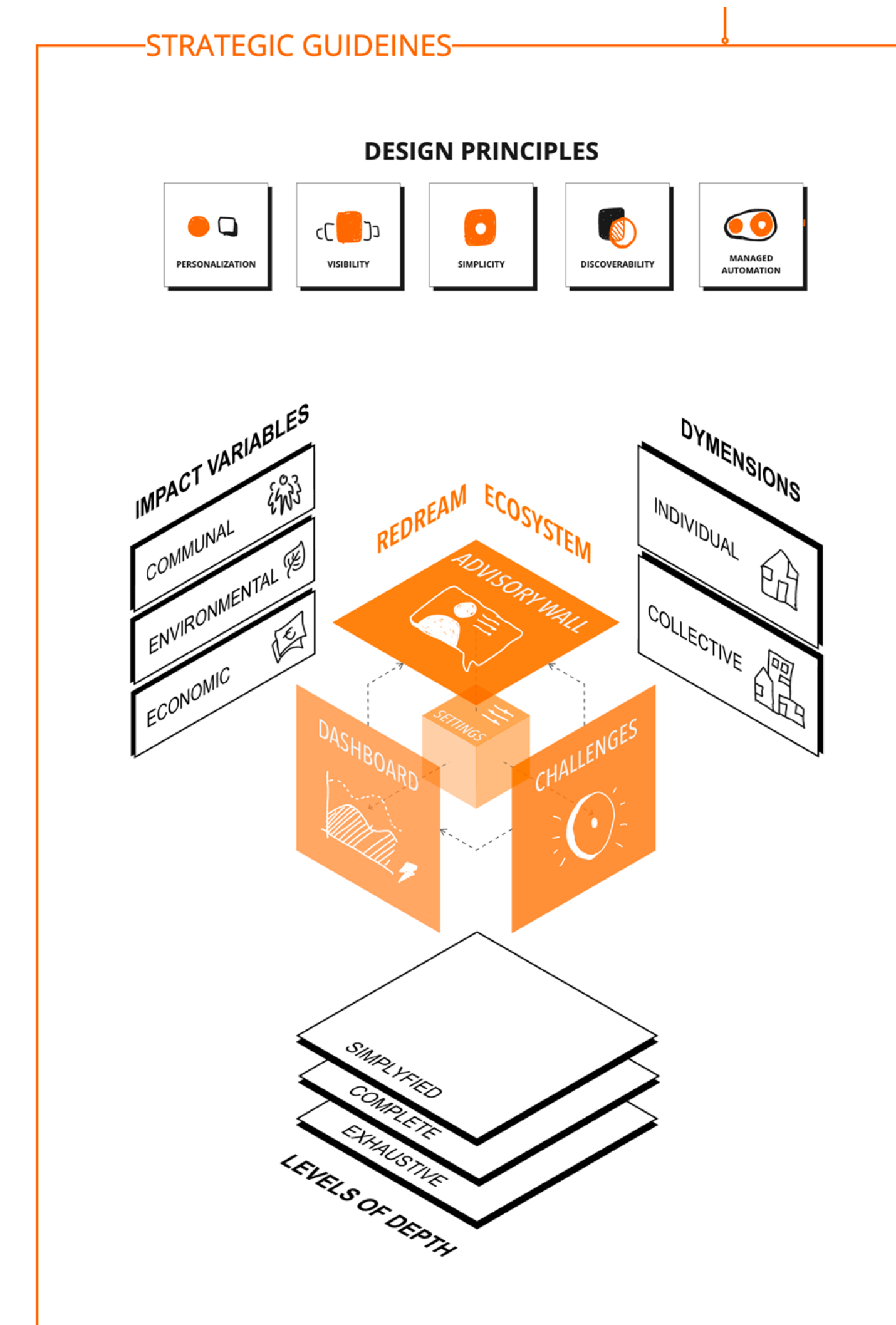
➔ User engagement requires consideration of manifold **ACTORS INTERACTION**: energy cooperatives, installers, smart devices developers and apps designers;

➔ We constantly have to assess our capabilities for leading and coordinating a large network of actors;

➔ Engagement unfolds in a **JOURNEY** which can be described in three participatory phases: recruitment, onboarding and participation itself. Each of the phases includes the need for iterations to incorporate new findings and improve ecosystem services;

➔ We can distinguish three components of **FLEX CAPITAL** that are beneficial for the user engagement: assets, capabilities and attitudes;

