



## **Deliverable 4.5**

### ***Final report on the consumer involvement campaign and its result across Europe***

## **HACKS' activities undertaken between March 2021 and February 2023**

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European portal [www.topten.eu/hacks](http://www.topten.eu/hacks)

#### **Project partners and websites**

Austria, AEA  
[www.topprodukte.at](http://www.topprodukte.at)

Belgium, GoodPlanet  
[www.topten.be](http://www.topten.be)

Czech Republic, SEVEN  
[www.uspornsportrebice.cz](http://www.uspornsportrebice.cz)

France, Guide Topten  
[www.guidetopten.fr](http://www.guidetopten.fr)

Germany, co2online  
[www.co2online.de](http://www.co2online.de)

Italy, Eliante  
[www.topten.it](http://www.topten.it)

Lithuania, LNCF  
[www.ecotopten.lt/](http://www.ecotopten.lt/)

Luxembourg, Oeko-Zenter  
[www.oekotopten.lu](http://www.oekotopten.lu)

Norway, Naturvernforbund  
[www.energismart.no/](http://www.energismart.no/)

Poland, FEWE  
[www.topten.info.pl](http://www.topten.info.pl)

Portugal, Quercus  
[www.topten.pt](http://www.topten.pt)

Spain, ECODES  
[www.eurotopten.es/](http://www.eurotopten.es/)

Sweden, SSNC  
[www.toptensverige.se](http://www.toptensverige.se)

Switzerland, Bush Energie  
[www.topten.ch](http://www.topten.ch)

UK, EST  
[www.toptenuk.org](http://www.toptenuk.org)

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## 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](http://www.topten.eu/hacks). Most national HACKS website will remain active after the end of the project.

## Executive summary

The HACKS project is characterised by planned activities in several areas, including communication and awareness-raising, but also by the flexibility to adapt activities and seize opportunities as they arise. Therefore, this document provides a detailed overview of the activities concerning WP 4 "Consumer outreach campaigns", carried out by the partners during the second phase of the project itself, which run from March 2021 to February 2023.

Following an outline that retraces the very structure of the tasks envisaged in WP4, chapter 2 exhaustively analyses the activities carried out by the partners, both online activities (mainly related to the development of the web portals and the activities based on them) and offline activities (such as the production of graphic materials, the organisation of events, etc.). Where possible, data is provided in the form of graphs and tables in order to summarise the activities undertaken and the results achieved.

Chapter 3, on the other hand, presents an in-depth examination of the specific activities that were undertaken by the partners in order to respond to the energy crisis triggered by the Russian invasion of Ukraine. In fact, as early as February 2022, but especially during the winter of 2022-2023, the need to reduce energy consumption (and hydrocarbon imports from Russia) prompted many partners to modify their already planned activities, dynamically implementing specific strategies aimed at disseminating good practices for energy savings and sufficiency measures.

Finally, the conclusions underline how the HACKS project was able to adapt in a reactive and dynamic way to the two great challenges that characterized the period in which it took place: the COVID pandemic during the first phase and, indeed, the energy crisis triggered by the Russian invasion during the second phase.

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## List of acronyms

BAT: Best Available Technologies	HAC: Heating and Cooling
AT: Austria	LT: Lithuania
BE: Belgium	LU: Luxemburg
CZ: Czech Republic	NO: Norway
D: Deliverable	PL: Poland
DE: Germany	PT: Portugal
ES: Spain	SE: Sweden
FR: France	UK: United Kingdom
IT: Italy	WP: Work package

# 1 Introduction

The **WP4 Consumer outreach campaign** is a key work package, because it concerns the involvement of citizens and the raise of their awareness about the benefits of efficient heating and cooling equipment. The WP's aim is to inform and motivate consumers to replace their old and inefficient heating and cooling equipment, through designing a consumer involvement campaign, developing national internet platforms and developing additional activities to interact with citizens. For this reason, the WP includes both *online* and *offline* activities.

To achieve the set objectives, the Consumer outreach campaign includes:

1. The design and implementation of a consumer engagement campaign to raise awareness on the benefits of installing efficient heating and cooling equipment.
2. The development of national internet platforms, acting as a cornerstone of national campaigns and increasing understanding by providing reliable advice on the benefits of moving to efficient products and solutions (cost of savings, payback period, comfort, air quality, etc.).
3. The development of additional activities to interact with consumers and increase their involvement.

The development of the project activities was strongly influenced by two exceptional events: the pandemic outbreak in early 2020 and the energy crisis triggered by the Russian invasion of Ukraine in 2022 (which escalated in the winter of 2022-2023). These two completely unexpected events had obviously strong repercussions on the national campaigns but the HACKS project was able to demonstrate its adaptability to changing contexts by developing specific activities to meet new needs.

The consumer involvement campaign framework also included a media outreach plan in which partners were able to detail all HACKS related coverage they have obtained, either in print or online press. A detailed update on this activity can be found in *Deliverables 4.6 and 4.7*

## 1.1 First period of the project and the COVID crisis

The first part of the Project run from September 2019 to February 2021. In this phase, each country first prepared a consumer involvement campaign plan (gathered in D4.1) and National campaigns should have started in April 2020; however, the plans have been heavily revised due to COVID-19 and the consequent lockdown that affected most European countries. In fact, the economic crisis generated by the pandemic and also the low interest of public opinion on topics not directly related to COVID have influenced the launch of the campaigns and their effectiveness. For these reasons, most countries decided to delay the start of national campaigns for a few months. At the same time, some countries have decided to launch a softer campaign, linking their communication to current events: for example, talking about energy saving at home and smart working, or giving advices on how to reduce consumption through simple low-cost and no-cost actions.

Another element that impacted the partners' activities and their consumer involvement campaign was the implementation of their respective national sites. The websites



actually constitute the backbone of consumer involvement activities, both because they host lists of most efficient products promoted by HACKS (and the related contents dedicated to selection criteria, advices, an overview of existing incentives, insights, etc.), and because they host the tools that the project provided, and which aimed at increasing involvement: raffles, competitions, online calculator, etc. Some of these tools were developed centrally in the first phase of the project but were launched and used in the second phase.

The launch of the individual national campaigns therefore began with different timelines from country to country, based on the different national situations.

## **1.2 Second period of the project and the energy crisis**

The second and final part of the project started in March 2021 and ended in February 2023. During this phase, the partners put the national campaigns into full swing, implementing the use of centrally prepared tools and developing the full potential of their web portals at the national level. In addition, the easing of the COVID-related emergency also enabled the development of some in-person activities.

However, another unexpected event completely changed the general context, setting new priorities at national and European levels. In fact, the energy crisis, triggered by the Russian invasion of Ukraine, redefined the context within which the national campaigns were being developed, this time placing great emphasis on the issue of energy saving, with particular reference to the need to curb heating consumption during the winter of 2022/2023. The various contents of the HACKS project, both in terms of energy efficiency parameters aimed at choosing the best equipment, and in terms of solutions for heating homes at reduced or zero cost, were used by the partners in specific awareness-raising campaigns.

## 2 Engaging consumers across Europe

The partners' campaigns, due to the specific reasons stated above, started and developed with very different modalities and timing and consequently also the results obtained are very different between the various countries. The following paragraphs detail the campaigns and the main activities carried out in the individual countries.

### 2.1 Development of the national websites

#### 2.1.1 The role of the national websites

The use of national web platforms is a fundamental tool of the HACKS project, as they are used as a key interface to reach a large number of consumers. The idea of the project was to develop specific national sections on each of the 15 Topten portals already existing, in order to benefit from their visitor traffic and from the recognition of the Topten brand. Topten is a consumer-oriented online search tool, which presents the best models in various product categories, selected according to selection criteria such as energy efficiency and consumption, while other quality aspects like resource efficiency and health are also considered. Topten sites exist in 15 European countries since many years, Chile, Argentina, Brazil and Peru. All Topten teams research, select and present the best products available on their national markets.

Although not all platforms are called «Topten», they benefit from an already well-known brand and apply the Topten methodology in selecting and displaying the product lists.

For this reason, during the first months of the project, the partners started, often with the support of web specialists, to **implement a HACKS content on their Topten websites**. The following paragraphs describe the actions implemented by the partners.

Especially during the second part of the project, the various national websites were enriched with content related to the HACKS project. In particular through the publication of content, news, updates (e.g. the update of energy costs related to the 2022 energy crisis). These improvements were particularly stimulated by the so called “webscan” reports assessing the quality of the websites (deliverables 4.8, 4.9 and 4.10).

#### 2.1.2 HACKS section on national websites

A section relating to HACKS has been developed on all national web portals which are accessible from the European website: [www.topten.eu/hacks](http://www.topten.eu/hacks)

This section is very important, because it summarises the main features of the project and lists the HAC products available on each website. This section was updated regularly to picture the progress of each national page.

Table 1- List of the national website URL and their HACKS section.

