

Introduction to ENCHANT

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(coordinator of ENCHANT)

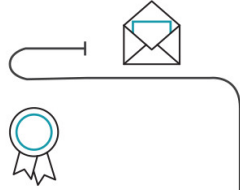


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 957115.



The project in a nutshell

1. Intervention packages



2. Communication channels

NGOs
Municipalities
Electric companies

Customers

Citizens

Members

4. Evaluation

5. Web-based tool

Target specific behaviours

Re-analysing existing data // Literature search and document studies

Investment

Maintenance

Behaviour adaptation



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Behaviour types

- **Investment behaviours:**

- In energy efficient technology purchase of appliances
- In energy efficiency upgrades of buildings
- In energy efficient transport technology

- **Maintenance behaviours with relation to energy efficiency:**

- Maintenance of heaters, cars, tires, water heaters, cars, etc. relevant for keeping energy efficiency high.

- **Adjustment of everyday behaviours and behaviours in the private sphere:**

- High impact energy behaviour at home: concerning heating, cooling, use of warm water, cooking, washing, drying etc.
- Reorganizing mobility behaviour: trip chaining, co-driving, increased use of public transport, e-biking, biking etc.



Intervention types

- **Feedback on own consumption;** is based on providing feedback to participants on their past and current behaviour, specifically their electricity consumption.
- **Social norms;** are based on providing participants with information about the behaviour of other people and about the socially acceptable standards of behaviour.
- **Information including Simplification;** is based on providing participants with information for example concerning behaviours that lead to energy savings.
- **Monetary incentives;** are based on to what degree people are motivated by financial considerations in the context of energy-related behaviours.
- **Commitment;** here participants are asked to commit to future behaviours or specific behavioural goals that are related to reducing energy consumption and other sustainable behaviours.
- **Competition;** is based on setting up conditions that introduce a contest where participants with the best performance are awarded a prize.
- **Collective vs. individual framing;** both matter for energy-related decisions, but depending on the behavioural context and target audience the effect might vary.





