# HEATING AND COOLING **KNOWHOW AND SOLUTIONS**





# Deliverable 4.4 Interim report on the consumer involvement campaign and its result across Europe

# HACKS' activities undertaken between September 2019 and January 2021

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European portal www.topten.eu/hacks

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Austria, AEA www.topprodukte.at

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Norway, Naturvernforbund www.energismart.no/

Sweden, SSNC www.toptensverige.se Belgium, GoodPlanet www.topten.be

Italy, Eliante <u>www.topten.it</u> Poland, FEWE <u>www.topten.info.pl</u> Switzerland, Bush Energie <u>www.topten.ch</u> Czech Republic, SEVEn www.uspornespotrebice.cz

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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 are working 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 will implement involvement campaigns to raise awareness of the economic and environmental benefits brought by good HAC products and solutions:

- HACKS will motivate 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.
- In each country, partners will set-up dedicated on-line platforms to assist consumers in their purchasing process. The platforms will 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.
- 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 will propose 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 will target 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 places 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

### **Executive summary**

The document provides an overview of the activities and results of the HACKS consumer outreach campaigns, launched across Europe during the first year and a half of the Project, reporting on the main activities carried out by the Project partners.

It describes the various activities foreseen by the project and how these were undertaken by the partners with a focus on the successful activities carried out.

The HACKS project is characterized by planned activities in different areas, including communication and outreach, but also by the flexibility to adapt activities and seize opportunities as they come. Hence, activities carried out by the partners are presented, although not formally foreseen in the work programme, because they have proven to be particularly useful and successful and potentially replicable in the second part of the project.

It should be emphasized that the particular situation due to the pandemic has certainly had a heavy impact on the activities of individual partners, who were forced to cancel all or part of the planned "physical" activities. This aspect made the implementation of online activities even more fundamental for the outcome of the project, of which an exhaustive overview is provided in the following paragraphs.

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#### List of acronyms

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

Therefore, each country first prepared a consumer involvement campaign plan (gathered in D4.1. 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 would have influenced the launch of the campaign and its 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 "zero cost" actions.

Another element that has impacted the activities of the partners and their consumer engagement campaign is the implementation of their respective national sites. The websites actually constitute the backbone of consumer involvement activities, both because they host lists 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 (or will host) the tools that the project provides, and which are aimed at increasing involvement (raffles, competitions, online calculator, etc.). Therefore, the implementation of national sites has influenced the development of individual online activities.

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

The consumer involvement campaign framework also includes a media outreach plan in which partners are able to detail any HACKS related coverage they have obtained, either in print or online press. A detailed update on this kind of activity can be found in *Deliverable 4.6*.

# 2 Engage consumers across Europe

The partners' campaigns, due to the specific reasons stated in the introduction, started 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**

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 is 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, China, 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.

#### 2.1.1 HACKS section on national websites

A section relating to HACKS has been developed on each national web portals which are accessible from the European website: 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.

Country	National website URL	HACKS page URL
AT	https://www.topprodukte.at/	https://www.topprodukte.at/de/service/EU-Projekt-HACKS.html
Ове	<u>https://topten.be/</u>	https://topten.be/private/page/hacks-nl
С	https://www.topten.ch	https://www.topten.ch/private/page/hacks

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

Cz	www.uspornespotrebice.cz	http://www.uspornespotrebice.cz/private/page/hacks
e	www.topeffizient.de	https://topeffizient.de/private/page/hacks
ES	https://eurotopten.es/	https://eurotopten.es/private/page/hacks-conocimientos-y-soluciones- para-calefaccion-y-refrigeracion
<b>●</b> <sub>FR</sub>	https://www.guidetopten.fr	https://www.guidetopten.fr/grand-public/page/chauffage-et- climatisation
Un	<u>www.topten.it</u>	https://topten.it/private/page/hacks
	https://ecotopten.lt/	https://ecotopten.lt/private/page/hacks
	https://www.oekotopten.lu	https://www.oekotopten.lu/private/page/hacks
PL	www.topten.info.pl	www.topten.info.pl/hacks
Орт	www.topten.pt	https://topten.pt/private/page/hacks
	www.energismart.no	energismart.no/om-energismart/category884.html
<b>e</b> se	https://toptensverige.se	https://www.toptensverige.se/produkter-privat/värme-kyla
Тик	http://www.toptenuk.org/	http://www.toptenuk.org/private/page/hacks



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.



