

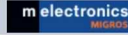





D6.7 – Sustainability business models: report on investigated business models for different market segments

	Make & Model	energy	Type	Technical specifications	Costs (CHF)	price comparison
	styles lyre	Energy (kWh/year): 1.6 Efficiency Index: 1.00 Standby (W): 0.0	Table	Noise level (dB): 35 Flow rate (m³/min): 5.0	Current in 15 years: 8th	CHF 50
	More product details Link to manufacturer					
	shop links					
	Available at	In stock?	Delivery included?	Price	shop link	
	 melectronics	no	Yes	CHF 50	" to the shop	
	 nettoshop.ch	no	Yes	CHF 55	" to the shop	
	Switching steps: 3 Height (cm): 30 Diameter (cm): 16.5		Power (W): 5.0 Width (cm): 16		Height adjustable: no Depth (cm): 14	

Ella Cox, Thomas McLaren, Adrianna Threpsiadi – Energy Saving Trust

February 2023

HACKS coordinator: ADEME – www.ademe.fr

European portal www.topten.eu/hacks

Project partners and websites

Austria, AEA
www.topprodukte.at

Belgium, GoodPlanet
www.topten.be

Czech Republic, SEVEN
www.uspornespotrebice.cz

France, Guide Topten
www.guidetopten.fr

Germany, co2online
www.co2online.de

Italy, Eliante
www.topten.it

Lithuania, LNCF
www.ecotopten.lt/

Luxembourg, Oeko-Zenter
www.oekotopten.lu

Norway, Naturvernforbund
www.energismart.no/

Poland, FEWE
www.topten.info.pl

Portugal, Quercus
www.topten.pt

Spain, ECODES
www.eurotopten.es/

Sweden, SSNC
www.toptensverige.se

Switzerland, Bush Energie
www.topten.ch

UK, EST
www.toptenuk.org

Politecnico di Milano
www.eerg.polimi.it



About HACKS

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

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

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

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

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

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

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

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Editor: Therese Kreitz, ADEME therese.kreitz@ademe.fr



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Executive summary

The HACKS project is an EU funded programme through which 15 national Topten websites operate to provide consumer information and advice about highly efficient heating and cooling products.

The HACKS project is due to end after February 2023, after which the Horizon2020 funding used to sustain the Topten websites in partner countries will cease. Due to the nature and set up the Topten websites, there are several possible options for consideration in the continuation of national Topten websites past this date. Under the project, three funding options were scored as the most viable methods for funding Topten activities: affiliate marketing, government subsidies, and partner self-funded.

This report explores these three funding options, highlighting their positives, negatives, and implementation requirements/considerations, based on the experiences of selected partners who are already implementing (or who have attempted to implement) one or more of the models within their countries. The experiences of the partners are provided in case studies listed in Annex I, II, and III of this report which highlight how these have been successful (or not/partially successful) in funding their Topten activities. The lessons learned through these experiences can provide other partners with the knowledge or inspiration to implement a similar style of business model which would help sustain Topten in their country once the HACKS project finishes and funding ends.

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1 Introduction

Topten is a consumer-focused website operating as a search tool for the ‘best’ or ‘most efficient’ product models in a number of product categories. During its time running, Topten activities have been financed through various means by the partner countries, most recently the EU Horizon 2020 programme’s HACKS project. Since the HACKS project is due to end after February of 2023, and therefore funding will cease, possible sources of funding for its continuation are of interest to countries with a Topten portal. The basic continuation of Topten portals relates mainly to personnel costs to update the website content (i.e. product lists) and maintain stakeholder relationships and could include promotion of the website through multipliers and media. Other costs include technical support and hosting fees.

During a first assessment of business models (Deliverable 6.6) of the HACKS projects, partners scored (through a scoring matrix) affiliate marketing, government subsidy and partner self-funded as the most viable funding business model options for the sustainability and continuation of Topten post HACKS project. The following sections use the partner case studies outlined in Annex I, II, and III to summarise the models in the context of Topten and outline the considerations for their implementation.

Table 1: Funding options and country case studies (please note some case studies cover multiple funding methods)

Affiliate Marketing	Government Subsidy	Partner self-funded
Czech Republic	Luxembourg	Poland
Spain	Germany	Czech Republic
Switzerland		

In general, Topten participating countries are members of the Topten International Group (TIG). TIG was created to keep the Topten teams ‘together’ and in communication over the various geographical locations, including during times where there is no project funding. One aspect of TIG is the search for further funding i.e. calls for projects within various grant programmes. Currently no project funding options have been identified, so the sustainability business models outlined in this report and the experience of partners throughout Topten duration are ever more important. Most of the teams delivering the HACKS projects within their country are part of the TIG and therefore will stay connected and have an avenue of communication post HACKS project. As such, most teams are committed to the continuation of Topten within their countries and can use this report to support this endeavour.

1. Sustainability business models

1.1 Affiliate marketing

Summary

Affiliate marketing involves an arrangement where an affiliate receives commission for each sale (or agreed action) they generate from a merchant. In the context of Topten this takes place in the form of a retailer (or website from which a product can be purchased) acting as the merchant and the Topten portal as the affiliate, examples and/or details of which can be found in the case studies presented in Annex I, which also include useful introductions, definitions, and requirements to and of affiliate marketing. For Topten, this model can take place through two possible routes:

1. URL links within the product listings which click through to the specific product on a webpage where the product can be purchased (or links to specific webpages).

2. Advertising

Based on the partner experiences outlined in Annex I, route 1 is the option that is currently used and as such the most plausible option for other Topten portals, although not necessarily as a single source of funding. This route operates through an affiliate platform which automatically track clicks (more details found in Annex I, Switzerland and Czech Republic).

