

In collaboration with

Renewables
Grid Initiative



The Future is Flexibility

Smart solutions for the building sector decarbonisation
and their role in system planning

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Renewables Grid Initiative

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Brussels, Elia's premises

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on the basis of a decision
by the German Bundestag



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Renewables
Grid Initiative

Who is RGI?

RGI is a unique **collaboration of NGOs and TSOs** from across Europe engaging in an ‘energy transition ecosystem-of-actors’. We foster knowledge exchange, discussions on the grid infrastructure needs, and the implementation of best practices within **three dimensions**:



Technical

We enable discussions on how to model, plan and implement decarbonised and optimised clean energy systems, including different voices in the process.



Environmental

We ensure energy systems both onshore and offshore are developed in **coherence with nature and biodiversity**, promoting mitigation, enhancement and restoration measures.



Social

We include and engage citizens, civil society and **policy makers** on strategies towards full decarbonisation, improving capacity and knowledge on the role of grids within for the energy transition.

European Organisations

CAN
CLIMATE ACTION NETWORK
EUROPE

WWF

BirdLife
INTERNATIONAL
BIRDLIFE EUROPE

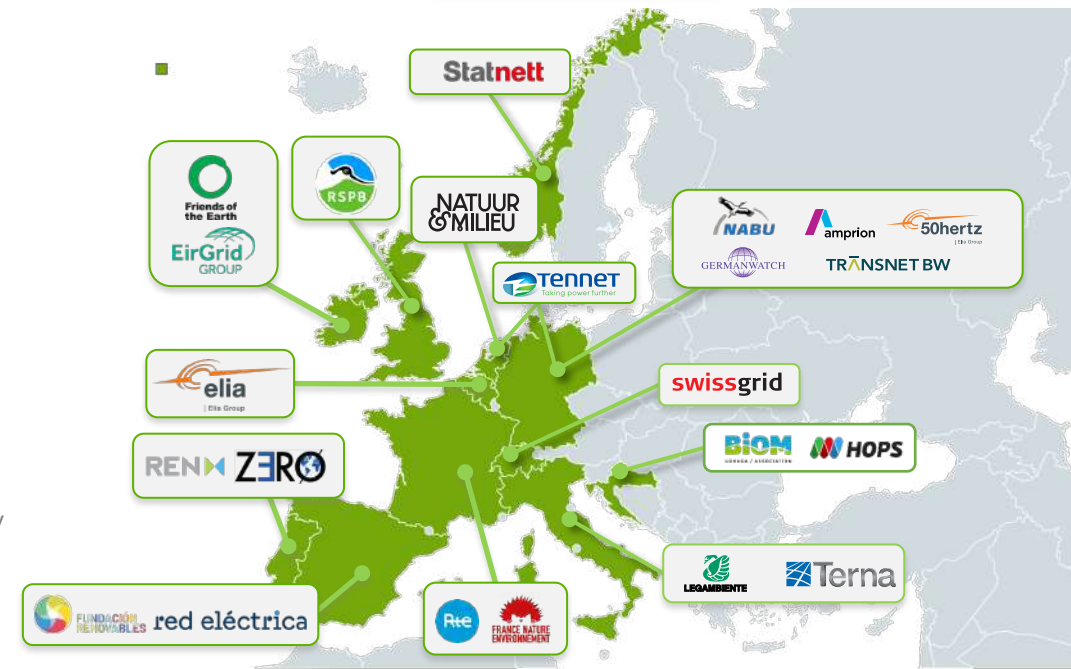
BELLONA
EUROPA

EMBER

Supporting Members

Europacable®
Try life without us

IUCN



Background

2018



Paris Agreement Compatible
Scenarios for Energy Infrastructure

1.0

2020



WHY Climbing the causality ladder to understand and project the energy demand of the residential sector

2021



Paris Agreement Compatible
Scenarios for Energy Infrastructure

2.0



'Regarding the development of flexibility in the electricity system and markets, the Forum recalls the importance and urgency of implementing the existing provision from the Clean Energy package, and sharing best practices in that respect.'

June
2023

THE FUTURE IS FLEXIBILITY

Smart solutions for the building sector decarbonisation and their role in system planning

IN-PERSON EXPERT WORKSHOP
21 JUNE 2023 | 09:30 - 15:30 CET



ELIA'S OFFICE
BOULEVARD DE L'EMPEREUR 20, BRUSSELS



Why Flexibility?