➔ Two models of the engagement **BRAKES** can be considered: the first is technopessimism and anxiety (**stress**) and the second is **disinterest** in flexibilisation of energy consumption;

➔ Given the above chain of multi-level interactions, **intrinsic motives are not enough to enable successful engagement**

**CONSUMER ENGAGEMENT STRATEGY**

VALUE OVER TIME

BENEFIT > EFFORT

TRUST IN THE ECOSYSTEM
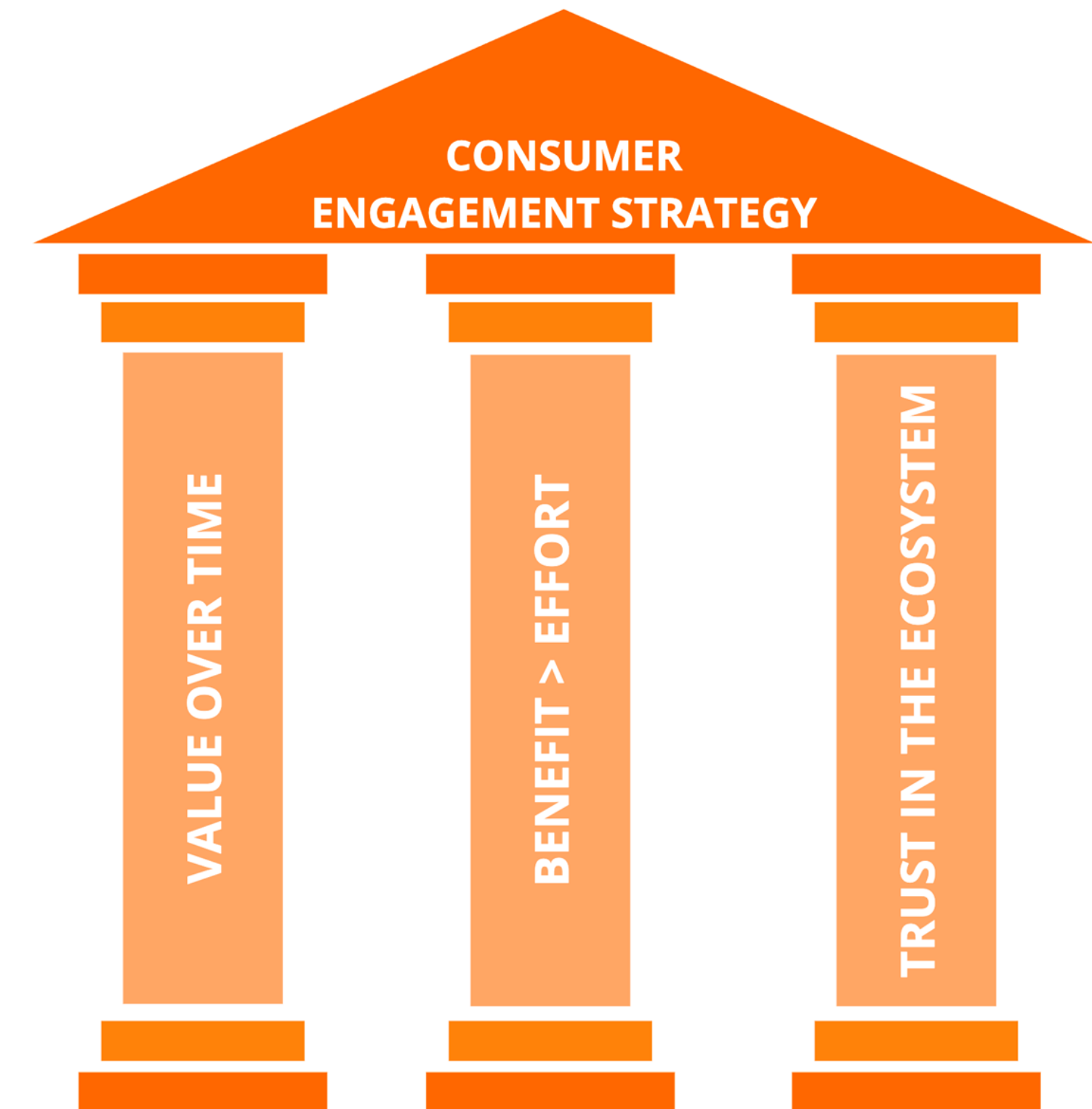
# 5. CONCLUSIONS & PROPOSALS

➜ Co-creation should cause **VALUE ADDITION:** the methodology of co-creation must necessarily be consistent with the creation of value, as co-designing interfaces alone will not be sufficient to overcome the barriers to engagement in the flexibility adaptation;