Considerations

The success of this model is achieved through developed partnerships with manufacturers/retailers and as such relies on the organisations ability to achieve this highlighted in Spain's case study in Annex I. The HACKS project has created some partnerships with retailers and manufacturers which can be utilised – along with already established networks that may exist within organisations – to achieve this. If these relationships have not already been created through previous projects, organisations, or via HACKS, the effort to establish such relationships could be time consuming and therefore a consideration should be taken into account. However, it is worth noting that in the case of Switzerland, approximately 80% of the income they receive from affiliate marketing is generated by two online shops. Although this seems a benefit in relation to effort expenditure, it also makes the income generation delicate and arguably insecure, although this may depend on the history with the retailer. Partners would need to consider this and see what balance between resource and security works for them.

In addition to this, the affiliate marketing method relies on having high visitor numbers to the website. For partners with low visitor numbers, they would first need to work on improving this to make this model worthwhile. Evidence of these visitor numbers could prove to a merchant that the partnership is 'worth it', otherwise there could be little to incentivise retailers, except perhaps the offer of growth in the future. The affiliate platform used to track clicks depends on the country of the particular Topten site. Details of these platform are discussed in the case studies in Annex I. In particular the Swiss and Czech experiences of these are useful to review, as these have resulted in different outcomes and therefore a variety of learnings to be taken by partners thinking of implementing the model. For example, in Czech Republic the affiliate software has resulted in affiliate marketing being difficult to implement, highlighting the need for partners to review the presiding software in their country before attempting to implement this model.

The case studies in Annex I highlight retailer affiliate marketing, but another option could be through manufacturers as the merchant, especially for products that cannot be directly or easily purchased from a single webpage e.g., heat pumps. However, assigning monetary value to this could prove much more difficult and is not as clear cut as products that can be purchased. This means that several HACKS products are not as suitable for affiliate marketing as they are often more complex to purchase. Affiliate marketing would therefore be more suited to non-HACKS products, or to the smaller HACKS products such as taps, showers and comfort fans. Since some partners have only worked on updating the HACKS products on their Topten portal, they may need to diversify the products they display in order to fund their website.

Only recently has advertising as an affiliate marketing technique been possible due to newly implemented functionalities of the Topten website, highlighted in the Swiss case study in Annex I. The Swiss team are going to trial 3 payment schemes under this method so the success of this option is yet to be determined. A major consideration for this type of affiliate marketing is how to ensure a certain manufacturer or retailer is not 'favoured' since Topten relies on impartiality. This requires careful consideration as how to achieve this as highlight by Czech Republic, Switzerland and, but as Czech Republic suggests randomisation of the adverts could be used to achieve this.

As highlighted and concluded by the partner case studies (i.e. Spain, Switzerland, Czech Republic), there are varying degrees of success when it comes to this model. The success of this model mostly relies on the ease and suitability of the presiding affiliate software, strong relationships with merchants/stakeholders, and the type of product displayed on the portal.

This model alone is likely not enough to fully sustain the Topten portal in each country, but if implemented successfully can provide a good amount of funding (or match funding) for Topten activities.

1.2 Government Subsidy

Summary

This finance model relies on national and/or local government departments funding or subsidising the national websites or the work to update them. From the examples provided in Annex II this funding relationship usually occurs because the governmental departments have targets and commitments relating to climate change and the environment, which Topten can contribute towards. In terms of replication, respective obligations within different partner countries could be used as leverage to secure funding for the Topten activities.

Considerations

An attractive benefit of this model is that it provides a secure method of funding in comparison to other models such as affiliate marketing. Since the funding is a more structured (generally via a contracts), there would likely be formal agreements made between the funder and the partner such as the period (length) of funding and key indicator metrics. For example, in Luxembourg's case study (Annex II), financial support from the Ministry of Environment has taken place in 6 contracts of mostly 36 months in length. Similarly, the partner would likely be aware of when funding would cease and therefore would have the time to plan for the next steps. However, it is worth noting that plans and available funding pools within governments are subject to change depending on the current political and environmental climate in the country, however it is likely that even in this event there would be some level of notice if funding was to be withdrawn and previously agreed upon contracts would likely stipulate this.

Whilst this more formalised structure is of benefit it also requires some effort in return from the partner. In order to understand how the funding of the Topten site are supporting the environmental targets/commitments of the funders, the partner would likely need to provide updates on website metrics which act as a set of performance indicators. In the case of Luxembourg, in return for funding they were required to integrate the state subsidy schemes onto Topten and also to carry out certain activities as well as provide a range of report (more information in Annex II). It is therefore important for partners looking to secure this type of funding to consider that their Topten portal may need to be managed in a different way to how it currently is under the HACKS project. This model could result in extra work depending on the level of reporting/updates and there could be further implications if the metrics are 'underachieving'. In addition to this, the contract relating to the funding may take some time to agree upon and therefore proceed with as highlighted in Luxembourg's case study, so partners should not underestimate the time taken to achieve this and the importance of a contract.

This model not only supports Topten in actual current funding but can also benefit a partner through the established reputational and relationship building that result from it i.e., being endorsed by government. For example, the German case study in Annex II shows how government funding has created lasting relationships that supported Topten beyond the funding and created a network of organisations who promoted their tools. In this way this model can 'pave the way' for alternative funding models.

This model could be used to fully fund Topten portals, however it is likely that governments may be interested in certain areas more than others. Therefore, partners should be prepared to present to funders the importance of the website as whole to its various stakeholders and therefore how this in turn supports the funders targets. One reason is that a lack of work in one area could affect the reputation of the website for the users of that particular service, resulting in negative association for the funder, therefore it is in their interest to make sure the website as a whole is 'up to scratch'. As with other models of funding, this model could be used to part

fund the particular areas of interest to the government, but as previously mentioned there are some possible effects to consider if match funding cannot be attained (reputation of endorser).

1.3 Partners self-fund

Summary

This model is based on each national website being maintained at the cost of the partner organisation, currently managing the portal via the HACKS project. In most cases this would be taken as a strategic decision by the organisation who see benefit to the website and view it as a viable return on investment, whether this be financially or through its ability to form retailer relationships, gain knowledge and stay within the field. Usually, the funding this model requires covers funding the time or person hours taken to carry out the relevant activities that are required to maintain a functioning portal.