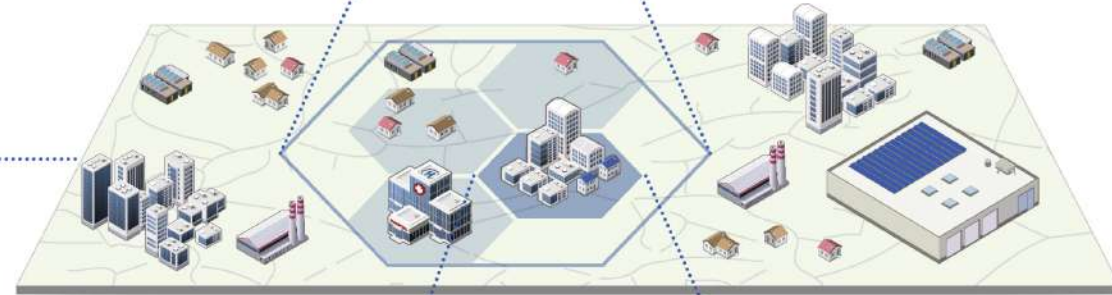
Transmission Level

- Capacity
- Energy
- Ancillary services
- Emission reduction



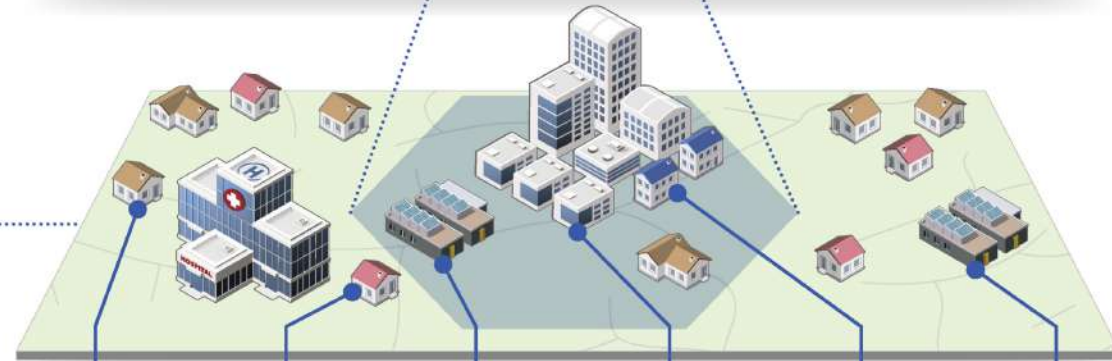
Distribution Level

- Non-wire alternative
- Reliability
- Loss reduction



Building Level

- Energy savings
- Comfort
- Resiliency



Building Technologies Level

- Energy efficiency
- Demand flexibility



Essential to supporting a decarbonised and optimised energy system

FLEXIBILITY IS...

Beneficial to all levels of the energy system

Engaging municipalities and consumers

Workshop objectives



Increase understanding of **practical (digital) solutions** contributing to **decarbonisation of the building sector and municipalities** and how this can (or already does) **interplay with grid flexibility**



