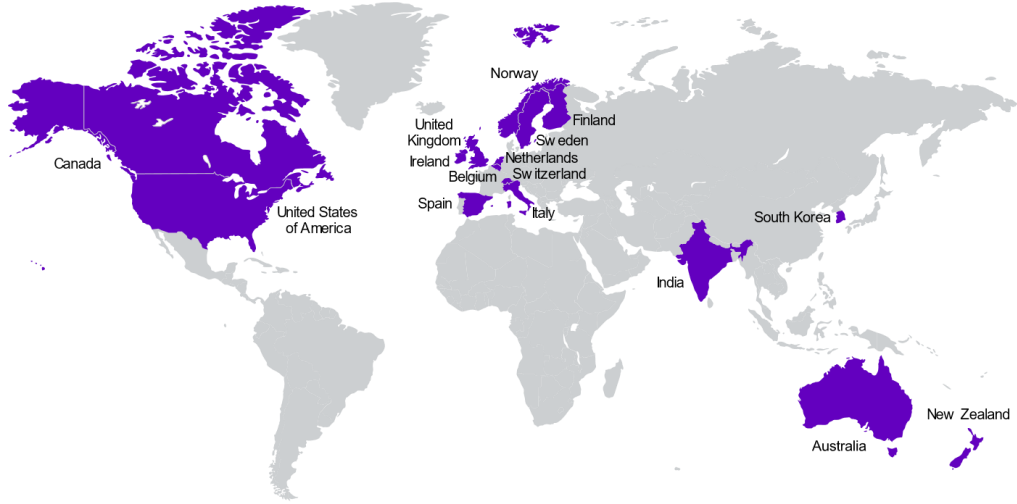
# User Centered Energy System (USERS) TCP in a nutshell

**Users TCP's Visie**
To be the world-leading international collaboration platform for (policy-)relevant socio-technical research on user-centred energy systems.

**Users TCP's Missie**
To provide evidence from socio-technical research on the design, social acceptance and usability of clean energy technologies to inform policy making for clean, efficient and secure energy transitions.

For more information go to www.userstcp.org or get in contact with: Gerdien de Weger – gerdien.deweger@rvo.nl




## Running task

- Social License to Automate
- Peer-to-Peer Energy Trading
- Hard-to-Reach Energy Users
- Behavioural Insights Platform
- Empowering All
- Public engagement

## Tasks in preparation

- Public engagement – phase 2
- User-Centered Business Models for Vehicle-to-Grid (V2G)
- Flexibility (and heatpumps?)
- Narratives – telling the story

## Completed task

- Fit to serve
- Business models and Systems
- Energy efficiency campaigns

## Academy

User-Centred Energy Systems Academy

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# GETTING THEM ALL ON BOARD:

## Meaningful public engagement to enhance acceptance for large-scale energy infrastructure projects

Ira Shefer, Nathália Pimentel

IEECP INSTITUTE FOR EUROPEAN ENERGY AND CLIMATE POLICY

Renewables Grid Initiative

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# Why do we need public engagement?

**3x times more renewables by 2030:** Acceleration areas & expansion of grids

More **decentralised** energy production

Infrastructure closer to the **people's homes**



→ Public engagement can improve and speed up the implementation of energy infrastructure in an appropriate manner**, reducing potential friction** between stakeholders in the development of energy infrastructure.

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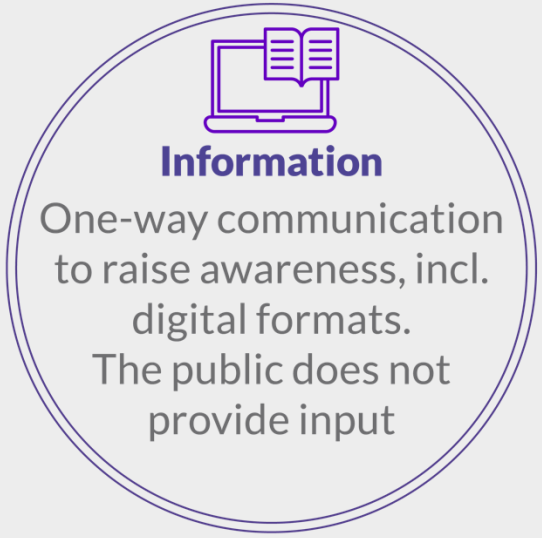
# What is public engagement?

The involvement of the public in various stages of energy infrastructure projects, incl. stages of defining infrastructural needs, planning, permitting, and implementation, as well as of sharing of medium- and long-term socio-economic benefits.