➜ **CRITICAL VIEW** on the common sense of co-creation practices in the digitally sophisticated sectors (energy innovative sector) must be kept: we need to know our user, but creating intuitive and seamless interfaces should come first from the developers and then be refined with the users in UX prototype studies;

➜ Therefore **DIRECT** co-creation of the interfaces might not be a crucial part of the user engagement in our opinion;

➜ Ideally, we would assume the success of **COMBINING** intuitively designed and tested interfaces with active motivation strategy and user adaptation policies;

➜ We are to consider **DECENTRALISATION** of the manager role as in many case studies social interactions and problem solving take place outside of the project's digital services;

➜ We promote introduction of the **SOCIAL** perspective into purely technological perspective of the co-creation methodology. An example of such introduction could be constant non-intrusive digital education of the communities of users for their adaptation to the new energy ecosystem.

And all of these suggestions could serve as a basis for the development of a multi-factor theory of user adaptability through **DIFFERENT** intersecting types of co-creation.
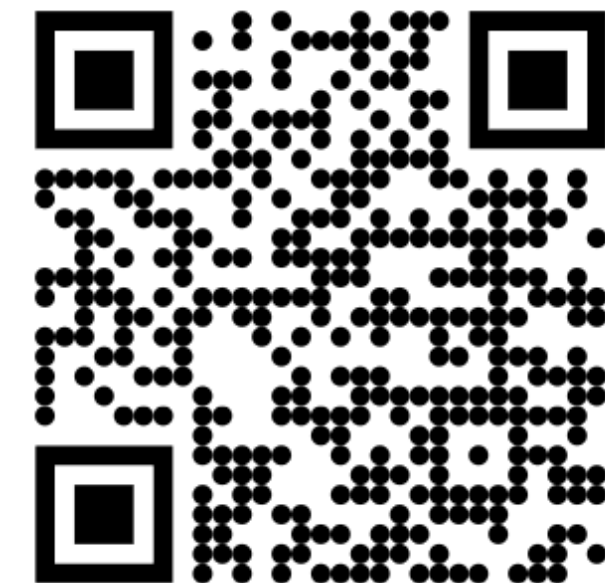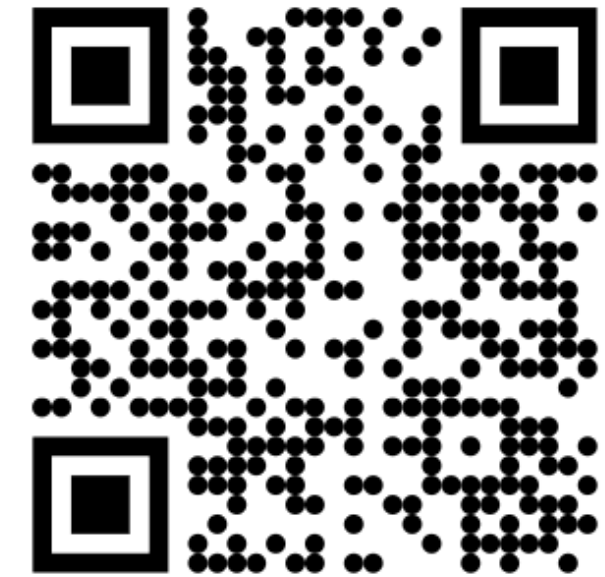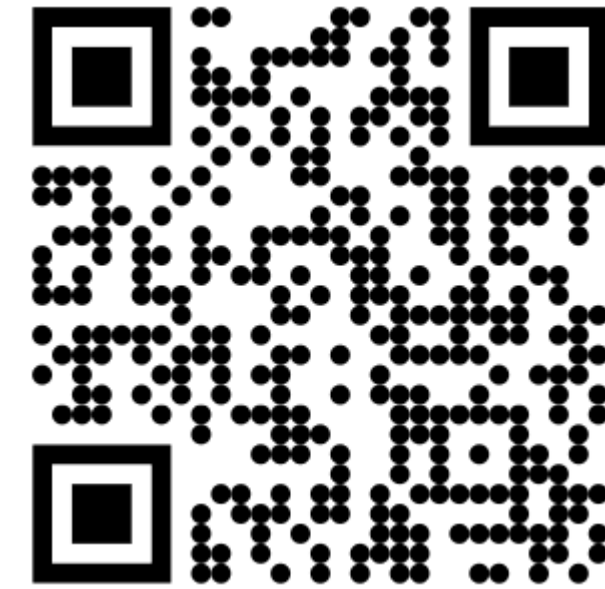
# OUR CONTACTS

