

# Click your way to energy savings

EURO-TOPTEN MAX 2012-2014 • REPORT

Find out the most efficient products in Europe with a simple click on the Topten websites

FEBRUARY 2015

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# Find out best products in Europe

#### **Cold appliances**

- Free standing refrigerators
- Built-in refrigerators
- Chest freezers
- Upright freezers

#### **Washing machines**

#### **Dishwashers**

#### **Air conditioners**

#### **TVs**

#### **Tumble driers**

- Residential use
- Semi professional use

#### Vacuum cleaners

#### **Coffee machines**

- Fully automatic
- Capsule espresso machines

#### **Energy saving lamps**

- LED lamps
- LED spot
- Office Luminaires

#### Office equipment

- Notebooks
- Computer monitors
- Laser printers
- Laser multifunction printers
- Inkjet printers

#### **Cars**

- Mini
- Small
- Compact
- Middle classUpper middle class
- Vans 5 seats
- Vans 6 seats and more

#### **Electric water heaters**

#### **Circulation pumps**

## Professional cold appliances

### **Executive summary**

### **EURO-TOPTEN MAX project**

#### www.topten.eu

January 2012 - December 2014

21 partners presenting complementary backgrounds: energy specialists, energy agencies and research institutes, environmental NGOs and consumer organisations with communication competencies:

ADEME - French Agency for Environment and Energy Management, France (coordinator)

AEA - Austrian Energy Agency, Austria

BBL - Bond Beter Leefmilieu Vlanderen vzw, Belgium

REGEA -North West Croatia Regional Energy Agency, Croatia

SEVEn: The Energy Efficiency Center, Czech Republic

Motiva Oy, Finland

Guide Topten, France

Oeko-Institut e.V., Germany

Wuppertal Institute, Germany

ICLEI, European Secretariat, Germany

WWF Greece, Greece

WWF Italia Onlus, Italy

LNCF, consumer federation, Lithuania

Oeko-Zenter, asbl, Luxembourg

Norges Naturvernforbund, Norway

FEWE Polish Foundation for Energy Efficiency, Poland

Quercus, Portugal

ICEMENERG, Romania

WWF Spain, Spain

SSNC, Swedish Society for Nature Conservation, Sweden

Keep Britain Tidy, United-Kingdom

The members of the Steering Committee show interest in the Euro-Topten Max project, support its partners or start to manage a Topten activity in their country:

Topten Switzerland WWF Switzerland dena, Germany Denkstatt, Bulgaria

Cost: 2.15 M€

Support from the Intelligent Energy-Europe programme: 1.61 M€

#### **Purpose**

Topten is a market transformation tool used to bring more energy efficiency on the market of products and equipment. Topten:

- Provides selections of the most efficient products available on the market. The selections are displayed on user-friendly websites managed at national level, close to consumers' markets
- Stimulates consumers and large buyers, via communication and support to professional procurers
- Stimulates manufacturers and retailers, via regular contacts, information and promotion of their most efficient products
- Contributes to market transformation and policy design thanks to its analyses

#### Key results

- 19 websites presenting continuously updated selections of best appliances, recommendations for users, and selection criteria
- Information available in 16 languages
- 270 product categories scanned in the 19 countries, broken down into more than 600 market segments reflecting consumers' preferences
- More than 4.72 million visitors over the three years of the project, 1.70 million in 2014. Together with Switzerland, all European Topten websites have attracted 6 million visitors between 2012 and 2014, of which 2.11 millions for the sole 2014
- Extensive media coverage
- An open Topten platform: new organisations can join at any time (Croatia and the UK)
- Differentiated impact on numerous target groups: tailored information delivered to consumers, procurement officers, retailers, policy makers, NGOs and institutions, support to utilities, support and recognition to product manufacturers and retailers investing in energy efficiency
- As a result, over 95 partnerships developed across Europe
- "Best of Europe": the only review of the supply of efficient appliances on the European market (BAT, policy analyses)
- Integration into a world-wide network together with TopTen USA and Top10 China, www.topten.info