**Information**

One-way communication to raise awareness, incl. digital formats. The public does not provide input

**Consultation**

Two-way dialogue to gather local views and knowledge. The public can shape the process but not the objectives and outcomes

**Empowerment**

Two-way community-led engagement. The public co-designs and help shape the process, its objectives and outcomes

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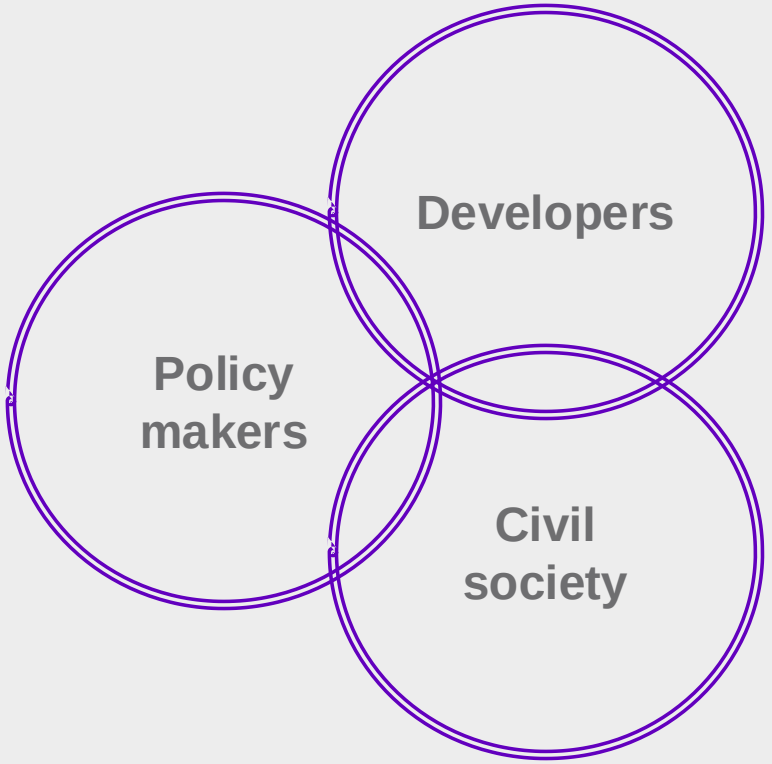
# Who needs to be engaged?

Crucial in the process of transforming energy and climate goals to energy infrastructure projects on the ground.




Can ensure a socially-acceptable development of energy infrastructure

Critical to empower citizens and communities to be part of the energy transition

Public engagement is a collaborative, multi-actor and multi-level process!

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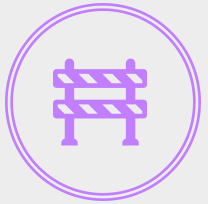
# Engagement challenges

- **Public engagement challenges** that you may be facing:

Little public engagement

Saving resources (costs & time)

Public opposition



Overcoming institutional barriers

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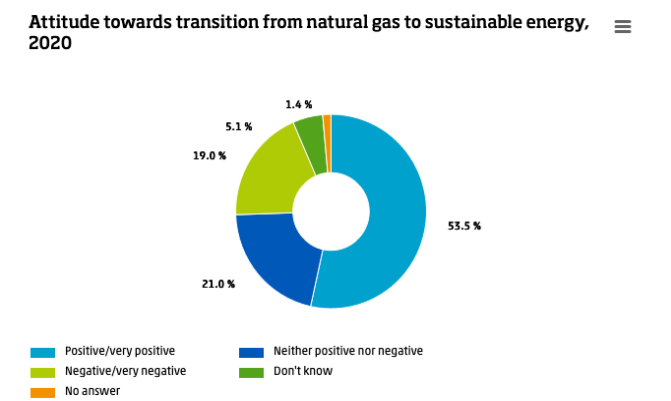
# Engagement challenges: The Netherlands




### Most Dutch people in favour of wind turbines, but not in their 'backyard'

A large proportion of the population, 71 percent, support the construction of new wind turbines in the Netherlands. The Dutch are less enthusiastic, however, about having wind turbines in their own area: Twenty-one percent are in favour and 31 percent are against. Forty-three percent say it depends. The location of the wind turbines is the most frequently cited factor: they must not be too close to their home. Most Dutch people therefore prefer to have no wind turbines near their home.

