Topten Act Deliverable 3.9 Periodic Market Surveillance Report

A Topten market surveillance report including results of the EEI calculations, online label display monitoring, and product testing review.

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www.topten.eu

Topten ACT aims at transforming the European market of energy-using products towards higher energy efficiency.

Topten Act identifies the top energy-efficient products in 16 European countries, and makes this information available to consumers and large buyers on tailored national websites. The most energy efficient models of different product categories (such as household, lighting, office, consumer electronics, cars) are presented with comprehensive product information, which is based on official labels and standardized declarations. Topten works with manufacturers and thus increases both market offer and consumer demand of high energy efficiency products. Topten is strictly neutral and independent of manufacturers and retailers, its selection criteria are transparent and always online.

Topten Act is supported by the European Commission's biggest research and innovation programme Horizon 2020, and many national organisations (energy agencies, environmental and consumer organisations, research institutes). Topten Act is a project of 17 partners in 16 European countries and coordinated by ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie).

More information and access to all National Websites on the European site: www.topten.eu

Topten Act coordinator: ADEME

European portal **www.topten.eu**

Project partners and websites

Austria, AEA
www.topprodukte.at

Belgium, BBL
www.topten.be

Czech Republic, SEVEn
www.uspornespotrebice.cz

France, Guide Topten
www.guidetopten.fr

Germany, Oeko-Institut
www.ecotopten.de

Italy, Eliante
www.eurotopten.it

Lithuania, LNCF
top-10.lt

Luxembourg, Oeko-Zenter
www.oekotopten.lu

Norway, Naturvernforbundet
www.energismart.no

Poland, FEWE
www.topten.info.pl

Portugal, Quercus
www.topten.pt

Romania, Icemenerg
www.topten.info.ro

Spain, WWF
www.topten.wwf.es

Sweden, SSNC
www.toptensverige.se

Switzerland, Bush Energie
www.topten.ch

UK, EST
www.top10energyefficiency.org.uk/

Content:

Topten: Key principles

Topten is a transparent consumer-oriented online search tool that enables comparison of all kinds of electric products and equipment. It presents the most energy-efficient and up-to-date appliances in various categories of products, including household appliances, office equipment, consumer electronics and cars.

For each type of product, information is provided on energy performance and several other characteristics of interest for consumers (i.e. brand, model, price, picture, as well as number of programmes, speed for printing…).

The Topten programme has been created to identify and promote the most energy efficient products – and thus to organise the "market pull" activities, which support higher penetration of the most efficient models by supporting the demand among consumers, and the increased offer by suppliers.

Only products fulfilling the selection criteria can be added to the lists, no advertisements or commercial promotion is possible.

Information concerning the products is being searched from the energy labels, product fiche, product manuals, manufacturer catalogues and websites, and other sources of information, required to be publicly available by the respective EU legislation, or international technical measurement standards.

Purpose of this document / summary

The energy label legislation, which applies to many product groups covered by the Topten programme, as well as Ecodesign and other related legislation, are based on manufacturers' self declarations in the EU. This means that manufacturers elaborate and circulate the energy labels (and other documents such as the product fiche) with their products to the retailers. It is the role of the EU member states' responsible Market Surveillance Authorities to verify the product claims for selected models available on their markets.

While Topten did organise some own sample product testing activities in the past to verify manufacturers' claims (focusing on LEDs, TVs and tumble driers, and also focusing on the professional cold products within the related ProCold project), it is out of the programme scope to test all individual models that are listed on Topten sites.

The project organisers have therefore designed a specific "Task 3.2" into the Topten Act project, so that all national Topten partners, who update the national Topten websites with individual models, could check and truly rely on the information provided by the manufacturers, as well as contribute to the efforts to inform consumers properly on the basis of the energy label about the product's energy efficiency performance.

The overall goal of this task is to contribute to the efforts of market surveillance – to ensure that the information provided by manufacturers on the energy label is correct, and that the retailers provide the energy labels and the product fiche to consumers in the prescribed form.