Considerations

Topten partners could self-fund the continuation of the national websites as a strategic move for the organisations they represent. In order to achieve this, partners would be required to carry out an evaluation of the benefits gained in order to understand the effects and priorities of their Topten portal at a strategic level. Some examples of possible benefits to consider are increasing consumer reach, improving organisations expertise, increasing the organisations partnership network, and improving organisation reputation/recognition. Another secondary benefit of these is that some of these direct benefits (i.e., increase in expertise, knowledge areas) could then be utilised to demonstrate the organisations capabilities to future funders and clients of Topten or related projects. The understanding of these benefits is important to secure the approval of the organisation and to present the case for the self-funding of Topten. For example, for the Czech partners (Annex III), their portal acts as their organisation's communication channel to both the public and professionals, therefore the organisation places strategic value in the running of the portal.

Another aspect of the evaluation would be working out which tasks or features of the website are necessary to fund i.e., which activities actually result in the benefits identified and which are more optional. This way they can work out the associated cost and time implications of different activity scenarios. The information from these evaluations can be used to see whether self-funding is worthwhile and advantageous in the first place and furthermore to present their case to their organisation.

In some instances, an organisation may be able to fully fund the continuation of their Topten portal. An example of this is explained in Poland's case study in Annex III where FEWE plan to maintain and further develop Topten and HACKS activities as part of its own activities post HACKS project. This self-funding includes the development of an internal project ensuring that financing is available for core activities, emphasising the value and benefits of Topten. In Poland's case study they have identified various ways that the Polish Topten portal has been funded and how this has created lasting relationships that make way for other forms of funding.

For some organisations the fully self-funded model is not affordable or achievable. Therefore, this model could be adopted to part fund certain activities e.g., updating of certain products lists not covered by project funding, such as with the Czech Republic in Annex III. This is where the evaluation of necessary activities mentioned previously become ever more important, as these are the activities that will become the focus of funding and ensure funds are not wasted on those that provide a lesser benefit to the organisation. It is important to consider that carrying out baseline activities is not necessarily an ideal scenario but necessary to maintain the usefulness and reputation of the websites with consumers and stakeholders. Some of the self-funded activity could be centred around funding time to research and develop proposals for already available or upcoming funding opportunities that enable a range of activities to take place on Topten.

2 Conclusions

As highlighted in the case studies, the models can all be used in some way to part fund the continuation of Topten within the respective HACKS partner countries and in some cases can be used to fully fund and support the portals. Most of the models require at least some form of evaluation to understand which aspects of Topten are the most important in terms of benefits, compensation, and strategic value. Topten can be considered in some ways a public service as it is a free of charge resource with a range of benefits for consumers and the environment. Due to this most partners should be able to make a case for its continuation whether this be to internal or external stakeholders.

In terms of the models outlined in this report, affiliate marketing was voted the most viable options in the previous D6.6 report and appears to be the model that sees continuous results but does require thorough planning and an already implemented network infrastructure to ensure its success. In addition, the success of this model is somewhat country specific due to software issues. It is also a relatively unsecure way to fund activities but allows an organisation to mostly self-manage Topten income and can be a good source of income, although is unlikely to fully cover all Topten activities at this stage. Government funding is an attractive option because it can cover all project website costs and offers long-term funding security. There will be additional tasks with this form of funding, so the work carried out may look differently to how it currently does under the HACKS project. Self-funding can be a way to cover basic Topten website maintenance but may not be a way to fund all Topten activities. This model relies greatly on how the organisation views the benefits of Topten portals and how this fits in with strategic objectives, therefore is not viable for all partners.

Partners can use this report to learn from the experiences of the other partners who provided case studies, ultimately understanding the possible pathways they could take or implement in order to continue the running of Topten in their country. They can use the case studies to understand whether these models could or could not work with their country and organisation set up. The consortium contacts made in the HACKS project as well as the continued participation of partners in the TIG, serve as platforms for continued learning and sharing of best practices, lessons learned and available sources of project funding.

Annex I: Affiliate marketing country specific case studies

Czech Republic



Michal Staša, SEVEN

The Czech Topten (branded as Úsporné spotřebiče in Czech) uses central Topten software. The previous Czech Topten website was built using a custom-made content management system and did not provide the possibility to add new features and expand in general. This was one of the main reasons why the Czech team chose to switch to central Topten software.

The Czech team has run the Topten website for quite long time (more than 15 years) and was active in many projects concerning the Topten website (for example ToptenACT covering general home appliances, ProCold covering commercial refrigeration appliances, HACKS covering cooling and heating and others). However, the long tradition of Topten projects increased the number of product categories and following the projects there were no funds and regular updates consumed considerable amount of worktime. This work was therefore funded by SEVEN and recorded as internal work. The search for additional income has taken place for the last several years. Affiliate marketing could be another way of providing additional income. As the “new” central Topten software offers some functions concerning affiliate marketing, the Czech team explores the possibility for this in the Czech environment.

Affiliate marketing is an arrangement where merchants pay for the negotiating of a trade (purchasing appliances). The commission earned by the party assisting the purchase is usually a percentage of the price of the product being sold. There are two options how to use affiliate marketing:

1. Display advertising, social media advertising and other ways to display specific offers – this option is similar to general advertisements systems (i.e. Google AdSense). This option is very simple to implement but it is not suitable for Topten as it requires ad banners. The selection of the ad could be automated otherwise it would be a very time-consuming option. The most problematic part of this could be direct connection of independent Topten website with specific merchant.
2. The second option means to link specific Topten products with merchants' website with the products. User can directly go the internet shop where he/she could buy a product. This could not be done manually as there are thousands of products. All must be set automatically. The price must be updated regularly. This is very suitable option for Topten if Topten offers sufficient number of merchants and does not act as ad for specific merchant/shop. The problematic part is feed of products (several formats, usually huge files, different ways how to download it).

