

About HACKS

The objective of the Heating and Cooling Knowhow and Solutions (HACKS) project is to achieve market transformation for heating and cooling (HAC) appliances and improve comfort and health of European citizens.

Across the EU almost half of all buildings have individual boilers that were installed before 1992 with efficiency of 60% or less. The expected energy savings from a speedy replacement are immense.

To achieve this goal, 17 HACKS partners in 15 countries worked together, thanks to the financial support of the European Horizon 2020 programme.

After scanning market actors, current policies and most commonly used products in each country, starting from April 2020 the HACKS partners have implemented involvement campaigns to raise awareness of the economic and environmental benefits brought by good HAC products and solutions:

1. HACKS has motivated households equipped with old and inefficient devices – boilers, water heaters, air conditioners, certain types of boilers and stoves, etc. – to replace them with new super-efficient equipment.
2. In each country, partners have set-up dedicated on-line platforms to assist consumers in their purchasing process. The platforms propose: tools to assess households' needs and provide customised information; best product lists with technical specifications; direct links to suppliers of most efficient products; and advice on how to use and maintain equipment.
3. For those households who need to improve their situation because they feel too hot, too cold, or too humid but who cannot invest in new equipment or can avoid getting equipped, HACKS proposed simple and low costs solutions. It is possible to reduce energy consumption and energy bills while improving winter and summer comfort, air quality and health conditions through the installation of shading devices, thermostats, water saving taps and showerheads, etc.

Beyond households, HACKS has targeted all relevant stakeholders (“multipliers”) that participate in the decision-making process of consumers by setting up strategic partnerships to facilitate the purchase of energy efficient appliances. HACKS placed a strong emphasis on installers but also retailers and consumer organisations because of their proximity to consumers, their capacity to involve them and bring them guidance on energy efficient equipment.

More information on the HACKS project can be found at www.topten.eu/hacks. Most national HACKS website will remain active after the end of the project.

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Presenting HACKS at International Conferences

This report (D7.3) summarizes the activities undertaken by several Topten teams to communicate the existence of the HACKS project and to disseminate results at the European level.

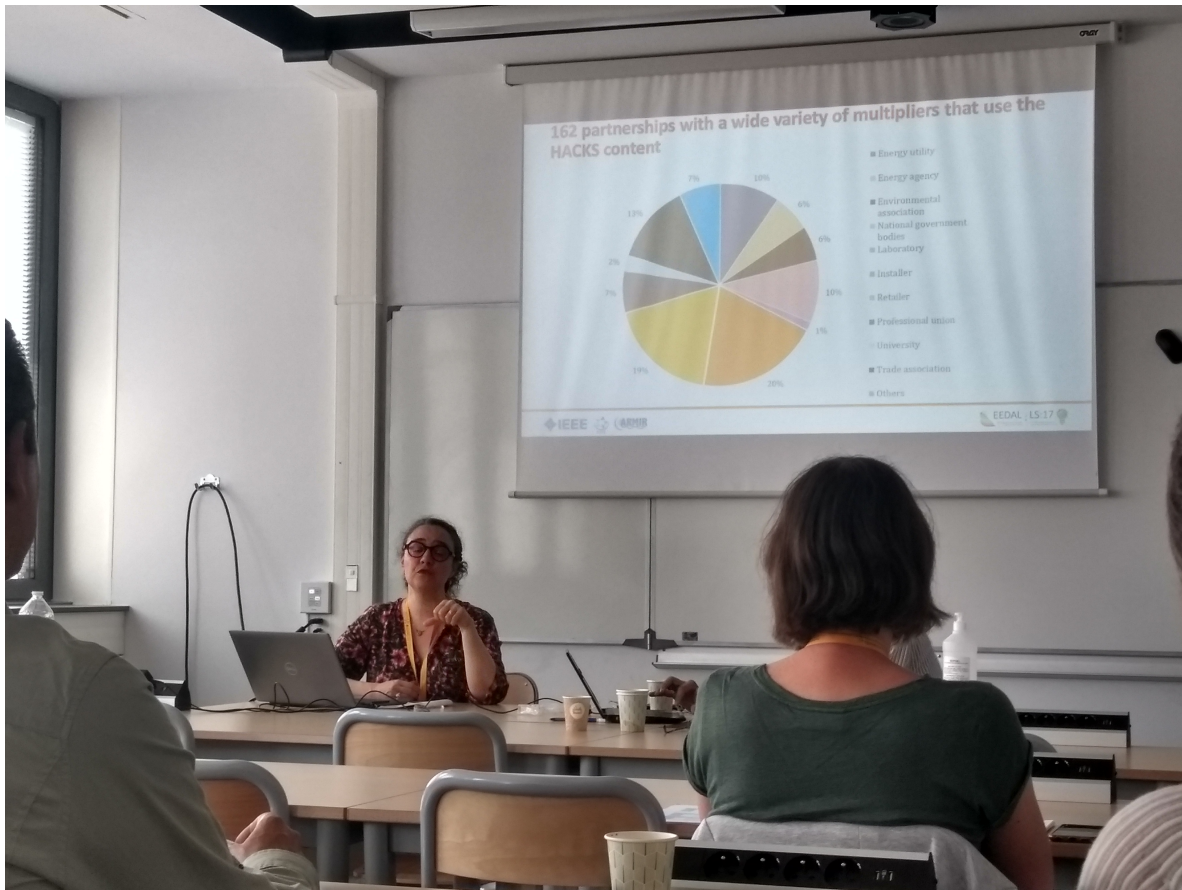
Within Task 7.3, the task leader Bush Energie has continuously maintained the European portal <https://www.topten.eu/> with all of its respective sections: the main portal providing access to the 15 national websites (plus Argentina, Brazil, Chile and Peru), product lists at the European level, a [news section](#), access to the [PRO Section](#) for procurement, a page introducing the [HACKS project](#) and a portal containing the [deliverables](#) of the HACKS project.