The activities within this task have been performed by the Topten Partners in the following three ways:

- **Calculating the EEI** – Energy Efficiency Index of the individual product, depending on the product category, to verify if the EEI figure calculated corresponds to the energy efficiency class declared by the Manufacturer.
- Monitoring the **proper display** of the energy label and product display fiche in selected online shops
- Monitoring availability of information on **product testing** and cross-checking the test results with the list of models relevant to the Topten portals.
- Some of the EEI calculation findings include that some models are designed at the lowest possible level of a specific energy efficiency class interval. These could be a natural target to be selected for formal market surveillance exercises.
- As for the label display duties, insufficient format of the label display and/or lack of the availability of the product fiche remain the main issues. The future layout of energy labels, as well as the system of providing information (database, QR codes, etc.) are therefore very incremental in enabling customers to really receive required information.
- While Topten has not identified Topten-eligible products being tested for formal compliance verification, the project team supports the continued efforts in reviewing and testing products for their compliane with energy efficiency claims made on the label.

EEI
Energy Efficiency Index calculation

Goals and actions undertaken

Concerning the calculation of the Energy Efficiency Index, the project team has undertaken the following activities:

- Elaborated a guidance document (Deliverable 3.5) that details the methodology of the surveillance exercise – to identify product categories and the number of product references to be included in the EEI calculation. This guidance document explains the specific calculation formulas for individual product categories, enabling to calculate the specific energy efficiency class based on available product data. This document has been also made available to consumer protection, environmental and civic organisations, as well as relevant manufacturers.
- Topten Act national partners, coming from regions with different market characteristics, have calculated the EEIs of products in their respective national markets with individual product updates, but at least two times throughout the project.
- When relevant, project partners have informed suppliers / manufacturers about possible mistakes in calculations and requested corrections; and in the case of insufficient correction measures, negotiated appropriate measures, depending on the national context, including the information to be provided to the market surveillance authorities.

Market Surveillance Guidance Document

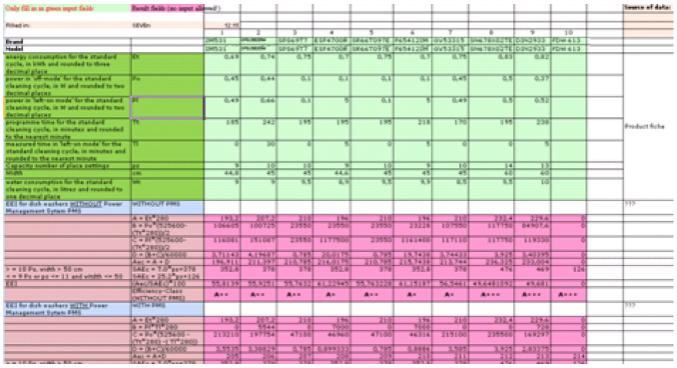
The Market Surveillance Guidance Document has been elaborated and shared with the project team and, throughout the task activities, also with other relevant stakeholders, including the manufacturers, whose products have been investigated.

This document provides details and formulas for the calculation of the EEI for the relevant energy label regulated product categories (starting in 2015,with updates throughout the project).

- Product categories covered within the document:
  - Household Refrigeration Appliances
  - Washing Machines
  - Dishwashers
  - Tumble Driers
  - Televisions

- For each of the categories covered, the document provides the following information:
  - Topten.eu selection criteria
  - EEI calculation formula (based on the relevant EU legislation)
  - Information required for the calculation

In addition to this document, for each of the product category listed above, an *internal excel calculation* sheet has been elaborated and shared with the consortium, see the illustration picture below:



EEI calculations – Results and impacts

It is important to note that while the original project target was that eight partners would calculate the EEIs of products, it was discussed and decided at the first two project meetings to "upgrade" the activity to the following status:

- All national project partners to calculate the EEIs
- To elaborate the EEI calculation with productupdates for new products
- And to calculate the EEI value for ten products for each main product category.