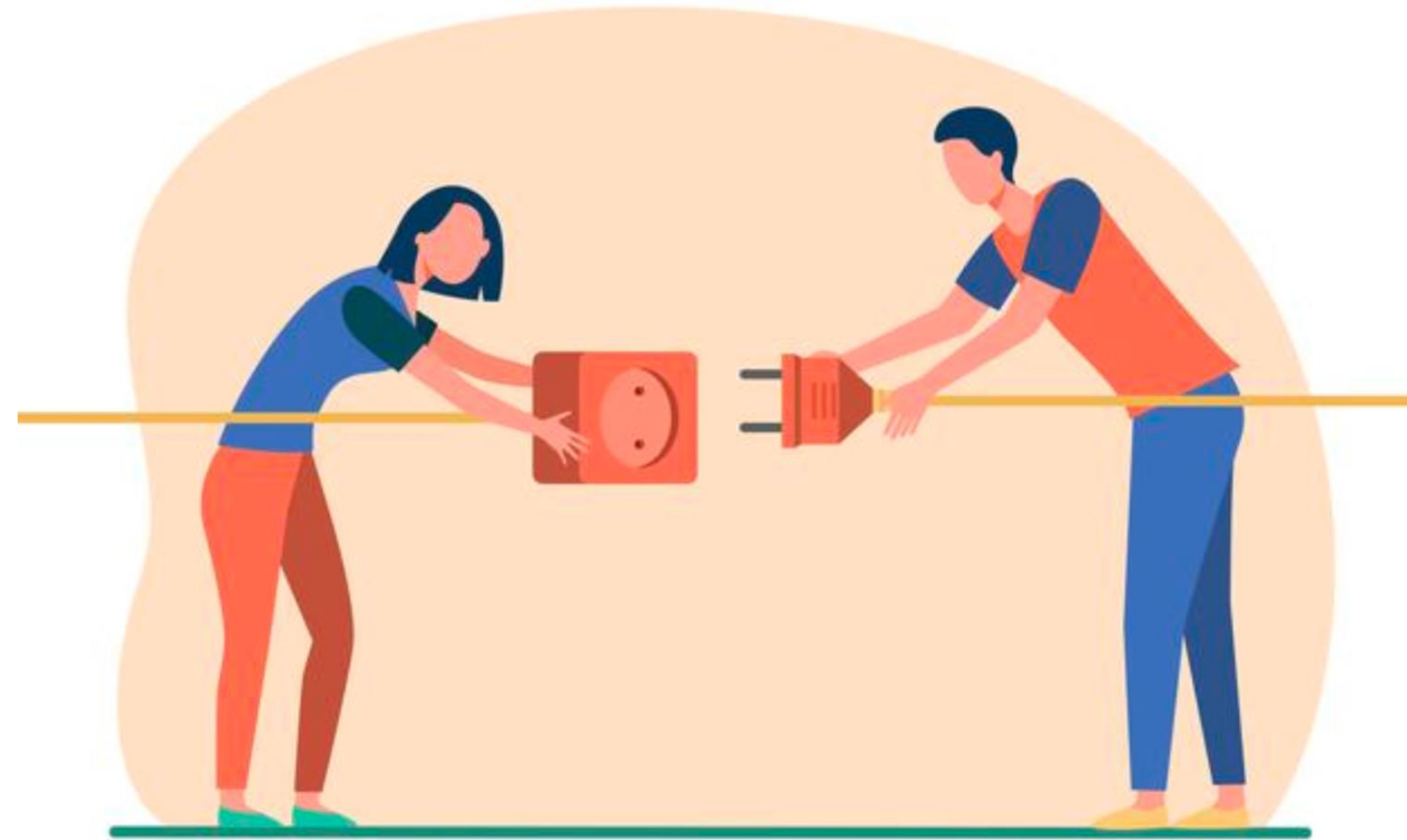ReDREAM website: https://redream-energy-network.eu

Ionah Nuur:  ionah.nuur@soulsight.es
https://www.linkedin.com/in/ionah-nuur/

Carmen Valor: cvalor@icade.comillas.edu
https://www.linkedin.com/in/carmenvalor/

# Thank you for your attention

## Time for questions



Participants can join
at **slido.com** with **#8172491**