Country	National website URL	HACKS page URL
 AT	<a href="https://www.topprodukte.at/">https://www.topprodukte.at/</a>	<a href="https://www.topprodukte.at/services/besseres-wohnlklima/eu-projekt-hacks">https://www.topprodukte.at/services/besseres-wohnlklima/eu-projekt-hacks</a>
 BE	<a href="https://topten.be/">https://topten.be/</a>	<a href="https://topten.be/private/page/hacks-nl">https://topten.be/private/page/hacks-nl</a>
 CH	<a href="https://www.topten.ch">https://www.topten.ch</a>	<a href="https://www.topten.ch/private/page/hacks">https://www.topten.ch/private/page/hacks</a>
 CZ	<a href="http://www.usporiespotrebice.cz">www.usporiespotrebice.cz</a>	<a href="http://www.usporiespotrebice.cz/private/page/hacks">http://www.usporiespotrebice.cz/private/page/hacks</a>
 DE	<a href="http://www.topeffizient.de">www.topeffizient.de</a>	<a href="https://topeffizient.de/private/page/hacks">https://topeffizient.de/private/page/hacks</a>
 ES	<a href="https://eurotopten.es/">https://eurotopten.es/</a>	<a href="https://eurotopten.es/private/page/hacks-conocimientos-y-soluciones-para-calefaccion-y-refrigeracion">https://eurotopten.es/private/page/hacks-conocimientos-y-soluciones-para-calefaccion-y-refrigeracion</a>
 FR	<a href="https://www.guidetopten.fr">https://www.guidetopten.fr</a>	<a href="https://www.guidetopten.fr/grand-public/page/chauffage-et-climatisation">https://www.guidetopten.fr/grand-public/page/chauffage-et-climatisation</a>
 IT	<a href="http://www.topten.it">www.topten.it</a>	<a href="https://topten.it/private/page/hacks">https://topten.it/private/page/hacks</a>
 LT	<a href="https://ecotopten.lt/">https://ecotopten.lt/</a>	<a href="https://ecotopten.lt/private/page/hacks">https://ecotopten.lt/private/page/hacks</a>
 LU	<a href="https://www.oekotopten.lu">https://www.oekotopten.lu</a>	<a href="https://www.oekotopten.lu/private/page/hacks">https://www.oekotopten.lu/private/page/hacks</a>
 PL	<a href="http://www.topten.info.pl">www.topten.info.pl</a>	<a href="http://www.topten.info.pl/hacks">www.topten.info.pl/hacks</a>
 PT	<a href="http://www.topten.pt">www.topten.pt</a>	<a href="https://topten.pt/private/page/hacks">https://topten.pt/private/page/hacks</a>
 NO	<a href="http://www.energismart.no">www.energismart.no</a>	<a href="http://energismart.no/om-energismart/category884.html">energismart.no/om-energismart/category884.html</a>
 SE	<a href="https://toptensverige.se">https://toptensverige.se</a>	<a href="https://www.toptensverige.se/produkter-privat/värme-kyla">https://www.toptensverige.se/produkter-privat/värme-kyla</a>
 UK	<a href="http://www.toptenuk.org/">http://www.toptenuk.org/</a>	<a href="http://www.toptenuk.org/private/page/hacks">http://www.toptenuk.org/private/page/hacks</a>



Figure 1 - The HACKS section on Topten.pt

In order to make the HACKS section visible on their websites, partners have implemented various strategies (in many cases, adopting all these strategies jointly):

- Inserting an image dedicated to the project in the carousel of images at the top of the home page.
- Publishing a box in the right column of the home page (or somewhere else on their homepage)
- Publishing a news dedicated to the project, in the news section.
- Publishing news related to HACKS.



Figure 2 - The Ecotopten.lt homepage. At the top of the page there is a "Carousel" of images. One of these is dedicated to HACKS and refers to the Project section in the website. This strategy has been adopted by many partners.

### 2.1.3 HACKS Product lists, selection criteria and advice pages

The aim of the HACKS Project is to maximize savings and avoid energy waste, both encouraging the replacement of old heating and cooling equipment with the best technologies available today, and providing useful advice to reduce consumption and lower bills to those who cannot afford expensive installations. Encouraging the choice of new efficient products by consumers is therefore essential. In fact, consumers for the most part are not specialists on this subject and can easily be overwhelmed by the terminology used in this sector, the complexity of the technologies, the amount of data available, etc. For these reasons, the HACKS project developed a series of lists of best

products on the market, selected on the basis of very stringent environmental and energy performance criteria. Product lists are a "shortcut" for consumers to identify and find the best products among the hundreds of products available on their market – i.e. the selection criteria are adapted to national markets to make sure that consumers can benefit from best available products they can really find locally.

For each list of products, the selection criteria used to select the products displayed on-line are published.

MODÈLE	CARACTÉRISTIQUES	PERFORMANCES	COÛT D'UTILISATION
Thermia ATLAS 12 400V (aquifère)	<ul style="list-style-type: none"> <li>Source d'énergie <b>Aquifère</b></li> <li>Type <b>Monobloc</b></li> <li>Puissance basse température (kW) <b>12.54</b></li> <li>Bruit intérieur (dB) <b>33</b></li> </ul>	<ul style="list-style-type: none"> <li>Classe énergie <b>A+++</b></li> <li>Conso. énergie chauffage (kWh/an) <b>2454</b></li> </ul>	<ul style="list-style-type: none"> <li>Coût en électricité sur 15 ans <b>6 990 €</b></li> <li>Économie d'énergie par rapport à un modèle peu efficace (classe A+) <b>11 687 €</b></li> </ul>
Thermia ATLAS 18 400V (aquifère)	<ul style="list-style-type: none"> <li>Source d'énergie <b>Aquifère</b></li> <li>Type <b>Monobloc</b></li> <li>Puissance basse température (kW) <b>17.55</b></li> <li>Bruit intérieur (dB) <b>36</b></li> </ul>	<ul style="list-style-type: none"> <li>Classe énergie <b>A+++</b></li> <li>Conso. énergie chauffage (kWh/an) <b>3160</b></li> </ul>	<ul style="list-style-type: none"> <li>Coût en électricité sur 15 ans <b>9 001 €</b></li> <li>Économie d'énergie par rapport à un modèle peu efficace (classe A+) <b>13 970 €</b></li> </ul>
Thermia Calibra 7 400V (aquifère)	<ul style="list-style-type: none"> <li>Source d'énergie <b>Aquifère</b></li> <li>Type <b>Monobloc</b></li> <li>Puissance basse température (kW) <b>8.51</b></li> <li>Bruit intérieur (dB) <b>32</b></li> </ul>	<ul style="list-style-type: none"> <li>Classe énergie <b>A+++</b></li> <li>Conso. énergie chauffage (kWh/an) <b>2463</b></li> </ul>	<ul style="list-style-type: none"> <li>Coût en électricité sur 15 ans <b>7 016 €</b></li> <li>Économie d'énergie par rapport à un modèle peu efficace (classe A+) <b>10 103 €</b></li> </ul>

Figure 3 - Product list (heat pumps) from Guidetopten.fr

In order to ensure maximum transparency, the national sites also provide **selection criteria pages**: for each product category, a section on the parameters used to select the products on the portals. The selection criteria section also provides additional information: the explanation of the methodology, a glossary of the technical terms, links for more in-depth information, etc.

	Stufe a pellet	Stufe a legna
Etichetta energetica	A+	A+
Particolato [mg/m <sup>3</sup> ]	15	25
Carico nominale di CO [mg/m <sup>3</sup> ]	250	650
Carico nominale di CO org [mg/m <sup>3</sup> ]	10	35
NOx [mg/m <sup>3</sup> ]	100	100

Figure 4 - The Topten.it page of the local space heaters selection criteria

In addition, for each product category, an **advice page** is available with recommendations on how to choose correctly and how to efficiently use heating and cooling products. In fact, each product, in order to be truly efficient, must be able to function well, be correctly sized and set up. The recommendations also contain useful information on emissions related to equipment, aspects on circular economy (duration, warranties, spare parts), comfort, air quality, maintenance and design.

Each HACKS national partner has tailored the information to the specificities of their national market (technology used, climate, electricity prices, CO<sub>2</sub> emitted, etc.).

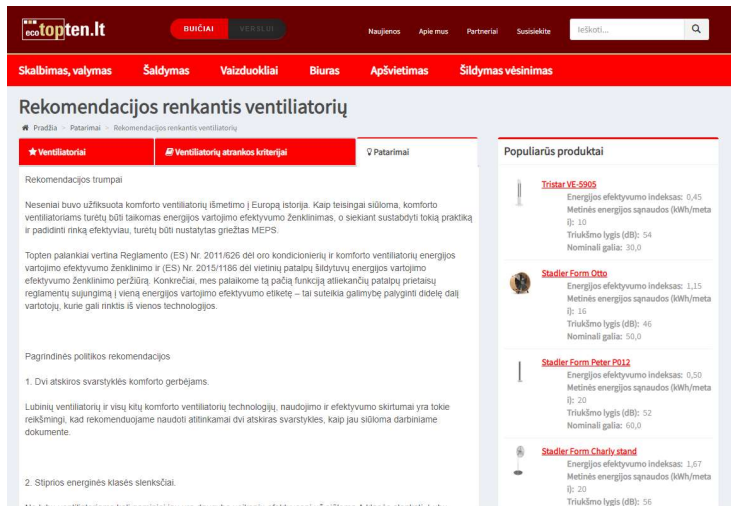


Figure 5 - The ecoTopen.it page of the comfort fan advice

The following table shows the lists which were implemented by the various Topen teams. In green are the lists activated during the first part of the project, in blue those activated during the second part.