This upgrade has meant that all 15 national partners (instead of just 8), and the EU-level portal as well, have focused attention on the EEI calculation. Each of the partners has calculated ten products from the main categories of products which they are publishing online on the national Topten portal.

The individual products for the EEI calculation have been selected randomly, but ensuring a variety of brands being represented, as well as lower-priced models, brands with known history of non-compliance or suspicious of higher risk of wrong declarations.

The evidence stored provides EEI calculations for some 700 products in six key product categories in each of the two rounds of calculations. While most partners calculated all relevant categories, some exceptions include:

- Calculation only for those categories which are being published online on the specific national Topten projects, such as for example a Southern European Topten-partner country not covering tumble driers product category.
- Models adapted directly from the Topten.eu portal to the national Topten sites have not been recalculated again, as each product published on Topten.eu has the EEI calculation verified before publishing.

- Some partners provided more calculations for one product category (e.g. recalculated after an update of products on line) or calculated separately more sub-categories (divided by size or capacity, e.g. refrigerating or wet appliances)

It has to be underlined that, in the majority of cases, the EEI calculations have confirmed the energy efficiency class declarations provided by the manufacturer on the energy label. Only few modifications occurred in the following cases:

- In some cases partners have exchanged with manufacturers (national suppliers) on the data provided on the energy label and the product fiche with seeking for clarifications. After the clarifications, some cases of discrepancy found and confirmed was the following:
  - An Italian manufacturer confirmed that they have modified product fiche for five dishwashers based on the Topten findings. Note that the energy label was correct, but data in the product fiche (which is necessary for the EEI calculation) provided some wrong figures and these were corrected.
  - Numerous products are declaring an energy efficiency class at the lowest limit of the respective energy efficiency index. While this is not illegal, it highlights the need for proper submission of data, calculation of the indexes, let alone the technical measurement of individual performance parameters.
  - Product data from its fiche and technical documentation is needed, as certain calculations cannot be provided only with the figures from the energy label.
  - The energy efficiency class may depend on the number of decimal places used in the calculation of the energy efficiency index. Some products investigated used one decimal place, other used three decimal place, and the resulting energy efficiency class calculated differed by the number of decimal places used. This was communicated with the suppliers.
  - Long term experience of the Topten team in this area shows that the overal situation in this improving – the overal number of products showing other declarations then calculated has decreased.

In summary, this activity has been useful for several reasons:

- Partners have been more engaged in the selection of specific models for the Topten portals, not only "passively" reproducing data from the energy label but also verifying these by calculations before publishing.
- Manufacturers / suppliers have been informed about the calculation activity in case any discrepancy has been identified. While in most cases only an explanation of the right figure or source of data was needed, this has raised the attention of supplier representatives on the importance of energy labels, product fiches, EEI and market surveillance.
- Communication: Topten partners could use the experience with EEI calculation in their communication activities, increasing the expertise and authority of Topten to collect and provide data on the most efficient products on the market.
- Market surveillance: this activity falls well within the overall efforts of other EU projects and surveillance authorities in ensuring that data provided to consumers on the energy label are correct.
- Full evidence of the EEI calculations undertaken by the project partners is stored and undertaken separately by the project partners engaged in this task - please contact the project organisers in case of an interest for more information.

Online shop monitoring

Goals

The second activity within this task focused on the monitoring of proper display of the energy label and product fiche by online shops. The goal is to ensure that consumers, when purchasing products, including the ones rated with the highest energy efficiency performance parameters, do have the information properly displayed.

The project plan was that several national project partners would select 3–5 internet shops with significant market shares.

Where lack of information would be identified, national Topten Act partners would take appropriate measures, including the information of the retailers, the manufacturers, and the market surveillance authorities.