Affiliate marketing is arranged directly (especially for large merchants) or through affiliated networks. These affiliate networks can be global and local, however, the reach and the market share of the affiliate networks vary much across the Europe. There are specific differences between every European country concerning dominant merchants and even dominant affiliate networks. For example, the large merchant Idealo is present in Germany, Great Britain, Austria, France and Italy; it is not present in the Czech Republic, Slovakia, Poland or Hungary. In the Czech Republic and in central Europe, there are some other dominant e-commerce stores such as Alza.

Concerning affiliate networks, there are dozens of networks, however their importance and the number of internet shops can vary too. For example, the dominant affiliate network AWIN is used in France or Switzerland and you can link to major internet shops. This network is not used much in the Czech Republic or other central European countries. In the Czech Republic, the CJ network is more dominant and stores like Alza operates its own affiliate hub.

General process of setting up affiliate marketing

1. Mapping of available affiliate networks
2. Mapping of dominant e-commerce shops and finding out whether they operate their own affiliate network
3. Setting up accounts in affiliate networks and finding/setting the appropriate product feeds
4. Automation of downloading of product feeds and connecting with Topten software

General experiences:

- It is not easy to jump in the affiliate market for the first time. Usually, there are affiliate conferences where people can get some initial information.
- The set-up of new account and especially the setting up of product feed could be complex and an “IT complicated” task. The affiliate networks are quite diverse.
- The affiliate marketing should be automated, not manual at any time.
- The central Topten software only uses some type of feeds and general approaches of how to receive feeds automatically (functioning for AWIN, not other networks). Central Topten software should add these features concerning general affiliate marketing usage (also applicable for other Topten websites):
 - various feed format support (Google Merchant, custom XML/CSV/JSON feeds, zipped feeds);
 - various ways of receiving feeds (automated FTP/SFTP download, URL with authentication, URL, others);
 - huge files support.
- The price information in product feeds have various forms (including transport, with or without VAT, etc.)
- Some features are not present (especially automated feeds) but you can ask for them.

The Czech approach and conclusions

The Czech team was not successful in using affiliate marketing to add new way of financing. This was mainly because of software issues and feed incompatibility, however, the general know how is present and will be used in future.

There are only limited number of useful affiliate networks regarding Topten products:

- CJ/VIVnetworks.com – This is the most important network and covers the most important internet shops (excluding Alza.cz). Setting up the account and finding the right feeds was not easy.
- Alza affiliate – This huge merchant has its own affiliate network. The feeds are available only on request.
- Affial.com, AffiliatePort.eu, Dognet.cz – other networks. These networks usually provide product feed.
- AWIN – only limited number of smaller merchants, not suitable for Czech environment.

Spain

Jeannette Bain, ECODES



ECODES took over from WWF in the beginning of 2019 and relaunched and updated the Spanish Topten website www.eurotopten.es in September 2019. In the beginning ECODES did not use advertising and publicity mechanisms in Spain because of the risk of breaking the vision of impartiality and independence, which is one of the foundations of the project. Likewise, and even though the issues related to the most efficient cooling and heating

equipment have been of interest in recent years, there has been no public call for proposals to obtain resources to generate sustainability in the medium and long term to the website.

The Awin affiliate network has now been implemented and is used with all sellers that are available in the network and that have some link to the product groups available on the Topten website. Although the eurotopten.es website has many monthly visitors, the resources obtained from the use of AWIN are variable and do not allow for medium to long term sustainability.

Since ECODES has no other funding, it has carried out various joint actions - often also with other projects with complementary aims and objectives - with different actors to generate a cooperative link/partnership that is expected to be maintained in the medium and long term. With this methodology, it has been possible to maintain cooperation with retailers, installers and associations and, through this, to have information on the most efficient equipment on the market in accordance with the established criteria. This has been one of the most sustainable alternatives in the long term as it has allowed for more and better product options, using fewer resources. However, it is not a methodology that allows for full sustainability, but is considered complementary.

Maintaining collaboration with the various stakeholders requires the dedication of the ECODES team, and depends to a large extent on the capacity of the stakeholders at the time, which may fluctuate depending on the time of year and their own work. The interest of the different stakeholders must also be maintained.

Future of business model & Top Ten within the country

ECODES has analysed the following funding opportunities for the continuity of Top Ten Spain:

Affiliate marketing - Although some income has already been raised this way, it is not enough to fully sustain the Spanish Topten portal financially. Moreover, this way of fundraising has the disadvantage of being a variable income that depends on consumers. In addition, not all products that are included on the website have shop links that can generate an income. A way to address this variability would be to ensure a regular flow of visitors on the website and also guarantee a flow of clicks through the shop links in order to increase income. Essentially, affiliate marketing represents a complementary source of funding and as such cannot be used as the only one. ECODES, as an NGO cannot replace the possible funding needed.

National/local government pays models - Government Subsidy - The possibility of ECODES obtaining a government subsidy for Top Ten is not a valid option because this kind of funding is obtained through specific calls made by the government, where the aim of the call has to be the same as the Topten website. This means that it is not possible to present a project and apply for funding, it depends solely on the calls for proposals made by the public administration.

Installer pays models - This alternative has been evaluated and worked on, but the installer associations do not have the funding to keep the website updated (products, content, personnel costs). Furthermore, installers in Spain work with a full budget system that includes the product to be installed as well as their installation services, so they do not look favourably on separating the price of the products, representing a further difficulty.

Other sources of private funding - It may be a viable option to obtain private funding to maintain the website and update products as a complement to projects that seek the transition towards more efficient products and equipment in the context of an energy crisis, focusing on heating and cooling solutions.

Conclusions

There is no simple and single possible source of funding for the Spanish Top Ten website. The future financial sources will have to be a combination of affiliate marketing, own equipment and partnerships generated during the project. By combining these actions, Topten can be

kept at a minimum level. Individual grants or larger projects where the Topten website can be complementary will also be explored.

Switzerland



Maike Hepp & Eric Bush, Bush Energie

Topten Switzerland uses multiple approaches to secure sustainable operation. The focus lies on a strong collaboration with diverse partners. Amongst those, affiliate marketing was very successful in enhancing the impact of Topten. In affiliate marketing, products that are listed on Topten websites are directly connected to various online shops through an affiliate network software that tracks clicks and sales. Retailers and manufacturers benefit from increased traffic to their sites as well as increased sales while Topten receives a monetary compensation in return.