Social Research



PRIMĂRIA ȘI CONSILIUL LOCAL CLUJ-NAPOCA



UNIVERSITATEA BABEȘ-BOLYAI



İZMİR EKONOMİ ÜNİVERSİTESİ



Study Coordinator



Accendi la TUA energia

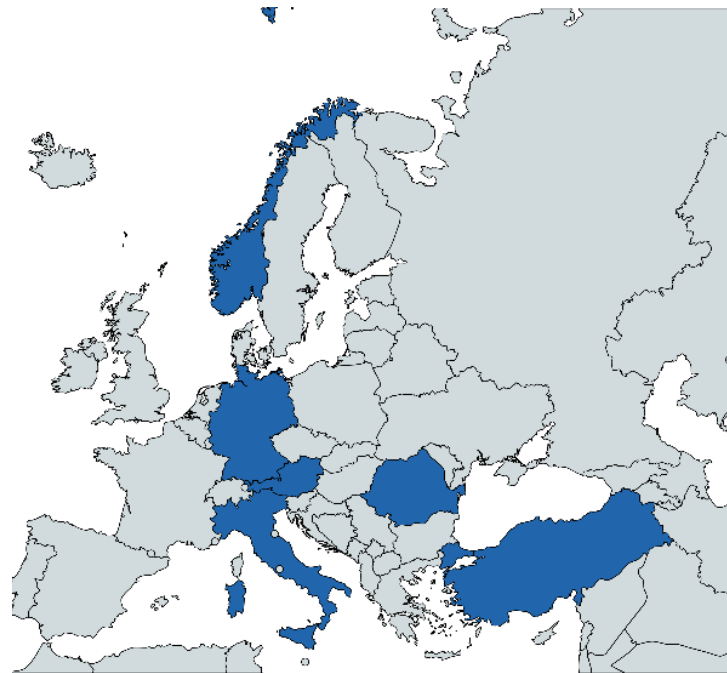


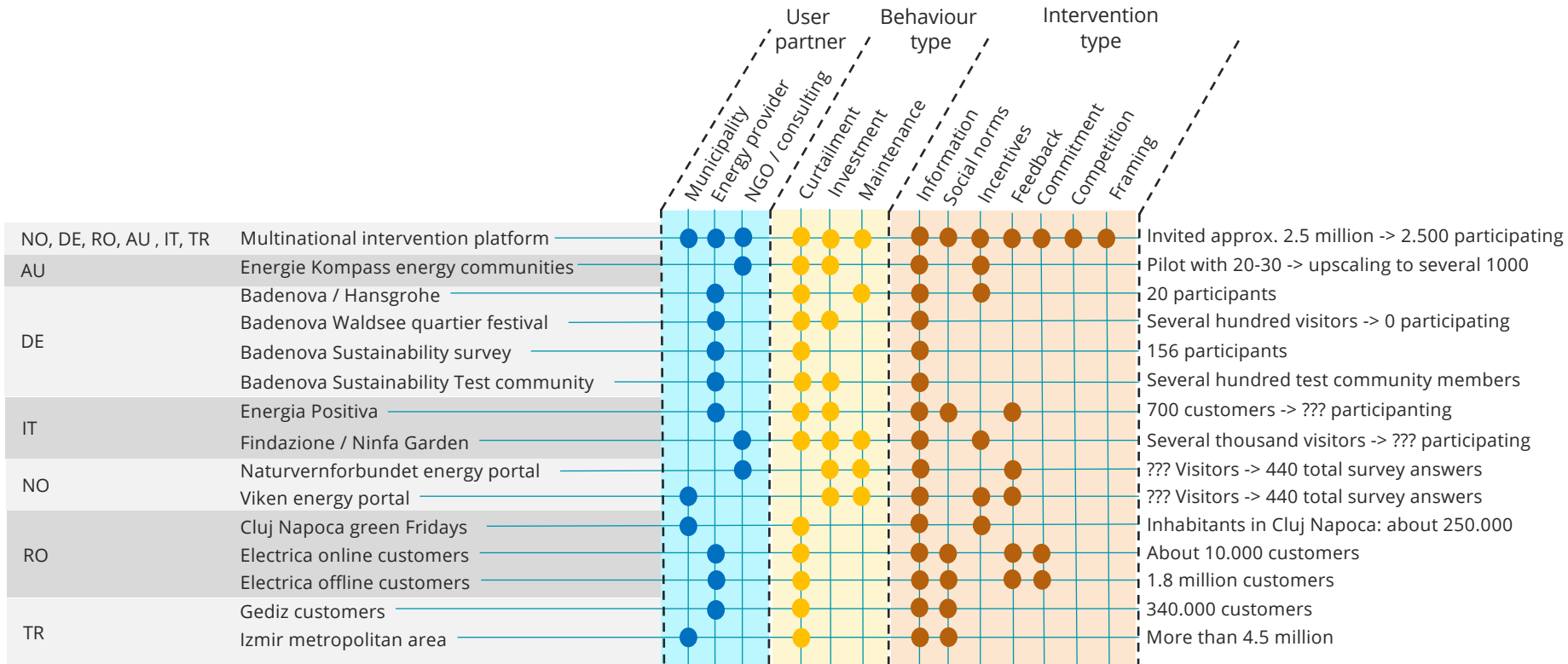
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Contextualization

- **Interventions types** (e.g., information campaigns, consumption feedbacks, social norms).
- **User-partners' categories** (e.g., municipalities, NGOs and energy providers),
- **Targeted behaviours** (e.g., investments, household heating and cooling, transportation),
- **Communication channels** (e.g., press, advertising, applications, web portals)





Total target population: approx. 8 million

What are the main take-aways?

- Behavior change has potential to reduce electricity consumption
- However: Engagement is key (both in households and communicators)
- Increasing energy literacy in itself is a value
- Keeping attention and motivation over time is demanding



What should you have a look at?