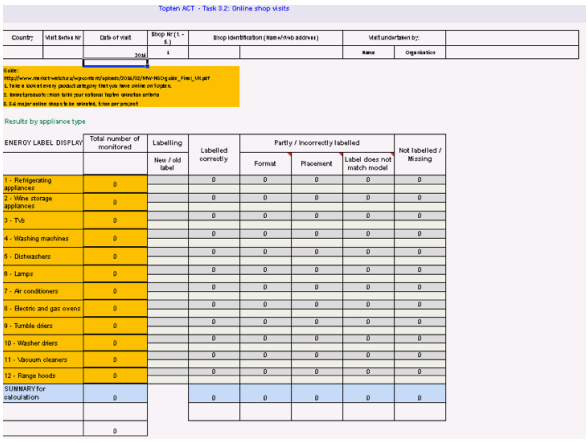
Actions undertaken

It was agreed during the project kick-off meeting and confirmed at the second project meeting that partners from the following countries would be involved in this activity:

- Austria
- Czech Republic
- France
- Poland
- Portugal
- Italy
- Lithuania (2nd round only)

The monitoring activities have been conducted in Spring 2016 and in Summer–Autumn 2017.

Synergy with other relevant EU project was used: **the MarketWatch project's Retailer guide, available here in ten languages**, has been shared with the project partners in order to gather knowledge and expertise on the full details of the proper energy label display. Some project partners have also individually shared this Guide with the monitored retailers.


Topten ACT - Task 3.2: Online shop visits

Country:	Visit before N°	Date of visit	Shop N° (1 - 5)	Shop identification (name+/Web address)	Visit undertaken by:	
					Name	Organisation
		2016	1			

Results by appliance type

ENERGY LABEL DISPLAY	Total number of monitored	Labelling	Labelled correctly	Partly / incorrectly labelled			Not labelled / Missing
		New / old label		Format	Placement	Label does not match model	
1 - Refrigerating appliances	0		0	0	0	0	0
2 - Wine storage appliances	0		0	0	0	0	0
3 - TVs	0		0	0	0	0	0
4 - Washing machines	0		0	0	0	0	0
5 - Dishwashers	0		0	0	0	0	0
6 - Lamps	0		0	0	0	0	0
7 - Air conditioners	0		0	0	0	0	0
8 - Electric and gas ovens	0		0	0	0	0	0
9 - Tumble driers	0		0	0	0	0	0
10 - Washer driers	0		0	0	0	0	0
11 - Vacuum cleaners	0		0	0	0	0	0
12 - Range hoods	0		0	0	0	0	0
SUMMARY for calculation	0		0	0	0	0	0
	0						

A specific excel table has been designed in order to collect and store data on individual shop monitoring inspections, and then be able to monitor and cross-check the information – see the print-screen.

Respective parts of the project meetings have been devoted to the training of how to conduct this exercise, and email exchange between the task leader and the reviewers in individual, possibly dubious, cases.

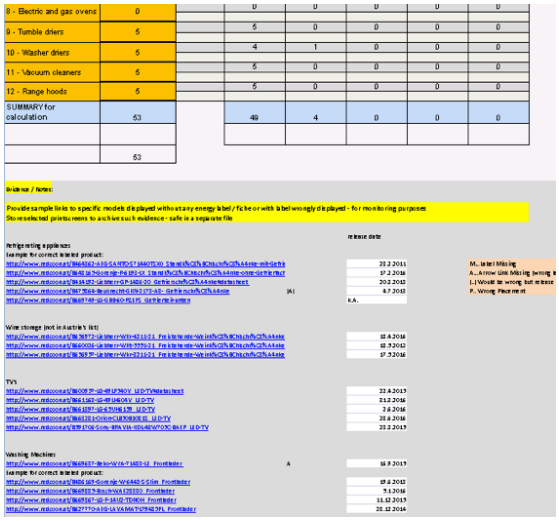
All partners who participated in this action have selected the individual shops randomly, but selecting the ones with significant market shares – therefore used by large number of customers in selecting their new home appliances.