Figure 1 - The Ecotopten. It 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.

- Publishing a box in the right column of the home page.
- Publishing a news dedicated to the project, in the news section.
- Publishing one or more news related to HACKS. For example, IT published two news items about the new national incentive for energy efficiency (so called "110%)" with an in-depth look at the HAC products which can benefit from this generous incentive.

#### 2.1.2 HACKS Product lists 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 foresees the development of 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 the market.

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



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

In addition, for each product list, 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.).

Table 1 shows the product lists implemented by the various teams as of February 2021.

Equipment	AT	<b>e</b> BE	CZ	<b>O</b> FR	DE	U	LU	PL	Image: 0Image: 0Im	ES	<b>₽</b> NO	LT	<b>SE</b>	<b>W</b> K	СН
Ventilators		<ul> <li>Image: A start of the start of</li></ul>	<b>~</b>		<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>Image: A start of the start of</li></ul>	<b>~</b>	<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>Image: A start of the start of</li></ul>				<ul> <li>Image: A start of the start of</li></ul>	<b>~</b>
Air conditioners	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$		$\checkmark$	✓	✓		<b>~</b>		$\checkmark$	<b>√</b>
Intelligent thermostat															<b>√</b>
Heat pumps	✓	✓	✓	✓		✓		$\checkmark$	✓	✓	$\checkmark$	$\checkmark$	$\checkmark$		<b>√</b>
Solid fuel boilers	<b>~</b>	✓	✓			✓		$\checkmark$	$\checkmark$	$\checkmark$	✓		$\checkmark$	✓	$\checkmark$
Pellet								✓							
Local space heaters		✓	✓			✓		$\checkmark$	✓	✓	✓	$\checkmark$			<b>√</b>
Heat pump water heaters	$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$	✓				$\checkmark$		<b>√</b>
Electric water heaters and combined water heaters (heat loss below 1,2 kWh/day)												~			
Dehumidifiers															$\checkmark$
Taps and shower heads		✓	✓			✓			✓	✓					<b>√</b>
Circulation pumps		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		<b>√</b>
Windows													~		$\checkmark$
Photovoltaic	<b>~</b>														
Insulation	<b>~</b>														
Doors								<b>√</b>							
District heating													<b>~</b>		
Windows								<b>~</b>							
Solar Thermal								✓							

#### Table 2 – HACKS Product lists displayed on the national websites

#### 2.2 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, CH (for 5 product categories), ES (for one category), IT (for two categories), PT (for two categories) and SE (for three categories), while 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. Other countries have made deals with online retailers, but have not yet implemented deep links and will 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
Ссн	Comfort fans, Humidifiers, Dehumidifiers, Smart heating controls, Taps and Head showers
ES	Air conditioners
Оп	Comfort fans, Taps and Head showers
	Heat pumps, Air conditioners, Solid fuel boilers, Solar thermal
өрт	Comfort fans, Air conditioners
ese	Local space heaters, Heat pumps, Windows

The development of deep links is somehow a challenge for HAC products: for example, not all HAC products have EAN 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.

<sup>&</sup>lt;sup>1</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

Elettrodomestici	Casa Illumir	nazione Uffici	o / TV	Mobili	ità Tempo libero	E	nergia ecologica		
Visualizzo 1-10 di 123	elementi.						Ultim	o aggiorr	amento: 06.07.2020
	Marca & Modello	Energia		Tipo	Dati tecnici		Costo (CHF)		Confronto prezzi
6	Stylies Lyra	Energia (kWh/anno): Indice di efficienza: Standby (W):	1.6 1.00 0.0	da tavolo	Potenza sonora (dB): Ventilazione aria (m³/min):	35 5.0	Elettricità su 15 anni:	CHF 5	CHF 49.95
I	Sonnenkönig TENERO	Energia (kWh/anno): Indice di efficienza: Standby (W):	4.0 0.51 0.1	a torre	Potenza sonora (dB): Ventilazione aria (m³/min):	49 6.1	Elettricità su 15 anni:	CHF 12	CHF 79.00
	Sonnenkönig DOLMEN 3	Energia (kWh/anno): Indice di efficienza: Standby (W):	5.2 0.47 0.5	a torre	Potenza sonora (dB): Ventilazione aria (m³/min):	58 7.0	Elettricità su 15 anni:	CHF 16	CHF 110.70
	Coop FT-23A	Energia (kWh/anno): Indice di efficienza:	5.6 0.90	da tavolo	Potenza sonora (dB): Ventilazione aria (m³/min):	54 15.7	Elettricità su 15 anni:	CHF 17	CHF 19.95
•	AEG VL 5528	Energia (kWh/anno): Indice di efficienza:	5.6 0.90	da tavolo	Potenza sonora (dB): Ventilazione aria (m³/min):	54 15.7	Elettricità su 15 anni:	CHF 17	CHF 36.80