- The «ENCHANT A to Z»:
<https://enchant-project.eu/enchant-from-a-to-z/>
(I will show you in a minute)
- The Energy intervention platform:
<https://app.enchant-project.eu/>
- The Energy Wizard
- And of course all our interesting deliverables... 😊





Introduction of the ENCHANT campaign platform



ENCHANT

Energy Efficiency through behaviour Change Transition Strategies



Select your country and mission

NORWAY



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The energy intervention platform

- Automated platform in six languages (more possible)
- Five weeks interventions to reduce electricity consumption
- Delivers surveys (starting survey, six short weekly surveys)
- Assigns 12 different intervention packages
- 2 control groups
- Randomized control trial features



Design



Surveys	Starting survey	Weekly survey	Weekly survey	Weekly survey	Weekly survey	Weekly survey	Weekly survey
Interventions	Randomization	Information Collective frame Competition	Information Collective frame Commitment Social Norms (Competition)	Information Collective frame Commitment Social norms Feedback (Competition)	Feedback (Competition)		



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Weekly measurement

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Who else is committed to:

People are committing to save e
of the most recent participants w
to make a significant contributor

Participant	Save goal	Date
129	5%	09,10,2022
108	5%	09,09,20
107	5%	09,09,20
101	5%	09,09,2022

This is
your
result

Best group consumption reduction

Here we display how much the group saving the most
electricity saved per capita compared to the first
week. Maybe this is an inspiration for you.

60 %

Your measurement

We will open a link for a new electricity meter reading
every week. You will also get a short survey and some
information about your consumption. Please provide
the measurements on time.

Contribute

History

You can stop this mission. We will save all collected measurements, but you will not be able
to contribute any further steps. If any other mission will start we will let you know.
Stop mission

Weekly measurement

Saving electricity is an important issue for you

Electricity consumption has become a hot topic in Norway this year. Electricity prices have exploded in many parts of Norway. At the same time, it is known that more clean electricity will be needed in the future in Norway and Europe to replace fossil fuel.

Therefore, you can do a lot of smaller and larger things that reduce your electricity consumption, which will help you to control your costs and save the environment at the same time. You personally can make a difference!

In Norway, almost all households have a smart electricity meter and you can get a lot of information about your electricity use on the website of your electricity net provider or in the apps they provide. Have you checked them?

Here are some tips what you personally can do to save electricity. Some of them are simple changes in everyday behaviours, some require a smaller or larger investment. We focus mostly on the small things we can do without too much effort:



If you heat with electricity or a heat pump, you can turn down the thermostat by one degree

Heating is one of the largest energy consumers in your household. If you turn down the temperature by just one degree you can make a big difference while still being comfortable.

Seal the leakages in windows and doors and put up thicker curtains during winter
A lot of energy is lost by leakages of cold air through windows or doors that are not

Weekly measurement

Saving electricity is an important issue for us in Norway

"Electricity consumption has become a hot topic in Norway this year. Electricity prices have exploded in many parts of Norway. At the same time, it is known that more clean electricity will be needed in the future in Norway and Europe to replace fossil fuel.

Therefore, we in Norway can do a lot of smaller and larger things that reduce our electricity consumption, which will help us to control our costs and save the environment at the same time. Together, we can make a difference!

In Norway, almost all households have a smart electricity meter and we can get a lot of information about our electricity use on the website of our electricity net provider or in the apps they provide. Have you checked them?

Here are some tips what we in Norway can do to save electricity. Some of them are simple changes in everyday behaviours, some require a smaller or larger investment. We focus mostly on the small things we can do without too much effort:

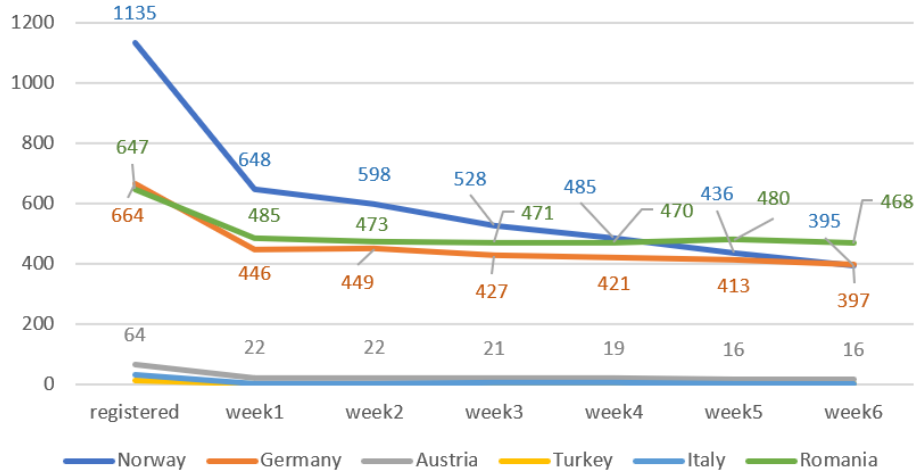


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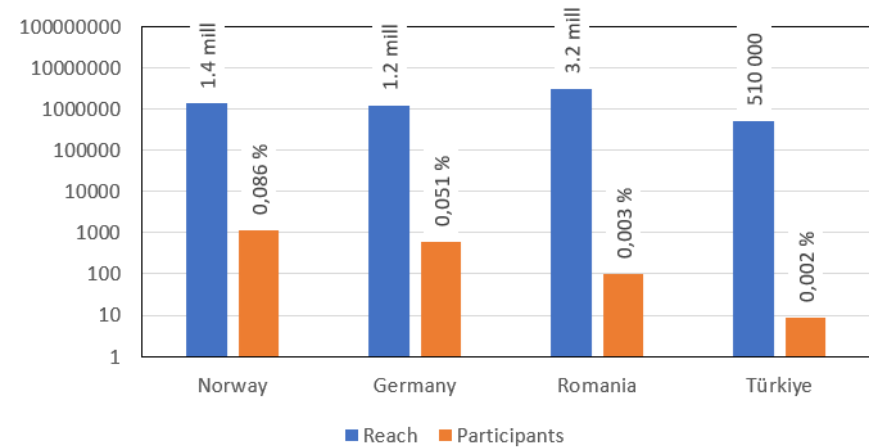
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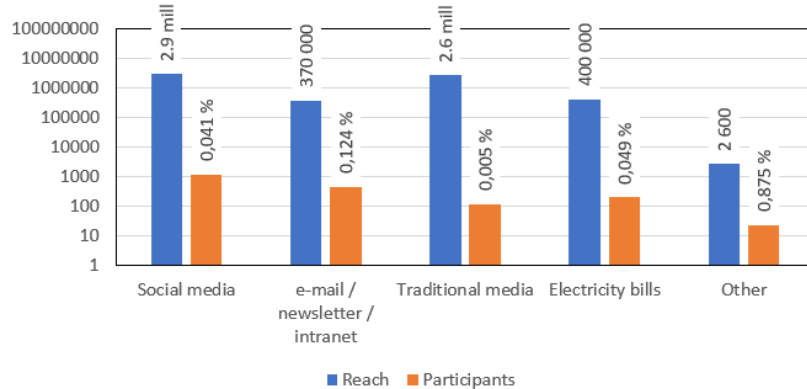
n per country per stage