#### Target groups and main inputs brought by the project

| Market Actor                             | Topten Value Proposition   |
|--|--|
| Consumers                                | <ul> <li>User-friendly interface to identify most efficient products</li> <li>Educate consumers on total cost (purchase price plus energy bill minus incentives) and good use of products</li> <li>Communicate benefits of efficient products for climate protection</li> </ul>  |
| Manufacturers                            | <ul> <li>Support market introduction of new products</li> <li>Provide independent, objective marketing of products</li> <li>Channel incentives and increase demand for innovative products</li> </ul>  |
| Retailers                                | <ul> <li>Increase of high mark-up products' sales</li> <li>Position retailer as "trend setter", and build trust in the message against climate change</li> </ul>   |
| Large Buyers and<br>Procurement Officers | <ul> <li>Support formulation of procurement specifications and award criteria</li> <li>Ensure that very efficient products are available on the market (no pilot product, lower risk of unsuccessful calls for tenders) from brands that are able to provide all associated services</li> <li>Reduce operating costs to enhance value-for-money</li> </ul> |
| Policy makers                            | <ul> <li>Provide real-time market data on the "best" products, with energy efficiency as a key criterion</li> <li>Pave the way for new and more stringent standard &amp; label specifications</li> </ul>   |
| Utilities                                | <ul> <li>Continuously identify the highest-efficiency products</li> <li>Serve as a basis for rebate programmes</li> <li>Serve as a source of information for their clients</li> </ul>  |
| Media                                    | <ul> <li>Serve as credible, independent source of information</li> <li>Issue regular updates</li> <li>Provide one-stop shop for broad range of product categories</li> </ul>   |
| NGOs & Institutions                      | <ul> <li>Concrete actions to illustrate their campaigns on sustainable consumption and climate change</li> <li>Material and information for their campaigns</li> </ul>   |

# Topten, a leverage to market transformation



#### a.1 Topten, a market transformation tool

Since 1881 and the first Edison light-bulb, it has only been a little over a century that mankind has developed the habit of using electricity. It is very flexible for the user (just press a button), but it is energy intensive to produce (3 parts of primary energy for 1 part of electricity), expensive, and very difficult to store. It should therefore be used wisely.

However, and despite undeniable efficiency improvement at the level of single appliance, electricity consumption in the residential sector has grown by almost 40 % between 1990 and 2010, when it reached 843 TWh in the EU27 countries<sup>1</sup>. There are several reasons for this growth: appliances and devices have multiplied, but are not always eco-designed, have grown in size, user behaviour is not always savings-oriented, etc.

The Topten network estimates that the specific electricity consumption could be reduced by 30 to 50%, provided appliances as well as purchasing and user behaviours continue to improve.

#### A synergy provider

While electrical appliances present a fundamental energy saving stake at European level, the market for these appliances is a complex one, generating three main difficulties:

- For consumers: Thousands of refrigerators, TVs, cars and other kinds of energy-consuming equipment are available on the market. Consumers, whether individuals or professional buyers, cannot always compare and chose judiciously: without clear information, nor time, it's too difficult to analyse the market...
- For manufacturers: The development of energy efficient and innovative products has an initial cost. Manufacturers need to trust there is a demand for these efficient products in order to start their production and to develop a real marketing strategy.
- For policy makers: Under the pressure of budget restrictions, it is not always easy to carry out ambitious and successful policies, despite the shared concern about climate change and energy issues.

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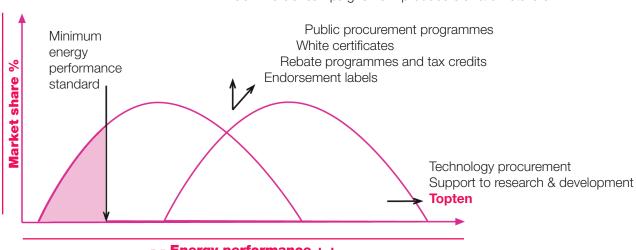
<sup>1/</sup>Source: Electricity Efficiency Status Report 2012 - Electricity Consumption and Efficiency Trends in the EU-27 - Joint Research Center, Institute for Energy, 2012, EUR 25405 EN.

