CLEAR is a project by European consumer organisations to advise and support consumers who want to produce electricity and heat from renewable energy sources in their households.

### CLEAR 2.0 in a nutshell

As energy bills increase and costs for renewable energy technologies decrease, consumers are increasingly installing renewable energy systems at home. Apart from contributing to climate protection, using renewables can considerably cut households' energy costs. But when consumers want to generate electricity in their homes, they often meet obstacles, among which not knowing who to turn to for independent advice.

### What did we do?

- Got better understanding of consumers' motivations and main triggers to change their behaviour by conducting online interviews.
- Tested what makes consumers use energy more efficiently by monitoring a group of households, providing them with information and equipment.
- Helped consumers make better informed choices by assessing the performance of renewable systems, and making this information accessible to more households through new online tools.
- Accompanied the consumer to buy cheaper and smarter through group purchases.
- Contributed to better national and EU energy policies
  where we advocated for easy and fast administrative and
  permit processes as well as for one stop shops providing
  consumers with information and personalised advice.

# CLEAR 2.0 involves 6 national consumer organisations:

- Test Achats/Test Aankoop (Belgium)
- Altroconsumo edizioni (Italy)
- OCU ediciones (Spain)
- DECO Proteste (Portugal)
- dTest (Czech Republic)
- Mipor (Slovenia)

#### It also includes:

- International Consumer Research and Testing (ICRT)
- The European Consumer Organisation (BEUC)

#### The technologies we covered were:

- Pellet stoves
- · Heat pumps for heating and cooling
- Photovoltaic panels, inverters, and installations performance
- Domestic batteries
- Systems to improve self-consumption and energy efficiency
- Systems to monitor energy consumption

### What we achieved

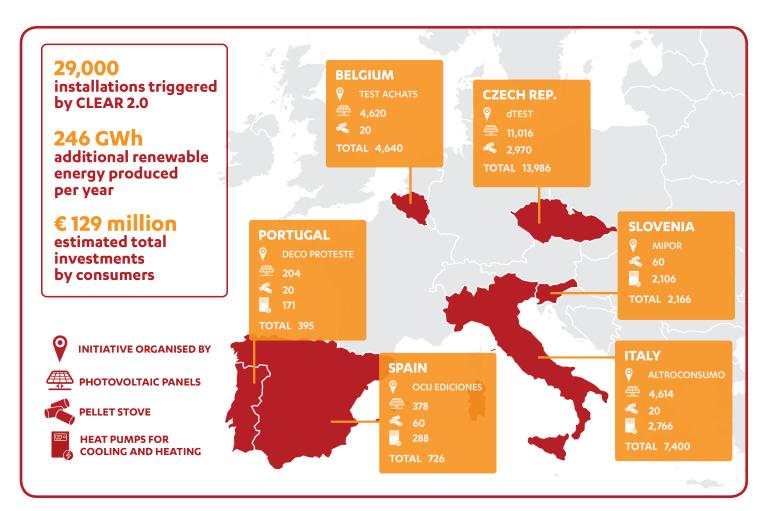
CLEAR 2.0 organised 17 group purchases of renewable energy installations.

These campaigns and related CLEAR 2.0 partners' actions triggered more than 29,000 installations of solar panels, pellet stoves or heat pumps for heating or cooling in households. The vast majority of installations were solar panels (71%), followed by heat pumps (18%).

Consumer organisations have been raising awareness and providing testing results on above technologies in more than 80 articles in their magazines.

Thanks to CLEAR 2.0, consumers are now producing an additional 246 GWh of renewable energy per year, which is the equivalent of doing 15,000 laps around the equator by car.

Consumers participating in CLEAR 2.0 achieved cumulative savings of 255 MWh/year and managed to directly use 26 MWh/year renewable energy they produced (self-consumption). This means cumulative savings of 97t  $CO_2$ /year, which is the equivalent to the  $CO_2$  emissions saved in one year by planting over 16,000 trees.



## Policy recommendations

#### **AVOID FREQUENTLY CHANGING LEGISLATION/TAXATION**

Regulatory instability, such as the tax on sun in Spain, changes in taxation and legislation to policies on renewable energy, undermine consumer trust and cut their appetite to engage in renewables.

#### **ENSURE CONSUMERS CAN EASILY ACCESS FINANCING**

A variety of financing options should be available to households: affordable and well-designed green loans (with payments in instalments), public funding for emerging technologies as well as tax incentives and 'pay as you save' schemes. Consumers should be able to access the right type of financing that works for them.

#### MAKE BETTER DEALS MORE WIDELY AVAILABLE

Group purchases and negotiated advantages can lower the costs for consumers. However, as group purchases of technologies are difficult to sustain in the long run, additional funding for these campaigns may be needed.

#### PROVIDE CONSUMERS WITH CLEAR, RELIABLE AND GRANULAR INFORMATION ON CONSUMPTION

Consumers should have access to all data on their energy consumption frequently enough. While smart meters will generate huge amount of data, consumption information should be communicated to consumers via an interface of their choice. Information should be clear, visually attractive and granular enough (i.e. per appliance).

#### NUDGE CONSUMERS THROUGH EDUCATION CAMPAIGNS

Consumer organisations have been providing consumers with behavioural tips such as how to optimise the use of appliances like washing machines, or make savings via eco-modes. Consumers could also profit from advice on smaller size investments and other tips on how to shift their energy consumption.

#### **IMPROVE INFORMATION ON AND ENERGY EFFICIENCY OF APPLIANCES**

Set stricter energy efficiency requirements for heat pumps and remove the worst performing appliances from the market. At the same time, the Energy label for heating appliances should be revised to reflect the real-life use.

CLEAR 2.0 started in September 2017 and ran till February 2020. It is a continuation and expansion of the first version of CLEAR which ran from 2014 to 2017. The CLEAR project consortium was formed by 8 organisations in 5 European countries. This included 5 consumer organisations: DECO Proteste (Portugal), Altroconsumo edizioni (Italy), Test-Achats/Test-Aankoop (Belgium), OCU ediciones (Spain) and Consumentenbond (Netherlands). It also included GfK market research and user experience research expert, the International Consumer Research and Testing (ICRT) and the Belgian renewable energy association APERe.