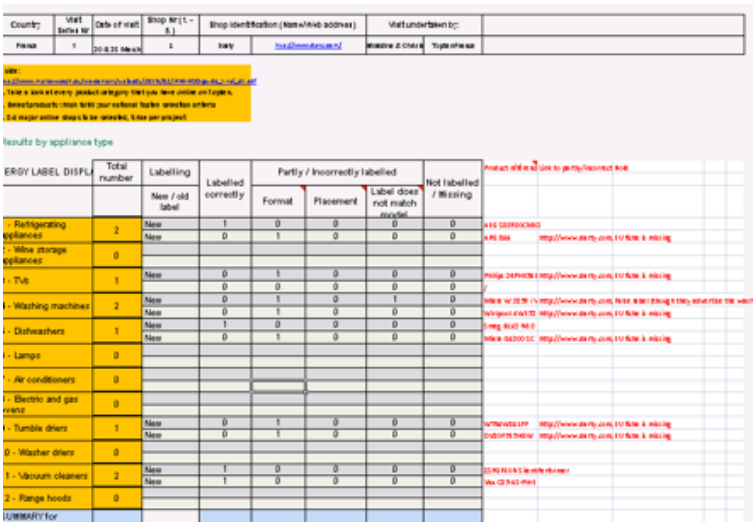
In the first round, 29 eshops have been reviewed, i.e. 4,8 shops per partner on average (out of the plan of 3–5 per partner), in six countries. **2550 products have been inspected**, mainly within the white goods, TVs and lamps.

In the second round, 32 eshops have been reviewed in seven countries (4,5 shops per participating partner). **2321 products have been monitored**, again focusing on white goods, TVs and lamps.

Tables for individual shops and countries are available with the national Topten teams. For monitoring and reporting purposes, these tables also contain links to individual product pages, where the information has not been provided in the proper format. Selected evidence in website print-screen pictures have been taken and stored as well.

The pictures below illustrate internal data monitoring and storage for individual countries:





Results and impacts

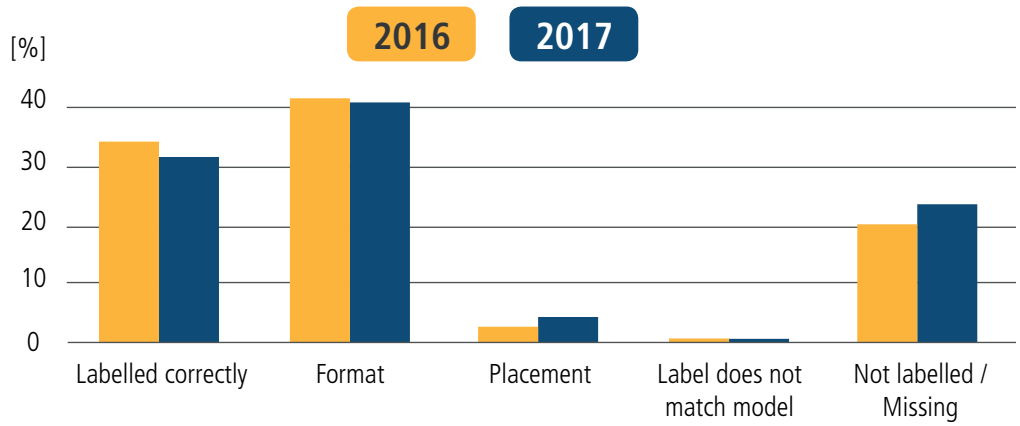
The experience of the Topten Act project confirms the situation observed also by the other recent EU initiatives, such as the **MarketWatch project**. While Topten Act cannot provide any figures on the percentage rate of products not displaying the energy label and product fiche properly, due to the small sample of shops and exclusive focus on most efficient (Topten eligible) products, the results do indicate that also the online shops with high market shares (experienced ones) do not always properly display the energy efficiency data (not even for the top efficient models, where this would be a good sales argument).

In most cases the key information was displayed (energy efficiency class and indeed the energy label), but sometimes the placement was not appropriate (in the proximity of price), or the product fiche was missing.