### Fifty-three percent of Dutch people are positive about energy transition

Over half of the population believe it is positive or very positive that the government wants to make the Netherlands free of natural gas by switching to sustainable energy sources. The most frequently cited reason is that natural gas contributes to CO2 emissions (and hence climate change). Another frequently cited reason is that the extraction of natural gas leads to subsoil shifts and subsidence, as in the earthquakes in Groningen. Another reason given for discontinuing the use of natural gas is that it will eventually run out.

### The impact of the new Dutch government on climate & energy policy

On 2 July 2024, the new right-wing coalition government in the Netherlands – composed of the election winner the PVV party, the VVD party, and newcomers the Farmer–Citizen Movement (BBB) and New Social Contract (NSC) – was installed. The coalition unveiled its key policy plans for the next four years in its 'Hoofdlijnenakkoord' or 'Outline Agreement', of which a crucial topic is climate and energy, one that will remain a focal point for the years to come.

Sources: Eurobarometer 2024, Accuracy.com, cbs.nl

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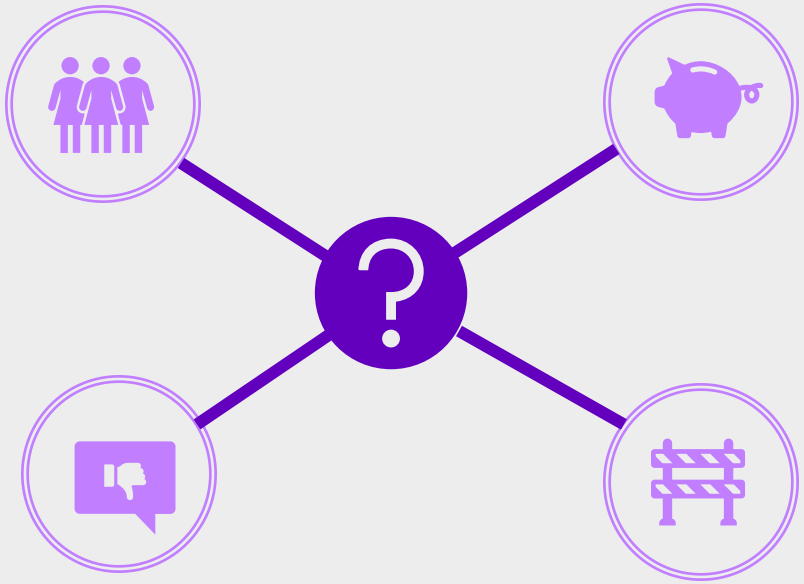
# Engagement challenges: The Netherlands

Little public engagement
*Shift of interest/support (migration, energy security)*

Public opposition to:
*EU policies*
*Ambitious climate actions*
*Near-by infrastructure*