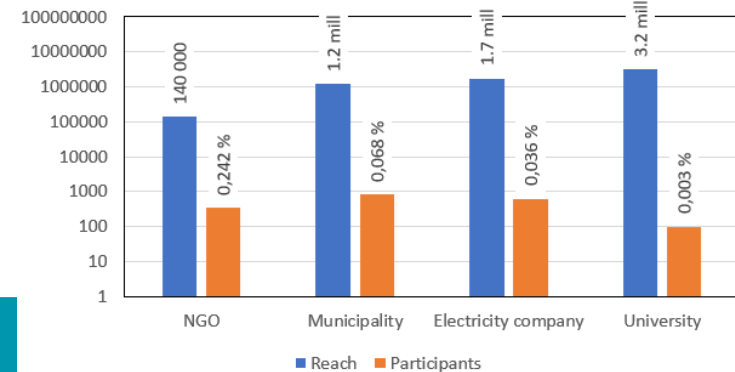
Recruitment per country



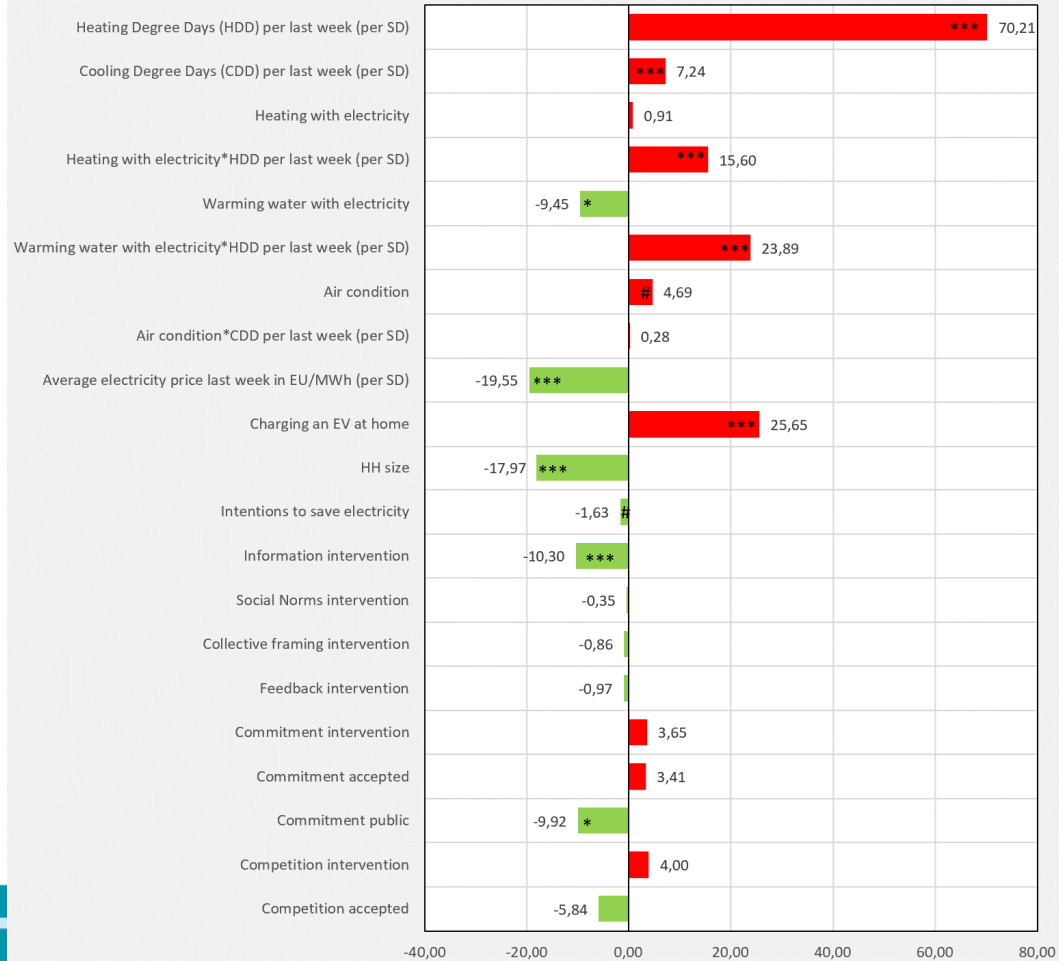
Recruitment channel type



Recruitment per organization type



Effects of Interventions and other factors on Electricity consumption



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Machine learning decision tool (The ENCHANT EnergyWizard)

- The data from the platform was used to train a machine learning algorithm:
 - Step 1: learn patterns in the data / identify groups of people
 - Norway: 6 groups; Germany: 3 groups, remaining countries: 3 groups
 - Step 2: Identify if people within these groups on average save energy, depending on the intervention group
 - Step 3: Rank the intervention packages per group that push most people to electricity saving
 - Step 4: Develop a tool that detects likely group membership based on relatively few questions
- Proof of concept / Upscaling plan for the platform and the EnergyWizard