Marke & Modell	Energie	Typ	Kosten (CHF)	Preisvergleich																				
Haier H3R-330WNA Kühlschrank	Energie (kWh/Jahr): 66 Effizienz-Index (%): 40.0	Kühlschrank ohne Gefrierfach Freistehend Höhe (cm): 190	Strom in 15 J.: 297	CHF 1'355																				
<p>Weitere Produktdetails Link zum Hersteller</p> <h3>Shoplinks</h3> <table border="1"> <thead> <tr> <th>Erhältlich bei</th> <th>Auf Lager?</th> <th>Lieferung inbegriffen?</th> <th>Preis</th> <th>Shoplink</th> </tr> </thead> <tbody> <tr> <td> nettoshop.ch</td> <td>ja</td> <td>ja</td> <td>CHF 1'355</td> <td>» zum Shop</td> </tr> <tr> <td> melectronics</td> <td>nein</td> <td>ja</td> <td>CHF 1'355</td> <td>» zum Shop</td> </tr> <tr> <td> MediaMarkt</td> <td>ja</td> <td>ja</td> <td>CHF 1'399</td> <td>» zum Shop</td> </tr> </tbody> </table>					Erhältlich bei	Auf Lager?	Lieferung inbegriffen?	Preis	Shoplink	nettoshop.ch	ja	ja	CHF 1'355	» zum Shop	melectronics	nein	ja	CHF 1'355	» zum Shop	MediaMarkt	ja	ja	CHF 1'399	» zum Shop
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melectronics	nein	ja	CHF 1'355	» zum Shop																				
MediaMarkt	ja	ja	CHF 1'399	» zum Shop																				

Image 1: Shoplinks from a product on Topten.ch that lead to three different online shops via affiliate marketing. Source: Topten.ch

The monetary compensation can take one of three forms:

1. **Pay per lead (PPL):** each click on a Topten shop link generates an income, regardless of the value of induced orders. This system is not very popular and attractive for retailers because of the risk of artificial hits or uninterested visitors; as a result, the monetary compensation is low.
2. **Pay per Sale (PPS):** the revenues for Topten depend on the value of sales. This is the usual system; however, it needs an initial effort from the retailer, it needs programming or configuration in the shop software to track the sales induced by Topten. Using an affiliate platform that provides built-in tracking can facilitate the set-up greatly.
3. **Flat rate:** Fixed monthly fees can be agreed with retailers. The level of fees depend greatly on the visitor numbers of the Topten website.

The advantages of affiliate marketing lie in its relative continuity and the free availability of generated funds – i.e., the income generated through affiliate marketing is not subject to calls-for-tender, reporting and earmarking of funds. However, a few points have to be considered:

- **Dependency on clicks:** income can only be generated if the website has many visitors and if many visitors click on the shoplinks and buy the recommended products. The higher the visitor numbers, the higher the generated income.
- **Dependency on up-to-dateness of product lists on Topten:** only products that are currently on the market generate links to online shops and new products should be

added quickly to match the demand. Popular products are bought more often and thus generate more income. Updating product lists requires resources from Topten.

- Identifying shops and affiliate networks that work: For Switzerland, 80-90% of all affiliate income is generated by one or two major online shops. It required tenacity to add more and more shops until those shops could be identified. Drawback: if those shops should end their cooperation or greatly reduce the percentage per sale, this source of income can decrease or cease abruptly.
- Not all product categories are suited for affiliate marketing: Affiliate marketing is not specifically suited to the HACKS categories – the majority of HACKS products has no EANs or work on a different type of distribution channel resp. the nature of decision making for the product type is not compatible with affiliate marketing. If products are not sold online, affiliate marketing does not work. As such, the other categories on Topten must provide co-financing for the HACKS categories. If a national Topten website displays only HACKS products, affiliate marketing is not a viable income source.

Stakeholders involved in affiliate marketing are mostly the affiliate platforms such as “AWIN” or “Adtraction” and their operatives in charge of the individual online shops. Any Topten partner can create an account on the affiliate platform – at times for a small initial fee – and apply for a cooperation with the participating shops. This profile should be professional and the short application text should incentivize the shop to accept the partnership. A high number of yearly visitors serves as a good incentive as well as “generated income” if a partnership with other shops already exists. Applying through the affiliate platform bypasses dealing directly with the shop, where it is often laborious to establish contact with the right contact person.

Despite this, the experience of Topten Switzerland has been that affiliate marketing is a long-term project that requires a lot of persistence. Over the last four years we have tried many things to increase our affiliate marketing share: applying to new shops, adding more EAN variants to each model name in order to increase matches with shops and re-designing categories such as e-bikes and entertainment electronics specifically to increase affiliate marketing. Through a lot of trial and error with various product categories that have EANs and are often bought online, it became clear that Topten Switzerland is widely known as efficiency authority on household appliances; accordingly, these are the categories where visitors generate sales in online shops and lead to affiliate marketing income. Focusing more time and resources on mobility, entertainment electronics or HACKS categories turned out to be neither profitable nor efficient.

Over the last six months, Topten Switzerland generated 20'000 clicks from our household product lists to online shops which resulted in a revenue for the shops of roughly 700'000 Euro. Extrapolating to an entire year, an income between 20'000 to 40'000 Euro for Topten Switzerland can be generated in affiliate marketing fees – more is possible if visitor numbers on www.topten.ch continue to rise and the product lists are kept up to date. While not enough to cover a considerable share of Topten's running cost, it serves as a valuable component in the overall sustainable financing. The current affiliate marketing income is used to update the relevant product categories and to improve the underlying software in the Topten CMS.

Through all this, it should be kept in mind that 80% to 90% of the affiliate marketing income for Topten Switzerland is generated through a single online shop and as such should be counted as a somewhat fragile income method.