Table 2 – HACKS Product lists displayed on the national websites

Equipment	 AT	 BE	 CH	 CZ	 DE	 ES	 FR	 IT	 LU	 PL	 PT	 LT	 NO	 SE	 UK
Ventilators		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Air conditioners	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓			✓
Mobile air conditioners				✓											
Intelligent thermostat			✓												
Heat pumps <sup>1</sup>	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solid fuel boilers	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Pellet			✓						✓						
Local space heaters		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Heat pump water heaters	✓	✓	✓	✓				✓	✓	✓	✓			✓	✓
Electric water heaters and combined water heaters (heat loss below 1,2 kWh/day)												✓			
Dehumidifiers			✓												
Taps and shower heads <sup>2</sup>		✓	✓	✓	✓	✓	✓	✓			✓				✓
Circulation pumps		✓	✓	✓				✓	✓	✓		✓	✓	✓	
Windows			✓							✓				✓	
Photovoltaic <sup>3</sup>	✓		✓									✓			
Insulation	✓								✓						
Doors										✓					
District heating														✓	
Solar Thermal										✓		✓			
Humidifiers				✓											

<sup>1</sup> UK, instead of a single list, provided 3 lists: air heat pumps, water heat pumps and ground heat pumps. SE developed a list only for air/air heat pumps. NO provided 3 lists: groundheat pumps, air/air heat pumps and air/water heat pumps. FR provided 2 lists: 35° heat pumps (for radiant floor) and 55° ones (for radiators).

<sup>2</sup> UK, instead of a single list, provided 3 lists: Taps, Shower Heads and Electric Showers. DE provided a list only for head showers.

<sup>3</sup> The CH list is dedicated to the Plug & Play Photovoltaic

## 2.2 Online calculator

In order to assist citizens in assessing their individual heating and cooling needs, two calculators have been developed: a **heating calculator** and a **cooling calculator**.

Both were developed in order to support consumers, taking into consideration eg. size of the rooms, the characteristics of the existing systems, the costs in the bill, etc. and providing customized solutions and calculating the achievable savings, both in economic and environmental terms.

The calculators were developed centrally by POLIMI (which took into account the inputs of the various partners) and then translated by the various partners for national versions.



The [heating calculator](#) was developed by Polimi, based on input from the various partners, and went online on 31<sup>st</sup> March 2021. The calculator was used by all partners, except AT, NO and SE, since calculators with the same purpose already existed in these countries.

Overall, the heating calculator was used by ca. 10,700 people.



As the topic of cooling was considered particularly important from an energy point of view, especially for southern European countries, it was decided to also develop an online calculator to support citizens in choosing efficient interventions to cool their homes. This [cooling calculator](#) was launched in September 2022 and was implemented by the following countries: AT, CH, ES, FR, IT, PL, PT.

In total, the cooling calculator has been used ca 240 users.

The promotion of the calculators was carried out by the partners in various ways, mainly by giving visibility on the site (homepage, specific news), with social media campaigns, through promotion on other organisations' websites. In addition, the use of the calculator was considered mandatory for participation in the two central competitions organised by the project (April 2021 and February 2022 - see below).

The goal of the project was to achieve at least 15,000 uses of the calculator. This target was not achieved despite the efforts of the various partners, possibly because there are many other free calculators online, or because the compilation, if correct inputs are to be obtained, takes some time and the online user is not always willing to devote more than a few minutes to a topic. This explanation is supported by the fact that the number of visitors to the calculator was higher than the project target (33,200 visitors), which means that many people started using the calculator, but did not finish the compilation.



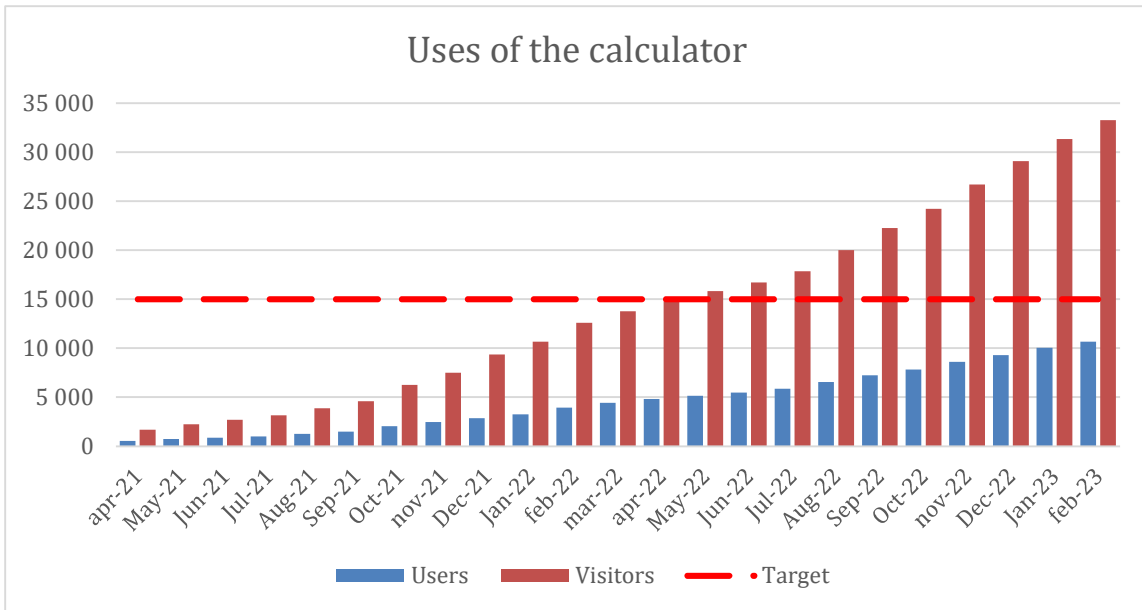


Chart 1 – Visitors and users of the calculator

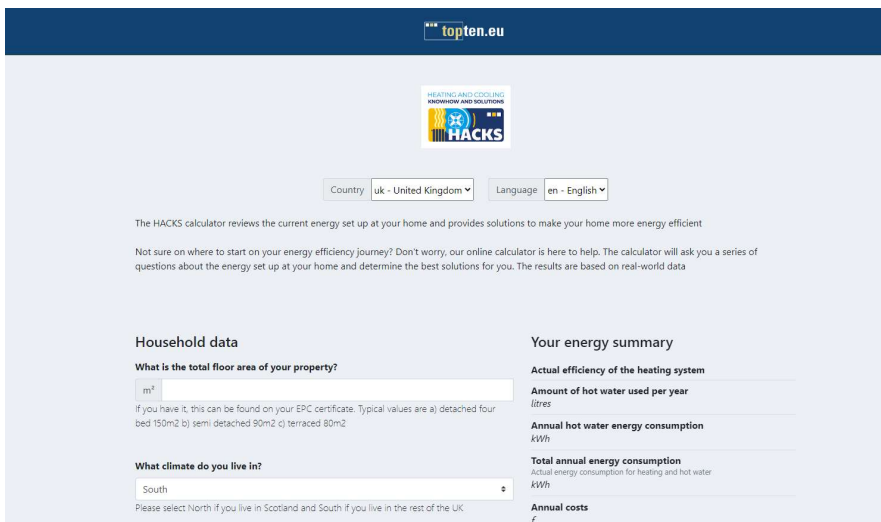


Figure 6 – The homepage of the Heating Calculator










Figure – 7 The homepage of the Cooling Calculator

## 2.3 Deep links

The use of *deep links* on the web-portals of the HACKS Project was designed in order to facilitate the purchase of efficient equipment for heating and cooling. In general, deep links are links (*hyperlinks*) that lead to an internal page of a different website. The adjective *deep* indicates that these are direct links, which avoid the home page and the intermediate pages of the arrival site, and direct them directly to the content that must be reached. The deep links implemented on the HACKS Project portals connect the product in the Project lists directly with portals where it is possible to finalise the purchase. Through the agreement with online retailers, the products selected on the HACKS portals are linked with "deep links" directly to online stores, so that consumers, with a simple click, can directly purchase this super-efficient product, without the need for further research.

Deep links have only been implemented by some countries for HAC products, CH (for 5 product categories), ES (for four category), IT (for two categories), PT (for two categories), France (for one category) and SE (for three categories), while NO has chosen not to create real deep links that allow the purchase of the product, but has integrated a contact form on the site, linked to expert installers in the energy sector. Other countries have made deals with online retailers, but have not yet implemented deep links and may do so in the coming months. Overall, the HACKS partners have entered into agreements with 21 online shops.

Table 3 – HACKS Product lists with deep links by country

Country	Product lists with deep links	Number of online retailers agreements
 CH	Comfort fans, Humidifiers, Dehumidifiers, Smart heating controls, Taps and Head showers	12
 ES	Air conditioners, Comfort fans, Heat pumps, Local space heaters	6
 FR	Comfort fans	1
 IT	Comfort fans, Taps and Head showers	3
 NO	Heat pumps, Air conditioners, Solid fuel boilers, Solar thermal <sup>4</sup>	-
 PT	Comfort fans, Air conditioners	1
 SE	Local space heaters, Heat pumps, Windows <sup>5</sup>	1

<sup>4</sup> NO has chosen not to create real deep links that allow the purchase of the product, but have integrated a contact form on the site, linked to expert installers in the energy sector

<sup>5</sup> For products not available on prisjakt.se (circulation pumps, wood & pellets furnaces), links lead to maps or lists of installers certified for the actual products. For the district heating category, links lead to pages specific to the ecolabelled district heating contracts.