This observation has led to the development of several instruments, all part of the market transformation tool box aiming at shifting the markets towards more energy efficiency:

- Data analysis and knowledge of the market
- Informative labels
- Endorsement labels
- Minimum energy performance standards
- Rebate programmes and tax credits
- Information campaigns
- Training campaigns for sales teams
- Voluntary agreements with industry, and/or retailers
- Commercial campaigns from producers and/or retailers
- White certificates
- Public procurement programmes
- Technology and cooperative procurement

- Support to research and development
- Topten: promotion of best models With regards to this situation,
  Topten encompasses and can serve most of these instruments as it:
- Provides selections of most efficient products available on the market
- Stimulates consumers and large buyers, via communication and support to professional procurers
- Stimulates manufacturers and retailers, via regular contacts, information and promotion of their most efficient products
- Contributes to market transformation and policy design thanks to its analyses

Data analysis and knowledge of the market Informative labels Information campaigns Training campaigns for sales teams Voluntary agreements with industry, with retailers Commercial campaigns from producers and/or retailers



- - Energy performance + +

# Topten smartphone interface: directly accessible in shops



#### Qualified, updated and widely accessed online

A major barrier to broad dissemination of more energy efficient and environment-friendly equipment, products and services is that consumers do not have quick and easy access in their language to ready-made qualified, independent and up-to-date product information. The purpose of Topten is to provide consumers and energy professionals with credible, up-to-date information on the most efficient products available on their local markets. The selection is much narrower than typical labelling systems, making it easier for consumers to choose from among the thousands of products available.

With Topten, consumers are directly informed about:

- The importance of choosing a good product (at the time of purchase) for their electricity bill and overall expenditure, and for the environment in general
- The importance of using electricity-consuming devices correctly, for the same reasons

#### A reference for marketing, R&D, and policy decision makers

Topten goes further than providing direct information to consumers and use synergies between the various Market Transformation tools: once the selections of Topten products are available, this very valuable information can also be used for other purposes. Topten provides key information to decision makers on their markets and the *status quo* of best available technologies; Topten can serve as a basis for rebate programmes or tax credits; Topten can fit into white certificate schemes; Topten teams can assist in many ways in cooperative and technology procurement operations; Topten feeds in information campaigns and the media – contributing to awareness raising.

Topten reinforces existing informative and endorsement labels as it verifies the information through a continuous dialogue with manufacturers at European level





and in each of the countries where a Topten website is available; Topten rewards retailers and producers who are seriously investing in energy efficiency.

The Topten tool is especially adapted in countries where information on products is available (producers' declarations, informative labels on energy efficiency, etc.) and where a significant number of people has access to the internet.

Given European standards of living and equipment rates, Topten represents a uniquely valuable tool, offering to European consumers and procurement officers a resource to replace the current generation of consumer appliances, lighting, and products sold each year with super efficient models. In choosing to purchase super efficient appliances, European consumers can reduce their individual energy consumption while simultaneously playing a major role to pull the global market toward urgently needed super-efficient products.

#### Topten criteria in green IT public procurement

CIRB (Centre d'Informatique pour la Région Bruxelloise) coordinates and promotes the use of IT by Brussels' local and regional public authorities including administrative bodies, schools, hospitals and private citizens. It acts as central purchasing body and it aims to be a leader on sustainable IT procurement. This is why its GREEN IT programme focuses on Total Cost of Ownership (TCO), and relies on Topten criteria to:

- Reduce energy consumption,
- Reduce the noise level of the appliances
- Reduce the number of appliances
- Encourage the recycling of packaging and consumption goods Thanks to the pre-market analysis, the integration of TCO in the tender, and the targeted internal (public administrations) and external (market) communication, 19 bids were received, and resulted in reduced costs.

#### a.2 Showcasing

**An internet tool...** from the portal www.topten.eu 19 national close-to consumer Topten websites can be accessed...

...Targeting the average consumer... Aware green consumers can find information by themselves, as they are ready to spend time looking for the greenest possible products. On the contrary, a large number of consumers may be resistant to, frightened or even upset by "green" information accused of promoting "expensive non-functioning devices". Even though the whole purpose of Topten is to promote the most energy

efficient products, this is not the message put forward here. The environmental rationale is not the first information even though it is extensively explained on specific pages of the web site...