Project results were communicated at the European level, focusing on market transformation, technical innovations, practical tips for consumers and impacts of European and National energy efficiency regulations. The presentations at international conferences as well as main reports and discussion papers are listed below. They can also be found on www.topten.eu/documentation.

- **EEDAL '22 conference** in Toulouse, June 2022:
 1. Market Transformation for Heating and Cooling Equipment in Europe: using benchmark and advice to involve stakeholders (Sophie Attali et al). [Paper](#) and [presentation](#).
 2. Heating with Air Conditioners – fast and affordable transition towards carbon neutrality (Andrea Roscetti et al). [Paper](#) and [presentation](#).

- **eceee Summer Study '21** online, June 2021:
 1. Heating and Cooling equipment: Fixing problems (sufficiency) and/or investing in a new equipment (efficiency) (Sophie Attali et al). [Paper](#) and [presentation](#).
 2. Heating with Air Conditioners – fast and affordable transition towards carbon neutrality (Andrea Roscetti et al). [Presentation](#).









- **International promotion material**
 1. [Euresearch video](#) about HACKS as an H2020 project (2020)




Picture 1: Author Sophie Attali explains the variety of HACKS partners during her presentation «Market Transformation for Heating and Cooling Equipment in Europe» at the EEDAL22 in Toulouse, June 2022

Investment in new equipment

- Lists of Best Available Technology – BAT - products

 <p><u>Air Conditioning Units</u> Single split Multi split</p>	 <p><u>Comfort Fans</u> To the product list</p>
 <p><u>Electric Water Heaters</u> To the product list</p>	 <p><u>Circulation Pumps</u> To the product list</p>
 <p><u>Solid Fuel Boilers</u> To the product list</p>	 <p><u>Local Space Heaters</u> To the product list</p>
 <p><u>Heat Pumps</u> To the product list</p>	 <p><u>Taps & Shower Heads</u> Taps Shower Heads</p>



Picture 2: Screenshot of the presentation "Heating and Cooling Equipment" by Sophie Attali during the eceed21 online conference, 2021

Heating and Cooling Knowhow and Solutions - HACKS H2020 project

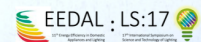
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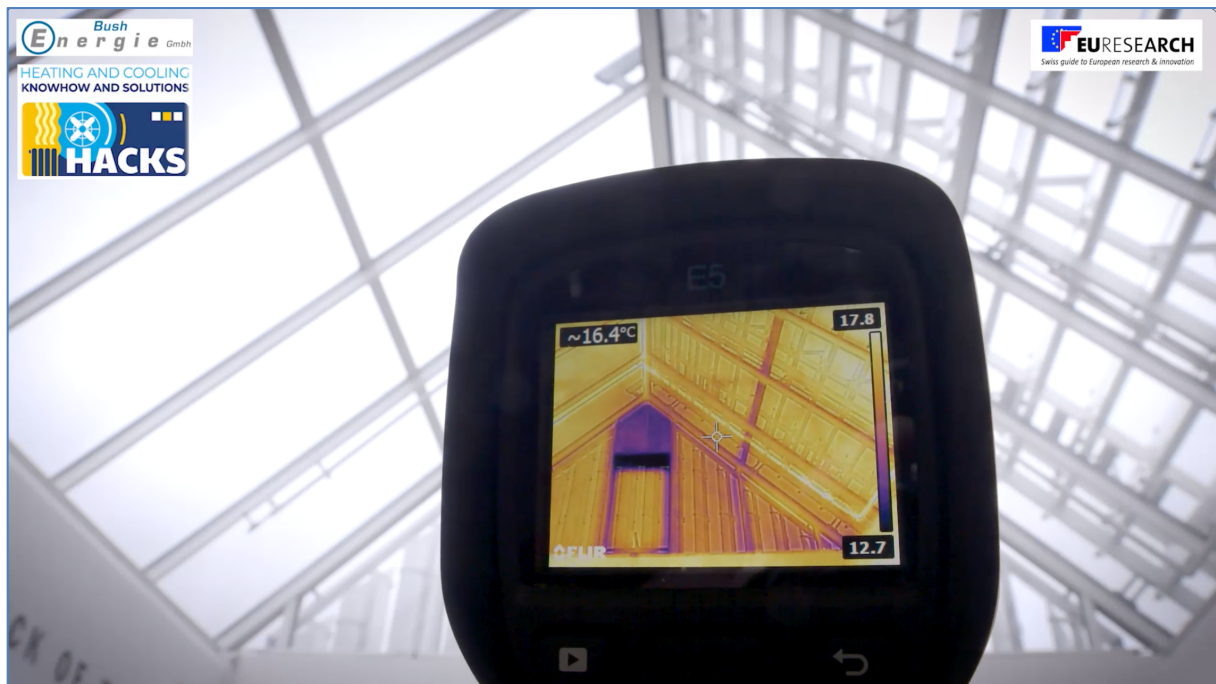


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Picture 3: Screenshot of the presentation "Heating with Air conditioners" by Andrea Roscetti during the eceee21 online conference, 2021



Picture 4: The Euresearch Video (2020) showcases how the H2020 project HACKS identifies efficiency potential for heating and cooling solutions in the WWF office in Zurich, Switzerland