Other typical mistakes included:

- Energy label and/or the product fiche not available
- Energy label provided only in picture gallery, in wrong location (not in proximity to price), unable to open it when clicking
- Energy class arrow in insufficient size and location, and/or without a link to the label

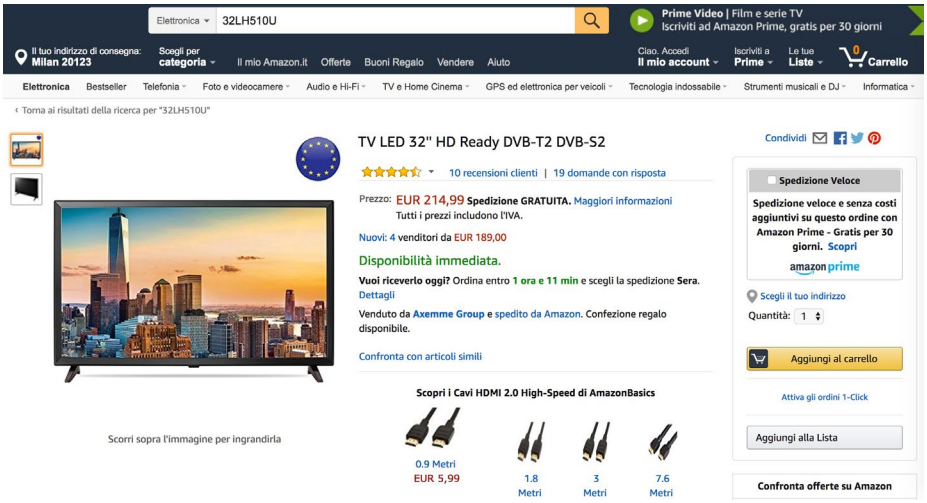
Energy label information display for Topten products in eshops in 2016 and 2017 in 7 EU countries



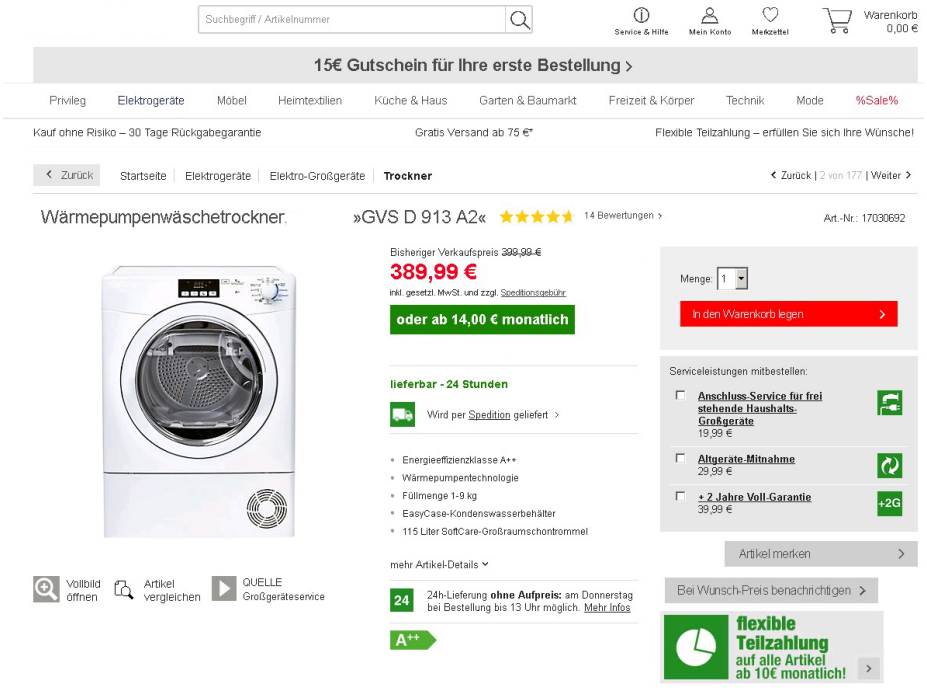
In individual relevant cases, when the information was not properly provided, the project partners have informed the monitored shops on the results and have provided them with the guidance documents elaborated by the MarketWatch project for improvements.