The development of deep links is somehow a challenge for HAC products: for example, not all HAC products have EAN or GTIN codes which are necessary to make automatic links (or they are difficult to find), or at a more general level, some HACKS products are not suitable for online sales (for example heat pumps, biomass boilers, etc.) because they require a professional installer. In general, deeplinks are easier for products such as fans, taps and showerheads.

	Marca & Modello	Energia	Tipo	Dati tecnici	Costo (CHF)	Confronto prezzi
	Styles Lyra	Energia (kWh/anno): 1.6 Indice di efficienza: 1.00 Standby (W): 0.0	da tavolo	Potenza sonora (dB): 35 Ventilazione aria (m³/min): 5.0	Elettricità su 15 anni: CHF 5	CHF 49.95
	Sonnenkönig TENERO	Energia (kWh/anno): 4.0 Indice di efficienza: 0.51 Standby (W): 0.1	a torre	Potenza sonora (dB): 49 Ventilazione aria (m³/min): 6.1	Elettricità su 15 anni: CHF 12	CHF 79.00
	Sonnenkönig DOLMEN 3	Energia (kWh/anno): 5.2 Indice di efficienza: 0.47 Standby (W): 0.5	a torre	Potenza sonora (dB): 58 Ventilazione aria (m³/min): 7.0	Elettricità su 15 anni: CHF 16	CHF 110.70
	Coop FT-23A	Energia (kWh/anno): 5.6 Indice di efficienza: 0.90	da tavolo	Potenza sonora (dB): 54 Ventilazione aria (m³/min): 15.7	Elettricità su 15 anni: CHF 17	CHF 19.95
	AEG VL 5528	Energia (kWh/anno): 5.6 Indice di efficienza: 0.90	da tavolo	Potenza sonora (dB): 54 Ventilazione aria (m³/min): 15.7	Elettricità su 15 anni: CHF 17	CHF 36.80
	Sonnenkönig	Energia (kWh/anno): 6.5 Indice di efficienza: 0.51	a torre	Potenza sonora (dB): 58	Elettricità su 15 anni: CHF 19	CHF 74.70

Figure 7 - Example of a product list (comfort fans) with deep links (see the red arrow) from the CH website

Disponibile da	In stock?	Con consegna?	Prezzo	Link
idealo	Sì	No	74,98 €	Al rivenditore

Figure 8 – Example of how a deep link is shown in the product detail, from the IT website

## 2.4 HACKS Prize competitions

With the aim of involving consumers and raise their awareness, the HACKS project envisaged two kinds of prize competitions: **raffles** and **central competitions**. Both provide a prize for winner(s), characterized by being a product related to energy

efficiency at home. The main difference between the two competitions is that the raffles were carried out at national level, while so called central competitions concerned all countries part in the project.

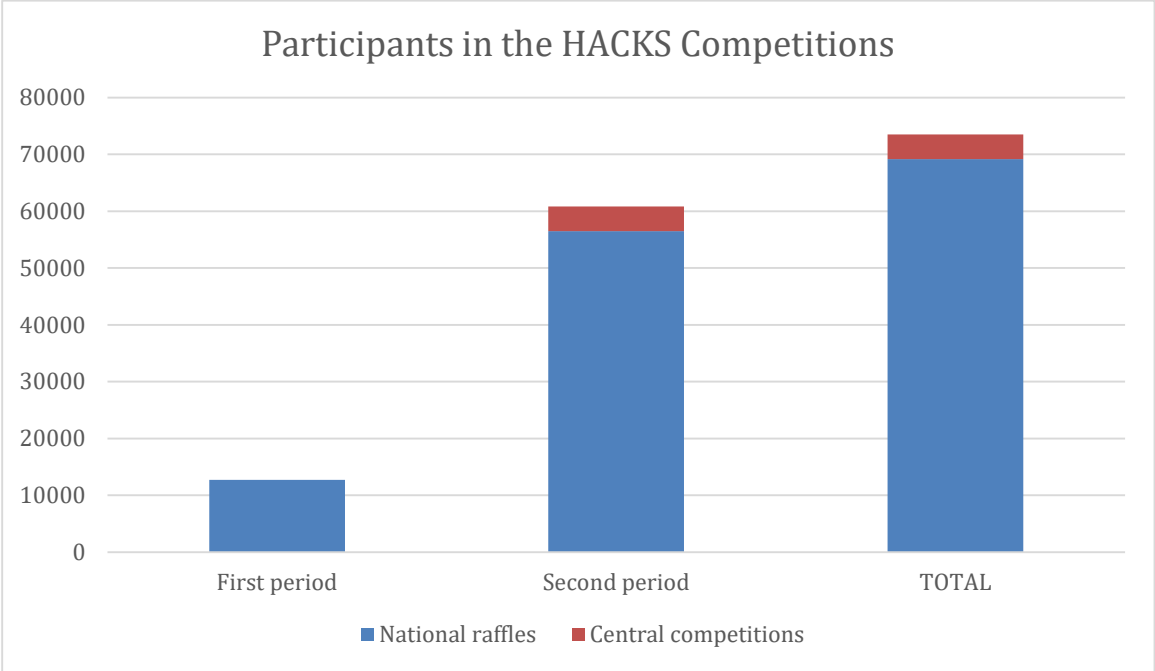


Chart 2 – Participants in the HACKS competitions

2.4.1 Central competitions



A total of two central competitions were organised, both during the second period of the project: the first in April 2021, organised in 14 countries (AT did not participate) and the second in February 2022, organised in 9 countries (AT, DE, NO, PL, SE did not participate). The non-participation of AT, NO and SE in the competition was linked to the fact that they had not adopted the online calculator. DE also did not participate in the second competition in February 2022, because during that time, the national Co2online campaign was focusing on the online *ModernisierungsCheck* calculator, instead of the HACKS calculator. In the case of Poland, the non-participation in the second edition was due to legal considerations.

In order to maximise the involvement of participants, a question related to the online computer developed by the project had to be answered correctly in order to participate in the central competitions. Four winners (2 for each competition) were awarded by drawing lots among those who had answered correctly.<sup>6</sup>

In total, the central competitions involved approximately 4,300 participants. The overall participation was below expectations, and most surely the need to fill-in the calculator made participation more complex.

The rules of the central competitions and their organisation were developed by the partner Eliante, with the support of a legal adviser. In Appendix 1, the English

<sup>6</sup> The winners of the competition were awarded a main prize (an air quality meter) and a secondary prize (chosen together with the winner, based on specific installation requirements, from a list of possible prizes, such as thermostatic valves, fans, etc.).

translation of the rules of the first central competition, held in April 2021, is attached. The official rules, being the competition organized by the responsible partner Eliante in Italy, were written in Italian: therefore, an English version was produced, so that individual partners could translate it into their respective languages. Similarly, as regards the February 2022 competition, the rules were updated and the same procedure was adopted.



Figure 10 - BE page dedicated to the winner of the central competition of February 2022

## 2.4.2 National raffles



Regarding the raffles, open to all users at the national level, during the first months of the project, a specific software functionality has been implemented in order to be able to host the raffles (from the announcement, the form to fill-in by participants, the verification of participants and the draw of winners). Thanks to the new functionality, 4 partners were able to organise at least one raffle during the first period of the project, namely: CH (4 raffles), CZ (1), ES (1) and NO (1). During the second period, 9 partners organised at least 1 raffle: CH (6 raffles), PL (5), CZ, ES, FR, IT, LT and PT (2), AT and DE (1).

To make the raffles more engaging and not to tie them only to a random draw, a "quiz" function has been inserted: in order to participate, it was necessary to correctly answer a question concerning the efficient products of the HACKS project.

Raffle prizes are usually products related to energy efficiency, such as comfort fans or humidifiers. In CH, the prizes were provided free of charge by the manufacturers.

Overall, 7 raffles were organised during the first part of the project and 25 during the second one, involving about 69,200 consumers.

Partners, in order to promote raffles have usually activated social media promotion campaigns.



Figure 11 - ES page dedicated to the raffle (August 2020)



Figure 12 - CZ page dedicated to the raffle (November 2020)

## 2.5 Increase online engagement

The national internet websites are the cornerstone of the HACKS Project, because they are full of useful content to disseminate energy saving best practices and highly efficient products. For these reasons, the websites were designed to be interactive and provide a large amount of information to citizens, in order to increase their involvement. The HACKS project developed further online activities carried out through national portals.

### 2.5.1 Interaction with consumers (contact form, comment function, FAQ, recommendations, etc.)



HACKS web portals are designed to encourage interaction with citizens, both to increase engagement, and to promote greater market transparency and completeness of information. All HACKS websites have an **online contact form** to collect citizens' comments. The comments received related to various topics. In many cases, comments from citizens and requests for information also reach partners through other channels (by mail, telephone or via social networks).



In addition, in order to implement the interactivity and completeness of the portals, some countries have also implemented a **FAQ** section to offer more information to citizens (NO and BE).