Saving resources (costs & time)
*Reaching consensus vs. time and resources*

Overcoming institutional barriers
*Decentralized system*

# How can citizens, communities and other stakeholders be meaningfully involved in projects?

*ENGAGE4ENERGY*

# AN INTERACTIVE GUIDE

*for developers, policymakers and civil society*

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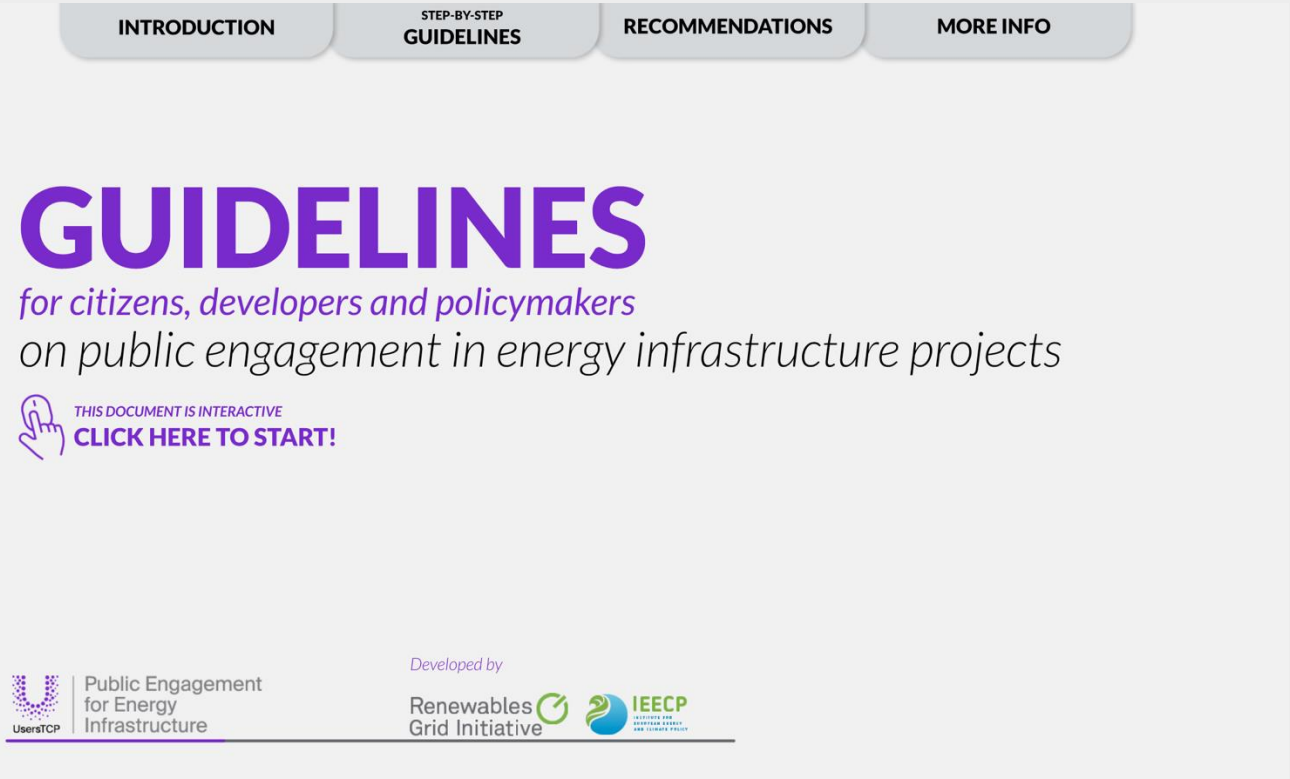
# The #Engage4Energy tool

- Interactive PDF, available online
- Technological scope: grids, wind energy, solar energy
- Target groups:
  - Developers of grids, wind and solar projects
  - Policymakers at national, regional and local level;
  - Civil society organizations & citizens



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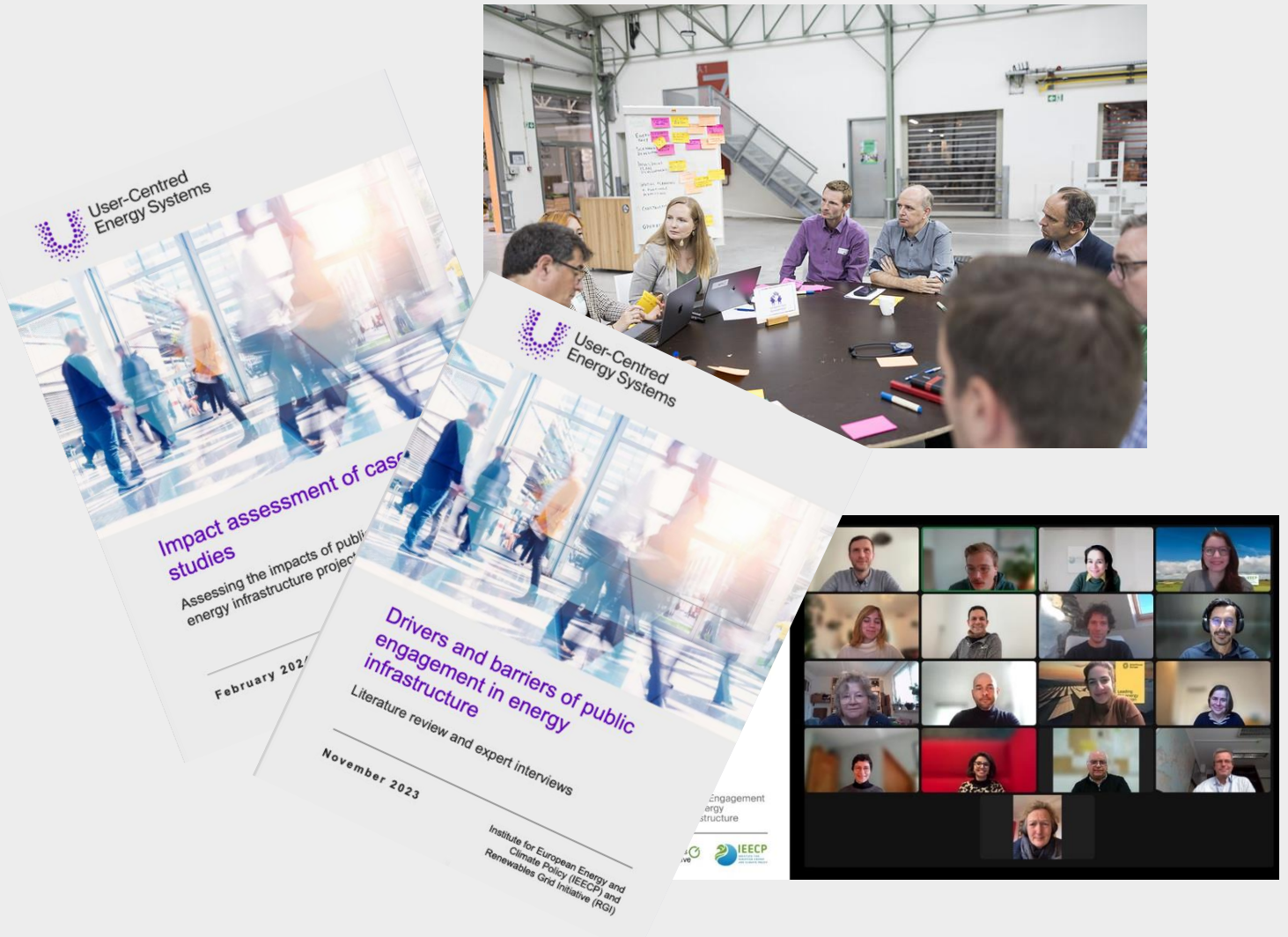
# The #Engage4Energy tool