Full evidence of the eshops monitored by all participating project partners is stored separately by the project partners engaged in this task - please contact the project organisers in case of an interest for more information.

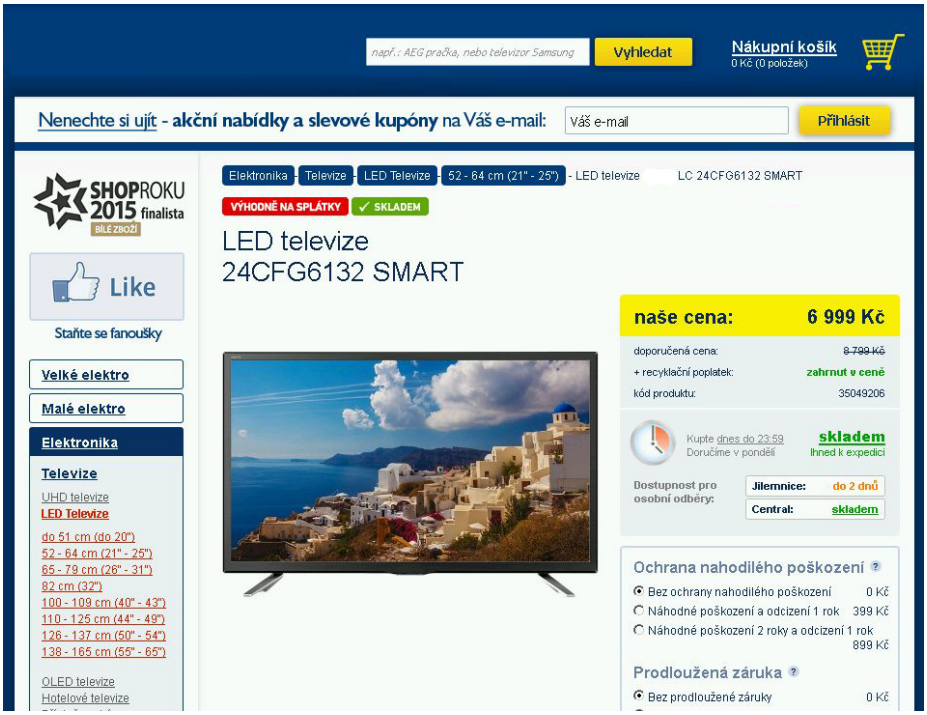
Illustration pictures here



No energy label information available



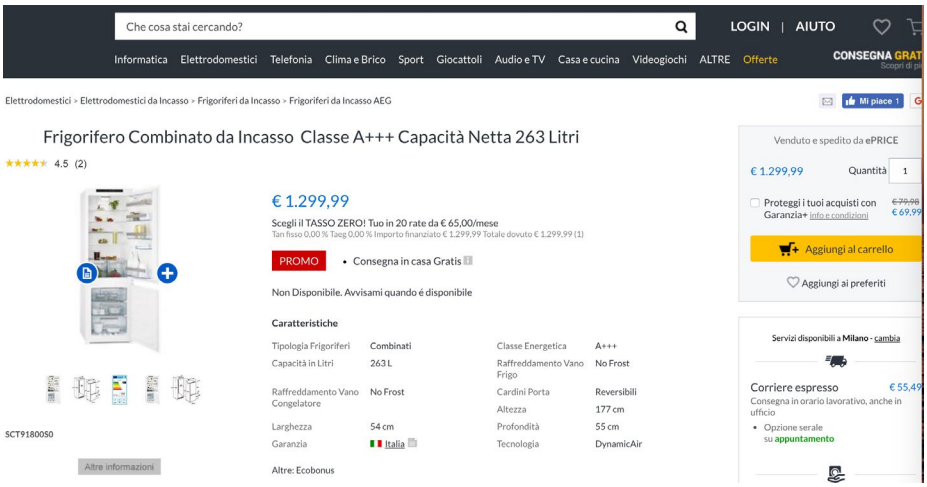
Wrong placement of the energy class arrow