Advertisement

In the past, Topten Switzerland has not tried to place advertising because of the risk to reduce the attractiveness of Topten – neutrality and professionalism are the key values on which the visitors' trust is based. However, with the lack of future core funding through EU projects the approach to advertising on the Topten Switzerland website has been reconsidered.

Central to this approach is to uphold the neutrality and independence of Topten. This is the decisive factor for the choice of advertisement partners and the placement of the advertisements on the website. Manufacturers are altogether excluded as advertisement partners.

Two types of potential advertisement partners have been identified as suitable for Topten Switzerland:

1. National Topten partners such as utility companies, retail stores and other efficiency project
2. Completely unconnected companies such as insurance companies or mobile phone providers

Already existing partnerships have the advantage of providing energy related content while completely unconnected companies are more likely to have a larger marketing budget. A phase of trial and error will have to be conducted in order to find out the optimal arrangement.

On www.topten.ch, advertisements can be displayed in banners both in the desktop and mobile view. They can take the form of videos or images and be individually managed to appear on the start page, news articles, news index, advisor pages or any other page on the Topten website. Advertisement blocks can either be fixed in place or be mobile within the page (i.e., move along with the page when scrolling). Time frames or times shares for each content can be managed by the content managers of Topten; in order to maintain control of the advertisement content, we have decided to only accept manually managed content instead of automatic advertisement feeds.

Three payment schemes will be tried by Topten Switzerland:

1. Pay per campaign over a certain time frame (1 month, 3 months, 1 year, etc): all advertisements are shown equally. This is the easiest option.
2. Pay per time in addition to the campaign: priorities for different campaigns are defined. The more time an advertisement is shown, the more expensive it is. This is a bit more complex to set up in the software but not impossible.
3. Affiliate marketing platforms are able to generate a general link to online shops (i.e., not to individual products). Any sales induced through those referrals would generate affiliate marketing income, though likely at a low level.

Topten Switzerland has this week received the necessary software components to start advertisement on our website. The next steps will be acquiring partners and to explore their willingness to pay. No yearly income potential can yet be estimated.

Annex 2: Government subsidy - country specific case studies

Germany



Moritz Steinbeck, co2online gemeinnuetzige GmbH

co2online is a non-profit company consulting mainly private households on how to save energy. By focusing on online-communication such as websites, online tools and calculators, newsletters and video content, co2online gives consumers and multipliers information and a data-based online consultation on their energy saving potentials. As a next step co2online recommends regional energy consultants, installers or consumer organizations.

In 2003 co2online started out with their online-based calculators to create an established, neutral website funded by the German Ministry of Environment. The German government aimed to offer the public a platform for unbiased, free information on energy savings and climate protection measures. Evolving from this funding, co2online proposed several projects in this field to Federal and Public Institutions and developed a wider portfolio on campaigns and projects through successful fundings by e.g., the German Ministry of Environment, the German Ministry of Economy, the Federal Environment Agency (Umweltbundesamt) or from EU-programs.

A network of manufacturers, installers, energy agencies, consumer organisations and other political actors formed around co2online, supporting and promoting their neutral consulting tools on energy saving.

With a campaign on low-invest measures in heating optimization, which was funded by the German Ministry of Environment in 2013, numerous manufacturers of heating pumps, thermostats and heating systems joined the project. They supported the campaign financially since they appreciated the general marketing and campaigning on those energy-saving measures and technics – without displaying their own products. After the funding from the German Ministry of Environment ended in 2016, the campaign could continue, being financed by only the network of involved manufacturers. Those cooperations were a stable financial source that supported the campaigning without jeopardizing the credibility and independence of the communication.

In addition to this, co2online committed themselves to a broad political network on energy efficiency in the building sector, and also to the installer associations, the energy consultant associations, and federal and regional energy agencies. Building on this diverse network, co2online could pool and structure different sectors and actors in the political sphere, but also in profit for the consumer communication and help.

As a result of the creation and regular maintenance of different online calculators like the HeizCheck, StromCheck or ModernisierungsCheck, co2online could benefit financially from those tools in two ways. The accumulated user data of the tools can be gathered and analysed to set benchmarks for further consultations. For example, users give data about their heat consumption, their house or apartment size, the number of inhabitants and their conditions of their house. In response, they receive benchmarks of the heat consumption in comparable households. Through permanent data analysis the benchmarks can be held up to date by using the new data. This knowledge is not only interesting for the national level or the press, but also for the regional level. Thus, regional partners like municipal authorities can buy the regional data analysis conducted by co2online, in order to use the regional benchmarks for their citizen advice or campaigns. Furthermore, the online calculators were made available as white-label and individualized tools for foreign websites. Partners like municipal authorities, consumer organizations, energy supply companies or manufacturers buy licenses for an integration of those online calculators on their own websites.

As described, co2online's work relies on credibility and neutrality. This guarantees consumers and funding authorities a trustworthy platform for information on climate protection

measures for the building sector. Within the HACKS project, co2online intensified their communication work on efficient heating and cooling solutions by describing different technical topics and giving practical advice. Meanwhile the usage of the product list on the new website www.topeffizient.de added a product-related service for consumers in their search for efficient climate protection measures. The customer journey from the neutral, consulting, measure-driven platform (www.co2online.de) towards the transactional, purchase-driven product lists (www.topeffizient.de) was a new approach that co2online tried to introduce within the HACKS project. In the limited time span of the project, the newly released website couldn't expand its growth, so co2online also used their existing website to promote HACKS content within the consulting environment, labelling the content with the HACKS logo.

The cooperation approaches with retailers like idealo or manufacturers like Hans Grohe didn't lead to deeper cooperation on leads, so no new business models were initiated by the HACKS project.

Luxembourg

Funds guaranteed by an agreement with the Luxembourgish Ministry of the Environment.



**oekoZentrum
pafendall**

Thierry Lagoda, OekoZentrum Pafendall

Oekotopten.lu is an online platform that aims to inform consumers about the most energy-efficient products on the Luxembourgish market. The non-governmental organisations OekoZentrum Pafendall and Mouvement Ecologique launched the project in September 2007 and from the start has been co-financed by the Luxembourgish Ministry of Environment. At the end of 2008, the above-mentioned organisations participated in the European project Euro-Topten Plus, which was co-financed by the European fund "Intelligent Energy – Europe". Since then, 3 more European projects followed in which Oekotopten.lu was involved. These were the projects Euro-Topten Max, Topten Act and the current project HACKS.