**Based on research and practice:**

- 2 studies on Drivers and barriers of public engagement and Impact assessment of selected case studies
- Experts' feedback (professional and academic workshops, round tables & online meetings)
- RGI & IEECP previous and ongoing works



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# The #Engage4Energy tool

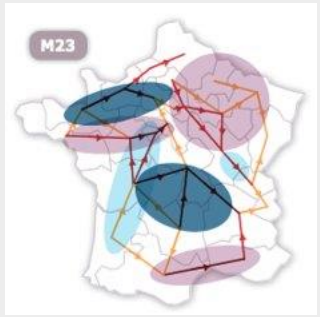
The guide considers the **energy infrastructure's lifecycle:**

1

**POLICY**
*MAKING*

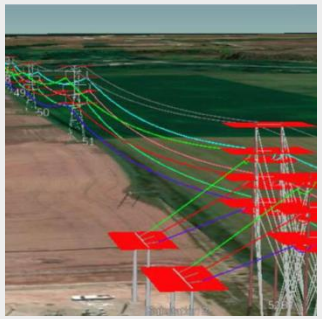

2

**SYSTEM**
*PLANNING*




3

**PROJECT**
*PLANNING*



4

**PROJECT**
*IMPLEMENTATION*

5

**INFRASTRUCTURE**
*END-OF-LIFE*

Photos: RGI data base, JustWind4All, Terna

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# The #Engage4Energy tool

## Four key principles for meaningful public engagement

**Early engagement** of stakeholders

**Transparency** about the engagement process and its outcomes

**Inclusiveness** of diverse individuals and social groups in the **entire lifecycle**

**Developing trust** in project developers and policymakers

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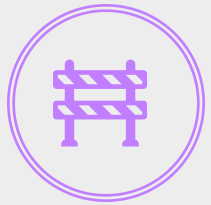
# Your benefits from engagement

Collaboration across different governance levels can ensure support and achievement of policy goals.

Multi-stakeholder collaborations can improve mutual understanding of drivers and barriers to energy infrastructure development.



Effort invested in multi-level and multi-stakeholder collaboration can reduce concerns and opposition to climate and energy plans.

# The #Engage4Energy tool - demo

# Let’s get inspired!
# Examples of public engagement in energy infrastructure

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# Let's get inspired

## CITIZEN FORUM

2021 • SWITZERLAND • CANTON OF GENEVA • EMPOWERMENT

- Citizens forum set up on the initiative of State Councillor Antonio Hodgers, who is responsible for planning and the environment, following controversy over urban development projects and tree felling.

### HIGHLIGHTS

- Four weeks of discussions among the 30 participants of the territory of Geneva that came together to discuss how they want to live together better while respecting nature and facing climate change.
- The debate focused on how participants see Geneva in order to live together better, while respecting nature and tackling climate change.
- 104 proposals submitted by the Forum on mobility , biodiversity, local consumption, waste, urban planning, green spaces and climate emergency.