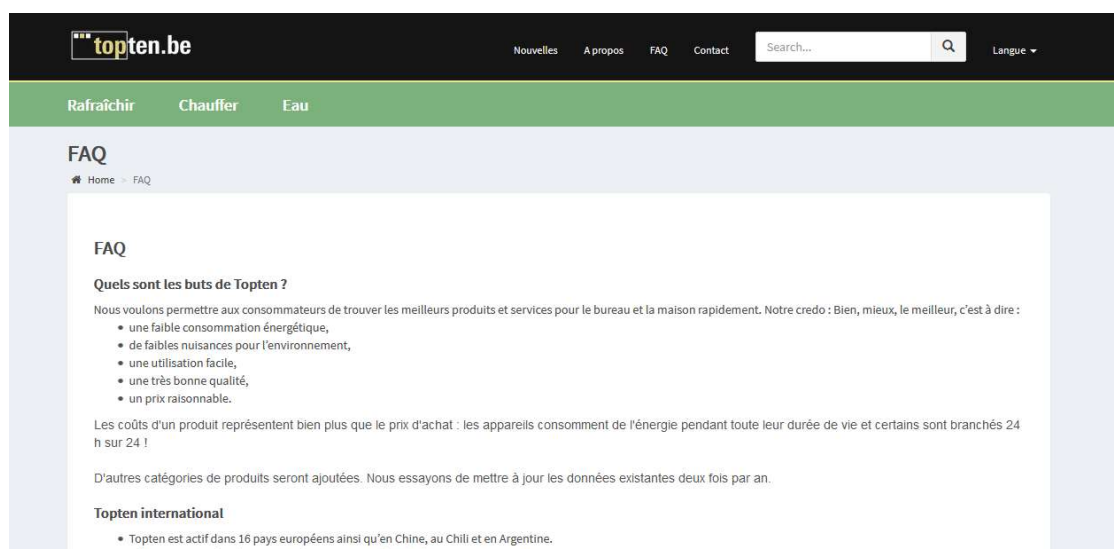


Figure 13 - FAQ section on BE website

In order to allow to be as close as possible to the market, the HACKS websites visitors have the possibility to recommend a product that meets the selection criteria but is not displayed online. Although this possibility is guaranteed by all HACKS websites, only few **recommendations** were received by the partners: SE (7), CH (3), ES (2) IT (1)

### 2.5.2 Rebate overview



In a context of economic crisis due to the COVID pandemic and climate change, many European governments have activated incentive policies for energy efficiency interventions, considered as a driving force to support the economy. In this context, it is therefore very important to underline national incentives and inform citizens.

CH, CZ, IT, PT and NO have implemented a specific section dedicated to an overview of national incentives for energy efficiency relating to HAC products. IT also specified

the incentives in the details of the products on the lists. FR mentioned the incentives directly in the advice pages.

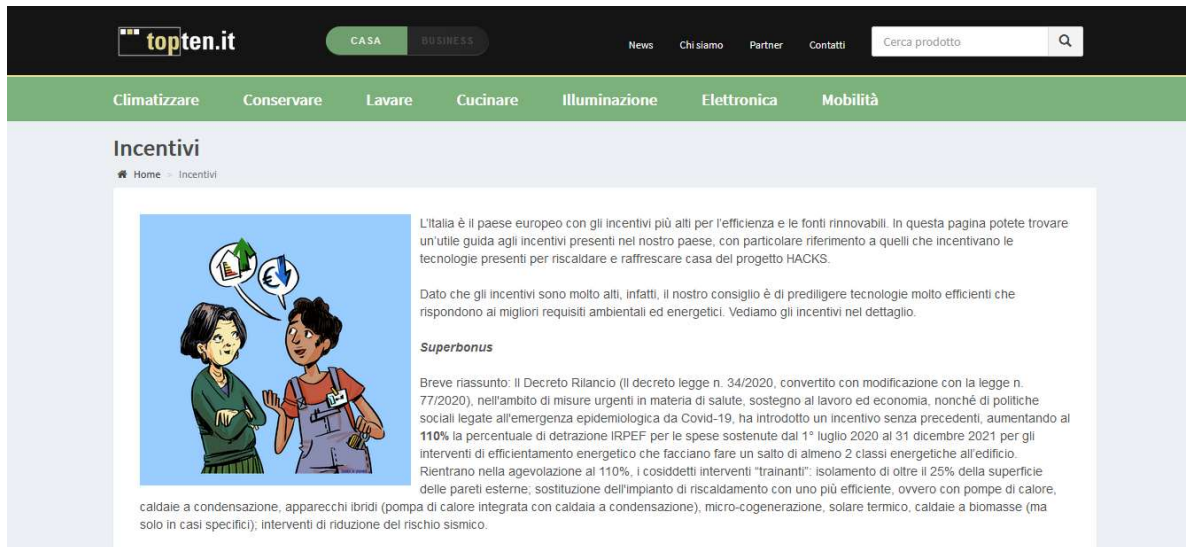


Figure 14 - Italian rebate overview page

### 2.5.3 Accompanying consumers to find competent installers



The implementation on the web portals of links to associations of installers and certified networks is a useful tool to accompany consumers in finding a local installer able to offer the most efficient equipment. This also facilitates the work for consumers and avoid cumbersome research. The HACKS websites currently host links to around 16 associations: NO (6), DE (3), PT (1), CH (1), IT (1) BE (2), CZ (2). These are national associations of installers and craftsmen (8+5), associations of energy consultants (2), certified pellet suppliers (1)<sup>7</sup>.

SE added links to installers for products where its warranted (boilers, stoves etc). Usually in the form of maps where visitors can find the closest installer closest, or installer lists. Installers are certified for the specific products and brands.

FR underlined in the advice pages that the French government programme recommends certified installers (certification is recognised if they attend a specific training course). Unfortunately, however, there are no online lists of such installers (advice is provided by phone).

<sup>7</sup> More info about collaboration with installer organisations is available in *Deliverable 5.3 Final report on the multipliers involvement campaign and its result across Europe, summary of activities carried out; successes and barriers; pictures of activities of multiplier partnerships (information exchange, etc.)*



## 2.5.5 Cooperating with consumer organisations



Due to the COVID-19 crisis, it has been very complex to organize specific initiatives with consumers, as it was almost impossible to organize events in presence. However, many partners have used this period to establish new relationships with consumer associations or to strengthen existing relationships. Overall, collaborations with 21 associations were developed (IT: 7 associations; LU: 3; CH, FR, NO and PT 2, ES, LT and LU: 1).

## 2.6 Visual material

To better develop the national campaigns, the partners developed various visual materials (infographics, illustrations, leaflets, flyers, brochures, videos, etc.), which were used for both online and in-person initiatives.

Below are some examples of graphic material produced by the partners, according to type. A more comprehensive list can be found in **Appendix 2 List of visual material produced by the partners**.

### 2.6.1 Production of infographics



In order to build a stronger visual image on their website, in the social media, to engage specific targets, some partners (IT, PT, CZ, ES, FR, LU and PL), under the lead of the WP4 and WP5 leaders, have produced **35 infographics**, dedicated to the WP4 and WP5 tasks and activities. The infographics covered the promotion of all project topics, activities, task, key messages, targets, tools and tips, using a specific graphical content, in order to add value to the visual material, and to encourage sharing and interactions in social media. Each image come with a text in English that partners were free to translate and change as most convenient. (3 dedicated to consumers are presented below in Fig. 15).

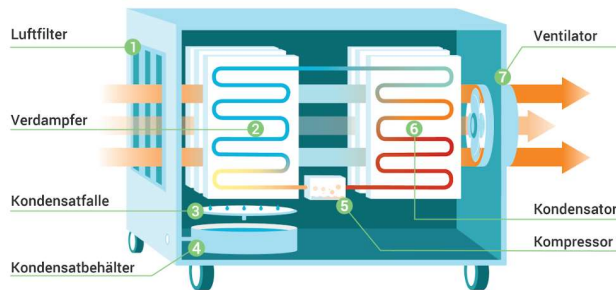


Figure 15 – Example of HACKS infographic used by several partners (after translation and adaptation)



DE produced various technical infographics dedicated to some appliances

### Aufbau eines Kondensations-Luftentfeuchters



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 845231  
Stand: 01/2022 | Daten und Grafik: www.co2online.de co2online

Figure 16 – Technical infographic produced by DE

### 2.6.2 Production of videos



Worthy of note is the short video filmed by **WWF Climate and Energy** about the HACKS project. This video, published on June 24<sup>th</sup>, 2020, describes the project's purposes and activities

[https://www.youtube.com/watch?v=akqRSWfP30w&feature=emb\\_title](https://www.youtube.com/watch?v=akqRSWfP30w&feature=emb_title)