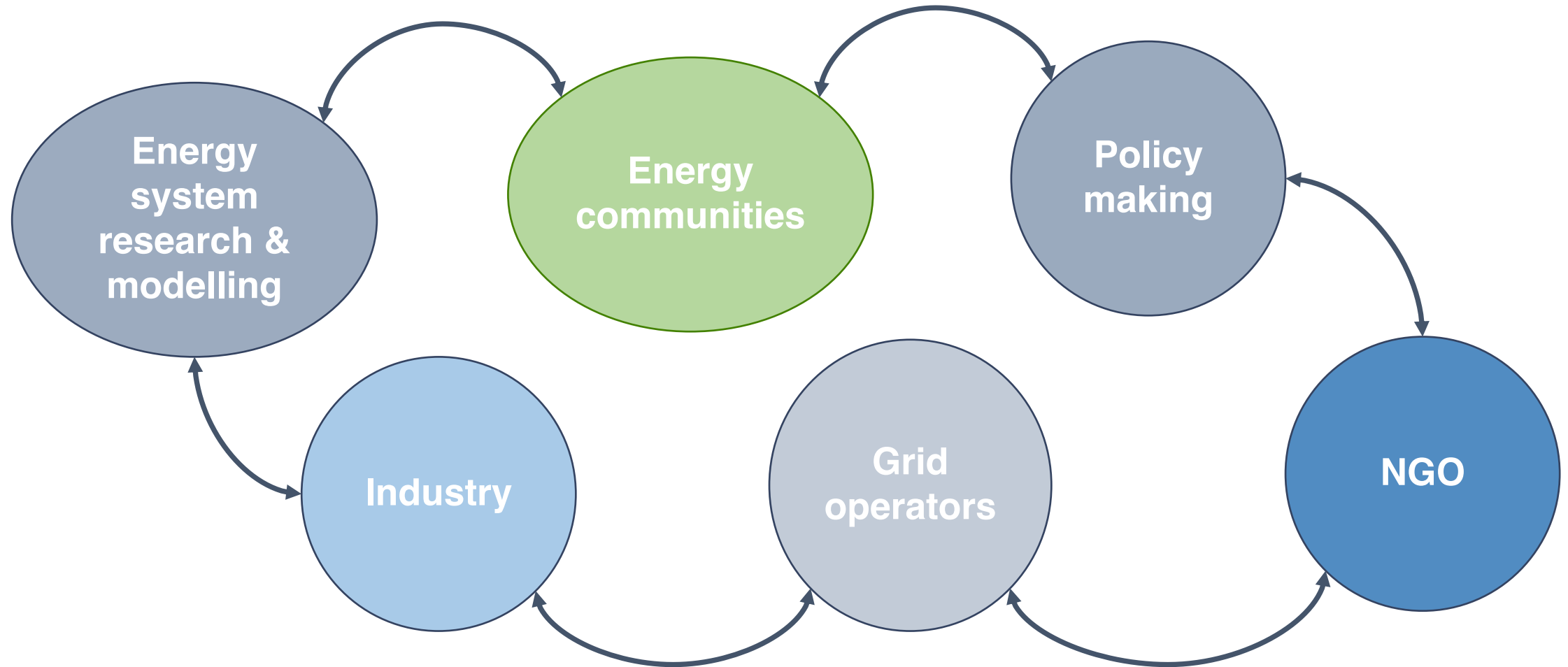
Understand how **energy demand flexibility** can be represented in **energy system planning and modelling**

Discuss **regulatory challenges** related to flexibility provision



Facilitate exchanges within the energy modelling community and practitioners from technical, planning, civil society and local-level implementers

Who is in the room today?



Workshop agenda - morning

09:30 – 10:00	Registration & Welcome Coffee
10:00 – 10:15	Welcome and introduction remarks
	Setting the scene and input presentations
10:15 – 10:30	Implementing the energy transition at the local level while navigating through the energy crisis – Irene Skoula (<i>C40 Cities</i>)
10:30 – 10:45	Enabling flexibility from future-proof decarbonised buildings – Vincent Minier (<i>Schneider Electric – Sustainability Research Institute</i>)
10:45 – 11:00	Methodology for identifying household electricity consumption patterns and their role in flexibility – Leire Astigarraga (<i>Goienet/WHY</i>) and Cruz Borges (<i>University of Deusto/WHY</i>)
11:00 – 11:35	Discussion
11:35 – 11:50	Coffee break

Workshop agenda - afternoon

11:50 – 12:05	Role of flexible grids in more flexible operation of entire power system – <i>Alexandre Oudalov (Hitachi Energy)</i>
12:05 – 12:20	Unlocking distributed flexibility: Elia's role in enabling demand side flexibility – <i>Sebastiaan Coppenholle (Elia Group)</i>
12:20 – 12:35	Representation of flexibility in the European grid investment planning – <i>David Radu (ENTSO-E)</i>
12:35 – 13:15	Discussion
13:15 – 14:30	Lunch break
14:30 – 15:15	Flexible buildings in the energy future of 2040: Paris Agreement Compatible scenario & Interactive discussion – <i>Joni Karjalainen (CAN Europe/PAC)</i>
15:15 – 15:30	Conclusion and closing remarks

It is time for...

Coffee break– until 11:50



It is time for...

Lunch break – until 14:30



Concluding remarks and the next steps



Let's stay in touch!

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RGI website: renewables-grid.eu



WHY and PAC projects: why-h2020.eu // pac-scenarios.eu



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