### IMPACTS & OUTCOMES

- The State Council and the administration took up the report and respond to it. It influenced the political agenda and the 2030 climate plan.

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# Let's get inspired

## DECISION THEATER: ENERGY TRANSITION

2021 • GERMANY • GLOBAL CLIMATE FORUM • EMPOWERMENT

- Decision Theaters guide experts and stakeholders through a moderated discussion process to achieve jointly supported decisions. The discussion is enriched live by decision aids and visualizations that allow different variants to be run through in real time using current data, algorithms and scientific findings.

### HIGHLIGHTS

- A moderated process for solving challenges together on a scientific basis.
- Decision theaters can focus on different topics, such as electricity system transformation, grid development, or sustainable mobility.
- Strategic issues of the climate and energy system are addressed.
- Participants can bring in their practical questions.
- Experts present models, scenarios and scientific findings.
- Joint development of strategic alternatives and alternatives to the business-as-usual scenario will be discussed.

### IMPACTS & OUTCOMES

- The result is an enhanced collaboration and a jointly supported decision on the future climate and energy system.

# Let's get inspired


## ENTREREDES - AN EDUCATIONAL GAME FOR SCHOOLS

2015 • SPAIN • RED ELÉCTRICA • INFORMATION SHARING

- Red Eléctrica de España is responsible for planning and operating the electricity grid in Spain.
- EntreREDes is a digital education platform which acts as a question and answer game that allows children to work out concepts related to the function, needs and challenges of the energy system in a playful and entertaining manner.

### HIGHLIGHTS

- The game has resulted in the participation of more than 8,300 Spanish students.
- 98% of students recommended the use of EntreREDes at school as educational support.
- UNITY (a videogame technology) was used to achieve maximum virtual quality.

### IMPACTS & OUTCOMES

- The project aims to educate school aged children about how the electricity system works, with the goal of helping the society to make informed decisions, encouraging dialogue and citizen participation as adults.
- The game is teaching children the responsible use of energy, and giving them information on renewable energy and smart grids.

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# Let's get inspired

MORE ABOUT THIS CASE >

OTHER INSPIRING CASES >

## GALWAY WIND PARK COMMUNITY FUND

2017 • IRELAND • SSE RENEWABLES & GREENCOAT • CONSULTATION & EMPOWERMENT

- Galway Wind Farm is jointly owned by SSE Renewables and Greencoat Renewables, and has been operational since 2017. It is Ireland's largest onshore wind farm with 58 wind turbines generating 174 MW. The Galway Wind Park Community is the largest fund of its kind in the country.

### HIGHLIGHTS

- €400,000-plus per annum, paid annually in contributions to local groups and individuals via the local fund, Major Projects Fund, and Scholarship Fund.
- Early and ongoing community engagement, with frequent communication, and active demonstration of benefits.
- Consultations for the community fund took place, following the launch of the Galway Wind Park Community.

### IMPACTS & OUTCOMES

- Emphasis placed during project development on reducing negative impacts, including visual impacts, and capitalizing on positive benefits, including environmental education.

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# Policy recommendations

**Communicate about the energy transition and engagement opportunities & benefits**

**Provide resources for public engagement**

**Support capacity-building for public engagement** within your organization AND to the respective stakeholders in your jurisdiction

**Initiate and support stronger multi-level and multi-stakeholder collaborations**

**And you can spread the word and share our guidelines to raise awareness about the relevance of public engagement!**

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# Contact

**This work was developed between:** March 2023 – March 2024

**Research & development team:** IEECP Institute for European Energy and Climate Policy; Renewables Grid Initiative

**This work was funded by:**
Ireland, Netherlands, Sweden, Switzerland and United Kingdom under: Users TCP, part of the IEA Technology Collaboration Programme

**Further information:**
https://userstcp.org/public-engagement-for-energy-infrastructure-task/

## Get in touch

If you have further questions or would like to discuss synergies, feel free to reach out to us!

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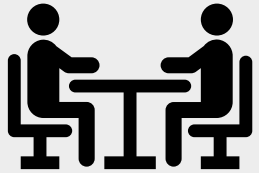

**Looking at the principles for promoting public acceptance, could you use the principles in your own work / Dutch context? What would be the difficulties in applying these principles?**

**Given the Dutch context, what do you think is missing from the principles presented so far? How can that be improved / implemented?**