The financial support from the Ministry of Environment has been regulated in 6 contracts since the beginning of the project. The duration of the Ministry's support was usually in 36-month spans, with the exception of the period from 2010 to 2011. This shorter period served to ensure that the duration of the contracts with the Ministry would run parallel to the duration of the European project. From 2021 onwards, the contract has a duration of 6 years ending in 2025. This new contract covers several projects of OekoZentrum Pafendall and are thus detached from the Oekotopten.lu project.

The purpose of the contract with the Ministry of Environment was to provide financial security for the work on the Oekotopten.lu project. The running costs, which were not covered by the co-financing of the European fund, were paid by the Ministry of Environment. Thanks to the financial support from the Ministry, it was possible to hire another person for the project in 2011, so that the project is currently implemented by a project coordinator and a project facilitator.

Initially, there were disagreements about the accounting of the project with the Ministry of Environment. The latter assumed that the project would have to be divided into a national and a European component, so that payment for the same hours on both sides would have to be prevented. After consultation, it was agreed that the model of co-financing would be implemented, in which the project would be co-financed as a unit, but without going beyond the total costs of the project.

In return for the financial support of the Ministry, the Oekotopten.lu has to integrate the subsidy programmes of the State in its online platform. These integrations take place in the criteria, meaning all subsidy-eligible products are represented on the website and/or in the recommendations, in which the subsidy programmes and the respective conditions are

explained. A regular exchange with officials of the Ministry is also planned in order to align the project implementation with the objectives of the Ministry.

At the end of each year, the Ministry receives a work programme for the following year, which sets out the priorities for the work for the coming 12 months. Furthermore, the Oekozenner Pafendall prepares an interim and a final report, as well as an interim and a final cost statement.

The following activities have to be carried out under the agreement:

- Monitoring technological developments on the market for specific products;
- Establishing criteria for products based on labels, standardised certifications and test results from reputable and independent bodies and defining sub-categories based on type, size and other characteristics that correspond to the perceptions of visitors to the site;
- Ensuring that the products presented on the website are updated at least every six months;
- Promoting and raising awareness of energy-efficient products;
- Involving producers and distributors by displaying the best eco-friendly products in shops;
- Communicating with the media, the public, private wholesalers and public authorities to put energy saving on the political agenda;
- Maintaining an attractive website and social networks with tips on economical use of products, basic information on Oekotopten.lu, updated pages, etc.;
- Offering ecological alternatives to new purchases through our recommendations and advice. This service primarily helps to combat over-consumption and the rebound effect. It also offers an alternative to consumers who cannot afford to replace electrical appliances. This service is therefore in line with the circular economy.

A new contract with the Ministry has been concluded until 2025, so that financial security for the project is ensured even after the European project HACKS has been completed.

Annex 3: Partner self-funded - country specific case studies

Poland

Sabina Kozińska, Polish Foundation for Energy Efficiency (FEWE)



Historical background

The TOPTEN program has been implemented by FEWE since 2006 with 5 editions of projects including the latest one which is the HACKS project. The main goals of the program have not changed over the years, and that is, to support consumers in choosing energy-efficient equipment. However, over the years, the focus on the various elements of the program and the ways of achieving the main task have changed. Initially, activities focused on the goal of reducing electricity consumption through the selection and use of the most energy-efficient products in households and offices, as well as increasing the market share of the most energy-efficient products through the presentation of lists of the most energy-efficient products. Afterwards, the program was expanded to support local governments preparing tender documents for green public procurement. In its current form, the main focus is on supporting individual consumers in choosing the most energy-efficient heating and cooling equipment.

Through the years, the largest financial source for the program has been EU funds (Intelligent Energy-Europe, Horizon 2020). The first three editions also required project cofinancing, as EU funds allowed partial (up to 75%) implementation of Topten. FEWE obtained the missing contribution from government funds (through the National Fund for Environmental Protection and Water Management). For editions of the program for which it was not possible to obtain external funding, the Foundation subsidized project activities from its own sources.

TOPTEN in the HACKS project

All activities undertaken under the HACKS project, such as updating product lists, competitions for consumers and producers, were financed from EU funds under grant agreement 845231. The emphasis of the HACKS project on supporting consumers in replacing inefficient heating and cooling (HAC) appliances with new, energy-efficient ones, had a direct impact on strengthening inter-sector cooperation. Actions taken with manufacturers of window and door frames and solid biofuel heating equipment, as well as organizations that supported FEWE in organizing competitions for manufacturers under EU funding, resulted in a strong synergy effect. This gives hope for the development of the achieved model and obtaining higher levels of financial support.

Competitions for window and door producers - Case study

Window and door joinery is a sector that is developing successfully in Poland. Poland has for years been one of the largest exporters of window and door joinery in Europe. Polish windows, in particular, have been recognized as a good and reputable brand for more than a dozen years and are eagerly chosen by residents throughout Europe and beyond. In 2020, Polish manufacturers sold more than 12.5 million windows and doors on foreign markets, and the export value of windows and doors amounted to €2.38 billion.

With these facts in mind, it was decided to organize another edition of the competition aimed at manufacturers and distributors of window and door joinery available on the Polish market. The goal was to identify and promote the best energy-efficient, economically and technically effective vertical windows, roof windows and external doors on the Polish investor and consumer market.

Lasting from January to June 2022, the "TOPTEN - HACKS OKNA 2022" has been running since 2012 and this is its sixth edition, which, as in previous years, is designed to help investors, designers, energy auditors and all homeowners and apartment owners in the selection of woodwork when planning investments for their buildings. The competition is summarized in a published catalogue of vertical windows, slope windows and doors, along with 4 the assignment of voluntary energy labels. The energy labels developed by Dolnośląska Agencja Energii i Środowiska (DAEŚ) allow the proper selection of a window for a building with only heating or heating in combination with air conditioning.