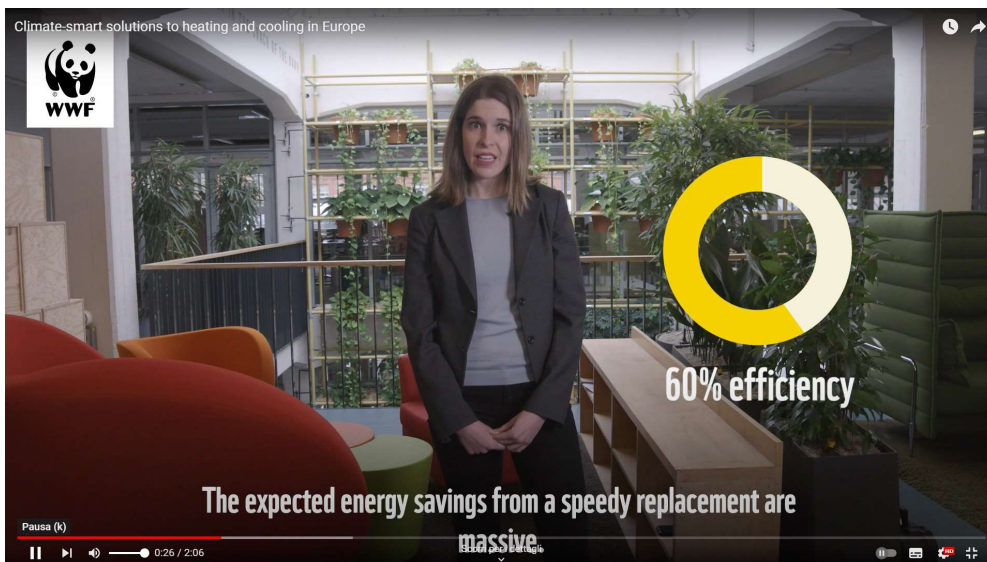


Figure 17 – Screenshot of the WWF blog on the HACKS project



During the energy crisis, IT produced a number of videos aimed at providing practical advice to citizens on how to save energy through low cost or no-cost actions. The videos were used in a Facebook campaign, reaching a high dissemination. In fact,

tutorial-style videos with do-it-yourself tips have proven to be interesting for the general audience, gaining a fair amount of success on social networks:

<https://www.facebook.com/eliantemilano/videos/1196719210972640/>

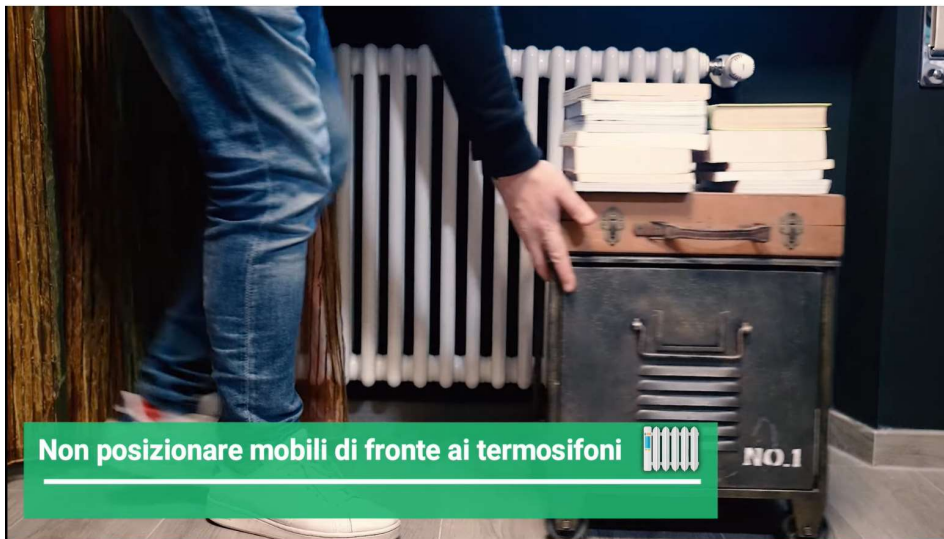


Figure 18: a screenshot from Italian Video

<https://www.facebook.com/eliantemilano/videos/5771843326232884/>



Figure 19: a screenshot from Italian Video

<https://www.facebook.com/eliantemilano/videos/1243228302934244/>

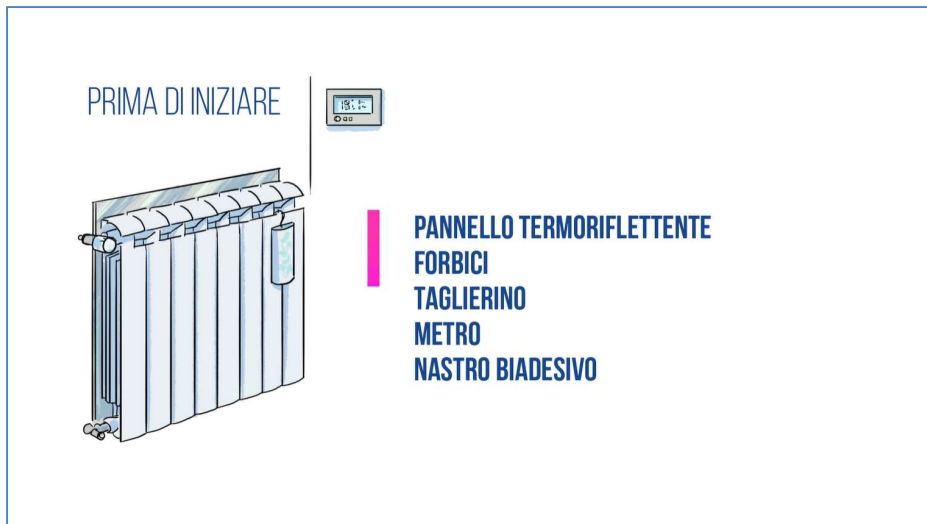


Figure 20: a screenshot from Italian Video



During Winter 2022-2023, ES produced with the collaboration of CNI (association of installers) and disseminated 4 videos on how to be more efficient, how to choose heating systems, and what different types of heating systems are available. They were posted on social media.



Figure 21 Screenshot from Spanish video



CZ made a video, circulated on Twitter, with general advice on how to save energy at home.

[https://twitter.com/sfzp\\_cr/status/1589610290072924160?s=20&t=OhEpchc-x9RXw0fAL2Altg](https://twitter.com/sfzp_cr/status/1589610290072924160?s=20&t=OhEpchc-x9RXw0fAL2Altg)



Figure 22 Screenshot from Czech video

<https://twitter.com/zkrotimeenergie/status/1585541877146820608?s=20&t=OhEpchc-x9RXw0fAL2Altg>



Figure 23 Screenshot from Czech video



PL made a video, circulated on Facebook, with general advice on how to save energy at home.

<https://www.facebook.com/watch/?v=951290505790688>



Figure 24 Screenshot from Polish video

### 2.6.3 Comic book



PL created a **comic book** (*Żar z Nieba*) with advices on how survive heat waves (Fig. 7). It was used in the social media (Twitter, Facebook, LinkedIn) and on the PL website.



Figure 25 – HACKS comic book in PL

### 2.6.4 Informative material



Some partners (AT, LU, PT, NO) have produced various types of **informative material** (leaflet, brochure, flyer) also available online.



Figure 26 - Infographic related to HACKS created by AT



Figure 27- Brochure about Topten and HACKS produced by LU



Figure 28 – Flyer produced by IT and used during physical meetings



Figure 29 - Infographic related to HACKS tips, produced by FR

### 3 Tackling Winter 2022/2023

The second unexpected event that occurred during the duration of the project and completely changed the context in which the national campaigns were developing was the energy crisis triggered by the Russian invasion of Ukraine. The rising price of energy and the need to reduce European dependence on hydrocarbons from Russia made the issue of energy conservation central.

In particular, it was needed to increase actions that reduced energy demand, changed the quality and quantity of energy services required in a sustainable way, without falling below the threshold of basic needs. In other words, it was necessary to think in terms of *sufficiency*, which is a more general concept than *efficiency* and concerns the need to introduce a limit to consumption. Energy sufficiency is meeting people's basic energy needs fairly and within ecological limits. In this changed context, many partners have activated specific initiatives and campaigns aimed at disseminating solutions to tackle the crisis. The HACKS project has proved to be a useful container of information that could be used in various ways by individual beneficiary and their partners in order to raise awareness about correct strategies to reduce consumption.<sup>8</sup>

The partners developed a very heterogeneous set of activities, aimed at very different targets (consumers, low-income families, elderly people, stakeholders, etc.), often in cooperation with other organisations or public bodies, which can be briefly summarised in the following lists:

- Social media campaigns



- Online seminars



- Physical meetings



- Media activities (tv, radio, articles, press releases, blog, etc.)



- Dissemination of informative material



- Campaigns with public bodies



- Campaigns with other associations



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<sup>8</sup> Particularly useful for this purpose was the Catalogue of key information topics (D 3.7 and 3.8), a document produced within the project, containing a wide range of useful and concrete information on how to reduce energy consumption.



## 4 Conclusions

On the whole, the various partners implemented several consumers involvement campaigns, with very different strategies and modalities. This strong heterogeneity is due both to the richness of the contents of the HACKS project, which allowed the partners to develop activities and initiatives dedicated to different contents each time, and to the unexpected events that characterised the context of the project: in particular, the *COVID 19 pandemic* and the *Russian invasion of Ukraine*.

The pandemic strongly influenced the course of the project's first period, while the Russian invasion and subsequent energy crisis characterised the last period. Both events forced the partners to change their planned strategies, seizing the opportunities created and facing new challenges.

The impact of COVID 19 was significant both because it catalysed public attention for long periods during the 2020s and because it caused a sharp reduction in the consumer's propensity to purchase, including HAC products.

The HACKS project and the related national campaigns undoubtedly suffered such situation, because many of the planned physical initiatives (meetings, fairs, congresses, etc.) could not be undertaken, and because the 'online' activities also slowed down.

In spite of this, however, the HACKS partners managed to launch the various national consumer awareness campaigns, demonstrating dynamism and a certain ability to adapt to the difficult context. Indeed, many initiatives were launched to engage consumers, but above all, the first half of the project was used to 'improve' national websites, filling them with content on heating and cooling technologies, comfort improvements and the development and display of best available product lists.