Figure 4 - Example of a product list (comfort fans) with deep links (see the red arrow) from the CH website

<b>*** top</b> ten.it	CASA	USINESS		News	Chi siamo	Partner	Contatti	Cerca prodotto	٩	
Climatizzare Conservare	Lavare	Cucinare	Illuminazione		Elettronica	Mob	ilità			
	nansarinio									
	Hansa HANSAPOLO	Energia (kWh/ann	o):	437,0	Costi elettrici ir	10 anni:		874€	74,98€	
	@ Altri det	tagli sul prodotto	Link all'incentivo							
A.	Sho	plinks								
-		Disponibile o	la	In	stock?	Con conse	egna?	Prezzo	Link	
	idea	alo Idea	lo		Sì	No		74,98 €	Al rivenditore	
	Classe di effi	icienza energetica: A	1	Luogo di	installazione: Lav	vandino bagno	<b>)</b>			
	Hansa HANSAPRIMO	Energia (kWh/ann	o):	437,0	Costi elettrici ir	10 anni:		874€	-	
	Hansa HANSATWIST	Energia (kWh/ann	o):	437,0	Costi elettrici ir	10 anni:		874€	-	

Figure 5 – Example of how a deep link is shown in the product detail, from the IT website

### 2.3 HACKS Prize competitions



With the aim of involving consumers and raise their awareness, the HACKS project envisages 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 are carried out at national level, while so called central competitions concern all countries part in the project. The central competition has not yet been implemented; the first edition will most likely be held in March 2021.

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. Thanks to the new functionality, 4 partners were able to organize at least one raffle, namely: CH (4 raffles), CZ (n. 1), ES (n. 1) and NO (n. 1). Other countries are getting organised to launch their first raffles in the period of spring-summer 2021.

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 is 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, the raffles involved about 13.000 consumers.

Figure 6 - ES page dedicated to the raffle (August 2020)



Figure 7 - CZ page dedicated to the raffle (November 2020)

## 2.4 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 are 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 to be carried out through national portals.

2.4.1 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 8 - 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 two **recommendations** of this type have been received so far, both in ES.

#### 2.4.2 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.

Currently, many countries quote subsidy programmes and CH, CZ, IT, PT and NO have implemented a specific section dedicated to an overview of national incentives for energy efficiency relating to HAC. Most of the other national teams have planned to make this page in spring 2021.



Figure 9 - Italian rebate overview page

#### 2.4.3 Accompany 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 will also facilitate the work for consumers and avoid cumbersome research. The HACKS websites currently host links to around 11 associations: NO (6), DE (3), PT (1), CH (1). These are real national associations of installers and craftsmen (8), associations of energy consultants (2), certified pellet suppliers  $(1)^2$ .

#### 2.4.5 Cooperating with consumer organisations



Due to the Covid-19 crisis, so far it has been very complex to organize specific initiatives with consumers, as it is 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 14 associations are underway (IT: 6 associations; LU: 3; NO 2, ES, LT and PT: 1).

<sup>&</sup>lt;sup>2</sup> More info about collaboration with installer organisations is available in *Deliverable 5.2 Report on the multipliers campaign and its result across Europe, Successes and barriers* 

## 2.5 Seized Opportunities

For the purpose of achieving WP4's aims and of engaging consumers, some partners have undertaken activities that are not explicitly stated in the WP4 work programme. In some cases, these activities have been thought to overcome the difficulty to carry out the activities foreseen due to the Covid-19 situation. Various examples are reported below.