For the realization of the competition, a cooperation agreement was signed in December 2021 with the Dolnośląska Agencja Energii i Środowiska, which was financed by a grant agreement. Under the agreement, DAEŚ was tasked with min:

- Carrying out, in cooperation with FEWE, the recruitment and evaluation of the competition applications;
- Creating a list of the best joinery within the TOPTEN-HACKS Windows 2022 competition, taking into account the structure of data presentation on the Topten portal;
- Developing energy labels for TOPTEN-HACKS Windows 2022 windows and doors;
- Carrying out promotional activities.

Tasks did not include financing the organization of a gala at which diplomas were to be presented to the winners of the competition.

DAEŚ and FEWE faced the challenge of finding funding for the event. The intention of the competition's organizers was to get as many applications as possible from window and door manufacturers in order to gain the largest possible overview of the market. Therefore, the idea of charging manufacturers and distributors an entry fee of several hundred zlotys for entering their product in the competition was rejected at the outset. It was feared that such a fee would discourage submissions.

The possibility of fundraising by trade media in Poland was also ruled out. Despite the high media interest in the contest, they were not interested in financially supporting the venture. It should be noted, however, that the competition and its results attracted the attention of 5 (almost all) major industry portals in Poland, as evidenced by numerous media publications and a large representation at the gala announcing the winners. This undoubtedly contributed to raising the importance and attractiveness of the competition from the perspective of producers but also potential sponsors in the future.

Manufacturers of components for window and doors, whose supplies were used by window and door manufacturers in the production process were approached. The presence of the competition on the market since the sixth edition and the fact that it was run by two organizations perceived as experts in energy efficiency issues inspired confidence and gave assurance of implementation in a professional manner.

In the end, the component manufacturers decided to finance the implementation of the event and declared their further willingness to cooperate in future years. This gives hope for the possibility of organizing further editions of TOPTEN competitions for manufacturers and partial

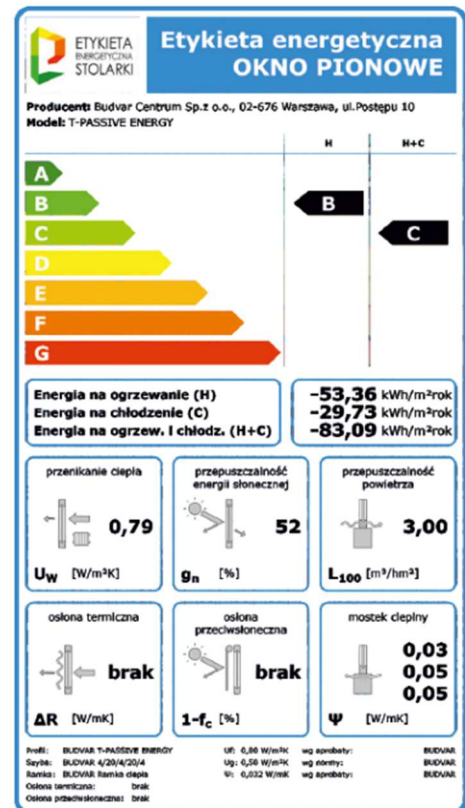


Figure 1. Example of an energy label for a vertical window

financing of the program through further development of cooperation with manufacturers of components/elements for windows and doors without the need to engage other financing.

Plans for the future

FEWE plans to maintain and develop the TOPTEN / HACKS program as part of its statutory activities after funding from the grant agreement ends. The Foundation plans to use its own funds for this purpose. This is because the objectives of the Topten/HACKS project are in line with the Foundation's statutory activities and support the realization of FEWE's main statutory goals of promoting and supporting efficient energy use in the economy.

We observe a growing interest in the topics of energy efficiency and energy-saving solutions by individual consumers, so after the end date of HACKS implementation FEWE is planning to develop its own statutory project that will ensure the core financing for project continuation. In parallel we will observe and search for:

- **The available and appearing co - financing opportunities within European and national financial schemes.** In our perspective, the TOPTEN - HACKS legacy provides a good basis for developing tools to promote counting the carbon footprint of products. In this regard, we will seek further funding for activities (the first application to LIFE has already been submitted).
- **Synergies with other currently implemented projects and with planned projects.** With the development of One Stop Shop energy services, the demand for information on the best products for building renovation will grow. TOPTEN - HACKS will be customized and used in projects implemented by FEWE (currently developed One-Stop-Shop project), or in cooperation with other organizations min. SAPE within the framework of the Build up skills project.
- **Synergies with available and new national financial motivation schemes supporting the exchange of HVAC equipment into more efficient one.**

Having in mind current mass interest on energy saving we do not exclude trying fundraising activities. The crowdfunding supported by e-mailing seems to be the best option to try. The project results will be disseminated and promoted during:

- Energy events for citizens.
- FEWE implemented trainings on energy efficiency issues.
- Developing cooperation with the consumer federation for information on the best products.

Czech Republic

Michal Staša, SEVEN



Supplementary information

As mentioned in the previous case study in Annex I, the SEVEN have funded some aspects of Topten themselves, with some details outlined here:

- **Self-funded work.** Categories not covered by specific projects have and will be updated using internal funding from SEVEN. This tackles, for example categories maintained by Procold project: commercial refrigerating plug-in appliances. The project Procold was active in years 2015-2018. Following the end of the project, the team upgrades the categories once a year.
- **Value to organisation.** The Czech Topten (Úsporné spotřebiče) is well established brand and it is seen as a general website promoting energy efficiency and energy efficient appliance. Also, this serves as SEVEN's communication channel to the public and professionals.

- **Positives/negatives and learnings.** In this method of funding there are clear negatives: there is no financial source for Topten's upgrades and it is pure overhead item. However, on a positive note, the website supports the publicity of SEVEN.
- **Process.** In order to agree to finance some aspects internally, the Czech Topten team discussed this matter several times with relevant company actors and came to the agreement that it was a beneficial and suitable use of resources.