It is precisely this content that is the main added value of HACKS. With a stronger and broader content-base at their disposal, it was possible for the partners to launch more consumer engagement initiatives from spring 2021. The start of the second phase of the project also coincided with the commissioning of some important project tools, such as the calculator and competitions.

It was in this context that the energy crisis, triggered by the Russian invasion of Ukraine and the consequent spike in energy costs, constituted a new challenge for the HACKS project, to which the partners responded once again in a heterogeneous and dynamic manner. Also in this case, the richness of the HACKS project's content proved to be very useful in setting up specific information campaigns aimed at curbing energy consumption and targeting different audiences.

At this stage, the focus was only partially on the topic of energy efficiency in the strict sense, and many partners focused on messages aimed at disseminating tips, suggestions and zero cost or near-zero cost solutions to reduce energy consumption.

## Appendix 1 – Central prize competition rulebook

### RULES OF THE HACKS PRIZE COMPETITION

#### Introduction

Rules of the international competition organized by Eliante Onlus Social Cooperative - P.I. and C.F. 04026890964, registered office Via San Vittore 49, 20123 Milan (hereinafter Eliante) within the European project Horizon2020 HACKS (Heating and Cooling Know-how and Solutions), grant agreement n. 845231.

The aim of HACKS project is to transform the market for domestic heating and cooling appliances, promoting the diffusion of efficient technologies and good practices for energy saving and at the same time improving the living comfort and health of European citizens. This competition has the same goals of the project and aims to stimulate and encourage the replacement of heating and cooling technologies to improve their energy efficiency.

The project is promoted by 17 HACKS partners present in 15 European countries, which are operating thanks to the financial support of the H2020 European programme.

Participation in the competition is based on the following articles:

#### Article 1

##### *Duration*

This competition will last from midnight on March, 18<sup>th</sup> to midnight on April, 19<sup>st</sup> 2021.

#### Article 2

##### *Participation*

- a) Participation is voluntary and free, all natural persons over the age of 18 residing in the following European countries are eligible to participate: Austria, Belgium, Czech Republic, France, Germany, Italy, Lithuania, Luxembourg, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United Kingdom. Staff members or family members of staff members of the following organizations are excluded from participation:

- 1) Agence de l'Environnement et de la Maitrise de l'Energie (ADEME)
- 2) Osterreichische Energieagentur Austrian Energy Agency (AEA)
- 3) Goodplanet Belgium
- 4) Bush Energie Gmbh
- 5) Seven, The Energy Efficiency Center Z.U.
- 6) Co2online Genuetziige Beratungsgesellschaft Mbh
- 7) Fundacion Ecologia y Desarrollo (ECODES)
- 8) Guide Topten SARL
- 9) Società Cooperativa Sociale Eliante Onlus (ELIANTE)
- 10) Politecnico Di Milano (POLIMI)
- 11) Lietuvos Nacionaline Vartotoju Federacija Asociacija
- 12) Oekozynter Pafendall ASBL
- 13) Norges Naturvernforbund (NNV)

- 14) Fundacja Na Rzecz Efektywnego Wykorzystania Energii (FEWE)
- 15) Quercus - Associação nacional de Conservação da natureza (QUERCUS ANCN)
- 16) Svenska Naturskyddsforeningen I (SSNC)
- 17) Energy Saving Trust Limited (EST)

- b) Only one participation per person is permitted for the duration of the competition
- c) To participate it is necessary to use the online energy savings calculator developed within the HACKS project in accordance with the provisions of article no.4

### **Article 3**

#### ***Registration***

- a) To participate in the competition, the participants must completely fill in the online form dedicated to the competition, present on the website of the HACKS project relating to the country in which they reside. Each site provides a link to the terms and conditions including the privacy policy.
- b) By submitting the data and confirming participation, after entering a valid e-mail address on the aforementioned web page, the participants confirm that they have read the terms and conditions and accept them without limitation.

### **Article 4**

#### ***Requirements***

To participate in the competition, it is necessary to have used the online energy savings calculator developed within the HACKS project, which will be present on all national sites. Moreover, the participant will have to answer an online question about using the online calculator.

### **Article 5**

#### ***Draw***

Among all the participants who used the online calculator and answered the question by the deadline of the competition, n. 2 (two), not belonging to the same country, will be drawn and will be awarded with the prizes referred to in art. 6.

In particular, the draw will take place as follows: initially, Eliante will draw, according to a criterion that guarantees an equal chance of winning for each participant, the two countries, among those referred to in Article 2, to which the winners will belong. Subsequently, each of the local HACKS partners from the two drawn countries will draw the name of the winner of its country from the national participants.

Both Eliante and the Partners will guarantee transparency and impartiality in the draws. Each participant, by registering, accepts the rules and renounces any dispute on the methods of drawing prizes.

### **Article 6**

#### ***Prizes***

The prize will consist of one or more objects relating to energy efficiency in household with total value up to a maximum of 500 euros. The winner will be notified by email within 15 days of the

closing of the competition and the prizes will be sent, at the expense of the Eliante, to the address indicated in the participation form.

## **Article 7**

### ***Exclusions***

The organizer reserves the right to exclude participants in the competition in the event of misinformation, manipulation, violation of terms and conditions or use of illegal aids. Any drawn participant not in possession of the requirements will in any case be excluded.

## **Article 8**

### ***Privacy***

The participant in the competition accepts that personal data will be stored and used for the sole purpose of the competition. The data will not be shared with third parties. The winners will be notified in writing and agree that their name (name and first letter of the family name) and the name of the place of residence (city or municipality), are published on the websites and social platforms connected to the same competition, and agrees to respond to a short interview on the topics of the HACKS project. Each participant has the right to access, rectify or delete information concerning him by sending a communication to [info@eliante.it](mailto:info@eliante.it)

## **Article 9**

### ***Rights of the organizer***

The organizer reserves the right to cancel the competition at any time without notice and without giving any reasons. This may take place at the sole discretion of the organizer if it is not possible to guarantee the correct execution of the game, for technical or legal reasons. If the cancellation is caused by the behaviour of a participant, the claims for damages are confidential.

## **Article 10**

### ***Limitation of liability***

- a) The organizer declines any responsibility for the transfer of data on the web. Any liability in the event of a failure of the data processing equipment is also excluded.
- b) No guarantee is given regarding the receipt of participant data. The participant, by sending the data, renounces to act for any possible responsibility of the organizer except for the violation of fundamental obligations ("cardinal duty"), in the event of injury to life, physical integrity or health, or in the absence of warranty conditions, if it is a typical case of damage in a predictable context. Liability is also excluded for all cases of slight negligence, for consequential damages, including consequential damages and lost prizes.
- c) No guarantee is given on the correct functioning of the prizes.
- d) Any liability for undue official action, labour disputes, accidental loss or force majeure is excluded. Likewise, any liability for damage caused by the criminal actions of third parties is excluded

## **Article 11**

### ***Final provisions***

For any dispute, Italian law applies and the competent court is that of Rome. The nullity of one clause of this regulation does not entail the nullity of the others. The reference version of this regulation is the Italian version, which can be consulted at the following address: [http://\\_\\_\\_\\_\\_](http://_____)

## **Article 12**

### ***Final information***

This project has received funding from the European Union's Horizon 2020 research and innovation programme, under grant agreement no. 845231. The responsibility for this content lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither EASME nor the European Commission are responsible for any use that may be made of the information contained herein.

## Appendix 2 – List of visual material produced by the partners

Number	Country	Partner	Type	Short description of the content	Target group	Links (where available)
1	AT	AEA	Infographic	Infographic on tips about energy efficiency at home	consumers	
2	CH	Bush Energie	Other	Graphics for Competitions (D, F, I)	consumers	
3	CH	Bush Energie	Other	Graphics for Blog articles	consumers	
4	CH	Bush Energie	Video	Youtube video about the HACKS Project and its goals, why is it important to focus on good solutions for the heating and cooling issues.	consumers	<a href="https://www.youtube.com/watch?v=akqRSWfP30w">https://www.youtube.com/watch?v=akqRSWfP30w</a>
5	CZ	SEVEn	Flyer	Energy poverty leaflet - the leaflet summarizing the energy efficient tips without need of investments	consumers at risk of energy poverty and general consumers	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
7	CZ	SEVEn	Flyer	BEACON collaboration flyer - HACKS provided criteria for solid fuel boilers for leaflet, leaflet is branded with HACKS logo	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
8	CZ	SEVEn	Other	Roll-up banner	consumers, professionals	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
9	CZ	SEVEn	Video	Topten video with Czech subtitles	consumers, professionals	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
10	CZ	SEVEn	Infographic	Series of energy saving tips 2022 - SEVEn prepared series of infographics responding to energy crisis, high energy prices and Russian aggression in Ukraine. The infographics were prepared together with project LABEL2020: 27 infographics with individual saving tips (10 tips related to HACKS), 3 energy label infographics (1 related to HACKS), 8 summary tips infographics (4 related to HACKS), office graphics tips, savings now matrix.	consumers	<a href="https://www.facebook.com/uspornespotrebice">https://www.facebook.com/uspornespotrebice</a> , <a href="https://twitter.com/usporspotrebice">https://twitter.com/usporspotrebice</a> , <a href="https://www.linkedin.com/company/sevenenergie">https://www.linkedin.com/company/sevenenergie</a> , <a href="https://www.instagram.com/usporspotrebice">https://www.instagram.com/usporspotrebice</a>
11	CZ	SEVEn	Infographic	Collaboration with municipalities and ministries, branded infographics and multiplied outputs - SEVEn offered several municipalities to brand saving tips infographics with city/organisation logo and multiply the overall reach. SEVEn customised outputs upon request. So, several outputs were printed or printed on wider paper format. There are 6 municipalities in total (Velvary, Mezihorí, Kladno, Žďár nad Sázavou, Bystřice, Prague 7 district) and 2 organisations (People in Need NGO and Czech Railways). Also, SEVEn provided know-how and information to the campaign zkrotimeenergie.cz which produced brochure for Labour Offices network.	public	<a href="https://zkrotimeenergie.cz/">https://zkrotimeenergie.cz/</a>
12	CZ	SEVEn	Other	Various graphics for competitions - SEVEn adapted some graphics outputs for local competitions ads	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
13	CZ	SEVEn	Other	Various graphics for events and ads ForTherm, Aquatherm, Ekolist	experts, public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>