#### 1) Production of infographics



In order to build a stronger visual image in the social media, to engage specific targets, some partners (IT, PT, CZ, ES, FR, PL), under the lead of the WP4 and WP5 leaders, have started to produce **30 infographics**, dedicated to the WP4 and WP5 tasks and activities. The infographics cover or will cover 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 comes with a text in English that partners are free to translate and change as most convenient. At the moment 11 infographics of 30 have been produced (3 dedicated to consumers are presented below in Fig. 5).



Figure 10 – Example of HACKS infographic used by several partners (after translation and adaptation)

#### 2) WWF Video



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

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

WWF has joined the HACKS steering Committee (see WP2) and is relaying the HACKS messages, in this video but also on their blog (see Fig 6).

https://wwf.panda.org/our\_work/our\_focus/climate\_and\_energy\_practice/blog/?36453 1/HACKS-low-carbon-heating-cooling



Figure 11 – Screenshot of the WWF blog on the HACKS project

#### 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 12 – HACKS comic book in PL

## 4) Informative material



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

* He Mit diese weniger B Wohnkom	ne einfachen Tipps verwenden Sie in der kalten Jahr fort und sparen Geld. Gleichzeitig erhöhen Sie fort und schützen das Klima, denn es gilt: Jede nich Klowattstunde ist eine klimafreundliche Kilowattstunde	lhren t ver-
	Gluckernde Helzkörper? Zeit zum Entlüften! Mit einem Entlüftungsschlüssel können Sie die Luft einfach selbst aus dem heißen Heizkörper ablassen.	65€ (18) (230 kg <sub>(x)</sub> )
	Die Temperatur macht's Die Raumtemperatur sollte nicht höher als nötig sein. Grundsätzlich gilt: Ein Grad weniger spart etwa sechs Prozent Heizenergie.	(25 kg <sub>∞</sub> )
	Richtig lüften Bei dauerhaft gekippten Fenster kühlen die Wände aus. Lieber nur ein paar Minuten stoßlüften, dann muss der Raum nicht von Grund auf neu aufgeheizt werden.	(500 kg <sub>co</sub> )
<u>@</u>	Fenster abdichten Passende Dichtungsbänder aus dem Baumarkt verhindern den Wärmeverlust durch undichte Fenster. Tipp: Verwenden Sie ein Teelicht oder Räucherstäbchen, um undichte Fenster zu finden.	65€ (18) (230 kg <sub>∞</sub> )
	Vorhänge und Jalousien nachts schließen Halten Sie Vorhänge, Jalousien und Rollos nachts geschlossen und senken Sie so den Wärmeverlust über die Fenster. Achtung: Tagsüber sollen Heizkörper jedoch nicht von Vorhängen oder Möbeln verdeckt sein.	15€ (4 (50 kg <sub>co</sub> )
Jährliche Kostensinsperu klima <b>akt</b> oogo		

Figure 13 - Infographic related to HACKS created by AT



Figure 14- Brochure about Topten and HACKS produced by LU

6) SE established a cooperation with <u>https://www.prisjakt.nu/</u>, a Swedish company running a popular app/site used to compare products and get the lowest prices. Prisjakt has a yearly competition and elects the best online stores in various categories, and Top Ten Sverige is part of the "**sustainability**" award.

## **3** Conclusions

The first half of the project was heavily influenced by the ongoing pandemic. The impact of COVID 19 was significant both because it catalysed the attention of public opinion for long periods during 2020, and because it caused a sharp reduction in consumption, including those relating to HAC products.

The HACKS project and the related national campaigns have undoubtedly been affected, both because many of the planned "physical" initiatives (meetings, fairs, congresses, etc.) could not be undertaken, and because even the "online" activities have been slowed down.

Despite this, however, the HACKS's partners were able to start the various national consumer outreach campaigns, demonstrating dynamism and a certain ability to adapt to the difficult context. Indeed, many initiatives have been launched to engage consumers, but above all the first half of the project was used to "enhance" national websites, filling them with content relating to heating and cooling technologies, comfort improvements, and developing and displaying the lists of best available products.

Precisely these contents are the core added value of HACKS. Having in place a more solid and broader content base available, it will be possible for the partners to start a greater number of initiatives for consumers' involvement starting from spring 2021.