No energy label information available

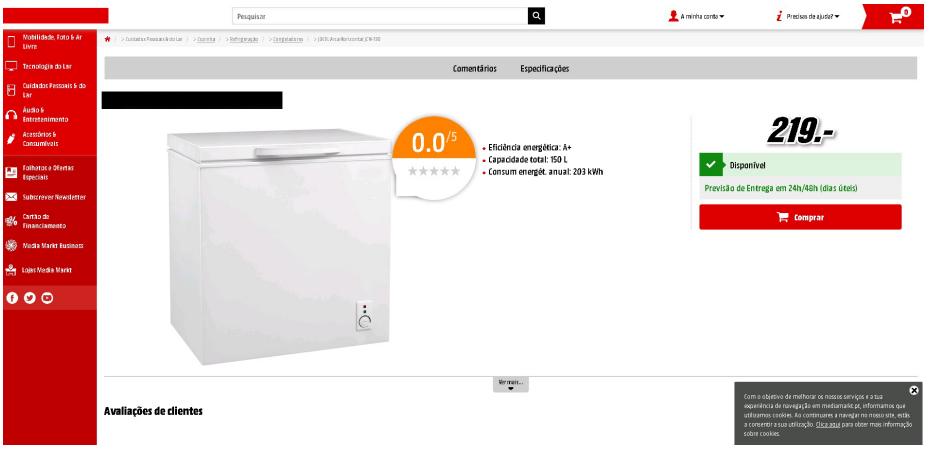
No energy label information available

- Placement of the energy label only in the product picture gallery



- No energy label information available

- No energy label information available



Product testing monitoring

Goals

The task leader reviewed and monitored information about product compliance verification campaigns available from other European projects and from national authorities, to ensure that no technically non-compliant products appear on Topten Act websites.

Actions undertaken

The goal of this specific task was to make sure that no product that would have been tested to check its compliance with energy label, and found noncompliant, would be listed on the Topten portals.

Since the Topten initiative does not have the funds and resources to conduct extended product testing, it has to rely on the self-declared data of manufacturers.

However, given the need to ensure proper market surveillance activities organised by national authorities and the relevant EU projects, the Topten Act team ensured that the information publicly available on product testing would be used in its own activities as well.

Therefore, the task leader in cooperation with the WP leader and the project organisers, has been working on the collection of data concerning testing of products relevant for Topten.

During each project meeting, partners have been informed about the relevant ongoing projects where products would be tested. These projects included the TVs (ComplianTV), lamps (PremiumLight) and a variety of products tested by the MarketWatch project.

Partners also monitored testing activities organised at national level, but no Topten relevant results have been revealed or made publicly available.

Results and impacts

It can be confirmed that there was no case of a product found to be non-compliant and relevant for the Topten Act project.

Throughout the project duration, several relevant testing activities of external projects have been organised, where at least some of the results have been made publicly available:

- Televisions: **ComplianTV** project: While some noncompliant products have been identified, none of the models was relevant for the Topten lists.
- Light sources: **PremiumLight** project: products were not tested strictly according to the energy label legislation requirements, therefore no model could be formally withdrawn from Topten list.

- Various products: **ECOPLIANT**, **EEPLIANT 2014**, **EEPLIANT 2** projects: Projects organised by consortiums of market surveillance authorities, focusing also on home appliances, but without publishing data on individual models.
- Various products: **Market Watch**: A project organised by a variety of consumer protection and environmental NGOs, did identify technically non-compliant products (high risk approach), but not relevant to Topten lists.
- Professional and industrial products: **ProCold** project /professional refrigerators/ and **INTAS** / transformers and fans/: ProCold project runs as a "sister" project Topten, otherwise Topten only focuses on home appliances.
- Individual Topten partners collaborate with other projects and/or with national authorities in monitoring the product quality and energy efficiency.
- While no specific product from within the Topten range has been identified as a subject to formal market surveillance, the results of various projects and activities confirm the need for continued attention devoted to this topic.

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