14	CZ	SEVEn	Other	Friend of the Earth NGO newsletter with infographics	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
15	CZ	SEVEn	Brochure	Adapted procurement guidelines - SEVEn adapted HACKS's procurement guidelines graphically and added support of Ministry of Labour and Social Affairs. The brochures were supported by Elektrowin (disposal of electric appliances organiser).	companies/or ganisations, experts, consumers	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
16	CZ	SEVEn	Other	Radio spot - The radio ad spot was broadcasted two times, on nation-wide Czech Radio channel 2 (Dvojka) and Prague local Radio 1, firstly broadcasted 7. - 13.11.2022, the second time 30.1.-3.2.2023	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
17	CZ	SEVEn	Other	Series of webinars - SEVEn representative attended several webinars and promoted actively energy savings and project infographics	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
18	CZ	SEVEn	Video	Video podcast - SEVEn representative attended 51 minutes long video podcast about energy savings and presented HACKS materials	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
19	CZ	SEVEn	Other	Influencer campaign - SEVEn used influencer to promote HACKS project and efficient heating appliances. The campaign consists of several Instagram posts by influencer (local Miss winner Nikola Kloudová). The influencer was chosen via platform for finding right influencer. As Ms. Kloudová was interested in our campaign, she made some paid Instagram posts. The overall influencer campaign was a try-out for new communication channels.	public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
20	DE	Co2online	Infographic	Features of a heating fan		<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
21	DE	Co2online	Infographic	Composition of a dehumidifier		<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a> <a href="https://www.co2online.de/modernisieren-und-bauen/heizung/heizliefer/">https://www.co2online.de/modernisieren-und-bauen/heizung/heizliefer/</a>
22	FR	Guide Topten	Infographic	Adaptation of the CZ flyer on no cost actions	General public with a focus on energy poor	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
23	FR	Guide Topten	Other	Image for the second central competition (adaptation of the first one)	General public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
24	FR	Guide Topten	Other	Image for the second national raffle	General public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
25	FR	Guide Topten	Other	Image for the Display and social network campaigns when launching the water saving pages	General public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
26	FR	Guide Topten	Other	Image for the web article on working from home during the COVID lockdown (adaptation of the illustration used by several countries)	General public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
27	FR	Guide Topten	Other	Image for the launch of the AC Topten list	General public	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
28	FR	Guide Topten	Other	Image for the Heat Pump press release	Professional press	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
29	IT	Eliante	Flyer	Casa HACKS provides information and tips about best practice and things not to do in a house, in order to cool/heat it correctly and save energy and money	Elders, students, consumers	<a href="https://topten.it/private/article/casa-hacks-quin-dici-consigli-per-la-tua-abitazione-in-brochure">https://topten.it/private/article/casa-hacks-quin-dici-consigli-per-la-tua-abitazione-in-brochure</a>
30	IT	Eliante	Video	Tutorial about how to insulate radiators	consumers	<a href="https://www.facebook.com/eliantemilano/videos/1196719210972640/">https://www.facebook.com/eliantemilano/videos/1196719210972640/</a>
31	IT	Eliante	Video	Tips on efficiency at home	consumers	<a href="https://www.facebook.com/eliantemilano/videos/1196719210972640/">https://www.facebook.com/eliantemilano/videos/1196719210972640/</a>

32	IT	Eliante	Video	Tutorial Tips on efficiency at home	consumers	<a href="https://www.facebook.com/eliantemilano/videos/1243228302934244/">https://www.facebook.com/eliantemilano/videos/1243228302934244/</a>
33	IT, PT, CZ, ES, FR, LU, FR	FEWE	Infographics/illustrations	35 illustrations / infographics, to be used on social media and websites. All these infographics and illustrations were produced centrally and then used by the 7 partners, translating and adapting the text	consumers/in stallers/other stakeholders	All the illustrations/infographics templates are here: <a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a> Some examples of national uses: <a href="https://www.facebook.com/photo/?fbid=578439464322544&amp;set=a.502181225281702">https://www.facebook.com/photo/?fbid=578439464322544&amp;set=a.502181225281702</a> <a href="https://www.facebook.com/FundacjaFEWE/photos/a.411196365681184/2642305509236914/">https://www.facebook.com/FundacjaFEWE/photos/a.411196365681184/2642305509236914/</a> <a href="https://www.facebook.com/photo/?fbid=495399262591879&amp;set=a.190852346379907">https://www.facebook.com/photo/?fbid=495399262591879&amp;set=a.190852346379907</a> <a href="https://twitter.com/InfoTopten/status/1339481708463353857">https://twitter.com/InfoTopten/status/1339481708463353857</a> <a href="https://topten.pt/private/article/calculadora-de-arrefecimento-hacks-poupe-no-arrefecimento-de-forma-inteligente">https://topten.pt/private/article/calculadora-de-arrefecimento-hacks-poupe-no-arrefecimento-de-forma-inteligente</a> <a href="https://eurotopten.es/private/article/sistema-calefaccion">https://eurotopten.es/private/article/sistema-calefaccion</a> <a href="https://www.oekotopten.lu/private/article/subpel2o23d">https://www.oekotopten.lu/private/article/subpel2o23d</a>
34	LU	Oekozenzer	Infographic	The infographic shows some simple tricks to save energy in your home.	public	<a href="https://www.facebook.com/107312875165608/photos/a.178098504753711/178121901418038/">https://www.facebook.com/107312875165608/photos/a.178098504753711/178121901418038/</a>
35	LU	Oekozenzer	Infographic	If air circulation is poor and heat builds up on the ceiling, a table fan (or stand fan) on low speed can help to distribute the heat better in the room.	public	<a href="https://www.facebook.com/photo/?fbid=193733293203716&amp;set=a.179131334663912">https://www.facebook.com/photo/?fbid=193733293203716&amp;set=a.179131334663912</a>
36	LU	Oekozenzer	Infographic	<a href="https://www.oekotopten.lu">Information about the list of certified pellet on oekotopten.lu</a>	public	<a href="https://www.facebook.com/photo/?fbid=202396289004083&amp;set=a.179131334663912">https://www.facebook.com/photo/?fbid=202396289004083&amp;set=a.179131334663912</a>
37	PL	FEWE	Other	Graphics for Competitions	consumers	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
38	PL	FEWE	Other	Graphics of competitions for producers	public, manufacturer s	<a href="https://topten.info.pl/private/article/konkurs-hacks-przedluzony-nabor">https://topten.info.pl/private/article/konkurs-hacks-przedluzony-nabor</a> <a href="https://topten.info.pl/private/competition/konkurs-okna-2022">https://topten.info.pl/private/competition/konkurs-okna-2022</a>
39	PL	FEWE	Infographic	Comics with tips	public, consumers	<a href="https://topten.info.pl/private/page/komiksowe-porady">https://topten.info.pl/private/page/komiksowe-porady</a>
40	PL	FEWE	Other	Business card	all	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
41	PL	FEWE	Flyer	Use heat effectively (300×216mm)	all	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
42	PL	FEWE	Other	Article – tips about buying a fan	consumers	<a href="https://topten.info.pl/private/article/zakup-wentylatora-na-co-zwrocic-uwage">https://topten.info.pl/private/article/zakup-wentylatora-na-co-zwrocic-uwage</a>
43	PL	FEWE	Other	Article - How to effectively cool the apartment without an air conditioner?	consumers	<a href="https://topten.info.pl/private/article/poradnik-chlodzenie-bez-klimatyzatora">https://topten.info.pl/private/article/poradnik-chlodzenie-bez-klimatyzatora</a>
44	PL	FEWE	Other	Graphics to promote the use of the calculator	consumers	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>
45	PL	FEWE	Other	Graphics and videos for FB with tips	consumers	<a href="https://www.facebook.com/FundacjaFEWE/videos/951290505790688">https://www.facebook.com/FundacjaFEWE/videos/951290505790688</a> <a href="https://www.facebook.com/FundacjaFEWE/posts/pf">https://www.facebook.com/FundacjaFEWE/posts/pf</a>



						<a href="#">bid0CaquiMv7uzoiLfApRxDWE1XeBSrhGoGnpnk2VT.Jcvdt7eeee5A8sZAx1p2Vc4CGMI</a>
46	PL	FEWE	Other	Graphics designed for an AdWords campaign by the company implementing the campaign	consumers	<a href="https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip">https://storage.topten.eu/source/files/HACKS/D4_5_Final_Deliverable_VisualMaterial.zip</a>