**...Centred on products...** The main information (home page and second and third levels) focuses on products, almost as if the web site was a retailer's site that a consumer would visit before buying in order to compare products and prices...

...Presenting appliances... all the product characteristics that may interest a consumer are presented: the brand, the commercial reference, the dimensions, the different services (for example for white goods: no frost function, 0°C compartment, built-in), the picture, links to manufacturers' site for more information...

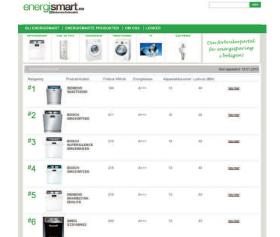
...And only the "best appliances"... from the energy efficiency point of view. These "best" appliances are presented in a table with the most energy efficient on top. They are presented according to energy efficiency but visitors can click on any information in the table to change the ranking criteria. Around a maximum of ten appliances (Topten) are presented in a category of products or a sub category (e.g. white goods / freezers / upright freezers / above a given volume).

...Emphasising the total cost over the lifetime... For each product, Topten provides the purchase price and the electricity cost over the lifetime of the appliance so that total cost is clearly displayed. Advice is also given on how to use and maintain the various products...

...And highlighting the overall efficiency gain in comparison with an inefficient model available on the market. The total cost difference with the efficient models is almost always obvious. The "bad model" is a real model but its brand is generally not published.

#### **Topten's websites ethics and basic rules**

- **Transparency:** the whole Topten approach is published on the website: manufacturers and consumers know, for each product category, the criteria for selecting "best appliances". The methodology is available on-line, with a simple additional click.
- **Flexibility:** the Topten products lists are updated frequently, at least twice a year. The criteria are easy to revise and are strengthened according to the markets' progress.
- **Simplicity:** priority is given to existing classifications and criteria. Where an energy label exists, it is used to determine the best appliances (in Europe, A+++ class for major appliances). Where it does not exist, other labels are used (such as Energy Star®, the Blue Angel label, or ATE). When there is a lack of harmonised norms to measure energy efficiency, Topten may carry out tests and develop its own methodology.
- **Neutrality:** Topten is fully independent from appliance manufacturers, importers or retailers. Thus fully independent from brands and commercial trends, Topten enables consumers to choose environment-friendly products, an incentive for manufacturers and retailers to favour them as well.



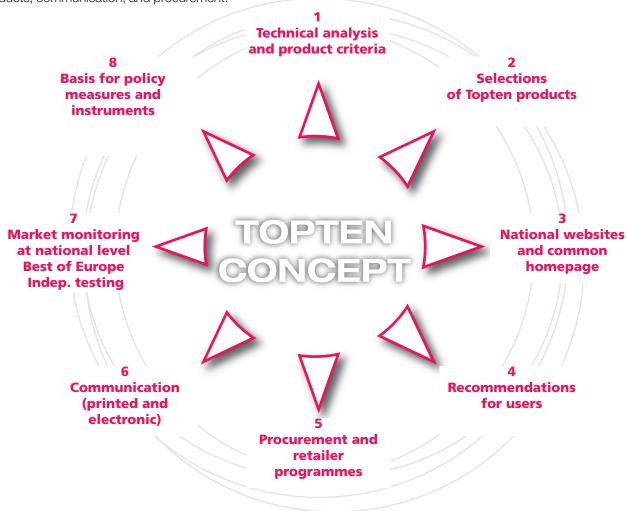
#### a.3 Achievements of field activities

The next figure illustrates that Topten is a concept that goes far beyond presenting information on a website. The various activities reinforce each other with the ultimate goal to encourage and accelerate the design, marketing and buying of highly efficient appliances and equipment within a reasonable timeframe. For each type of product, Topten teams undertake regular market studies at national level in order to:

- Verify their information with manufacturers (on technical issues, availability on the market, price, photos, etc.)
- Generate partnerships and publications in printed media and mentions of Topten in audio-visual communication means.

A lot of effort is made to find media support: if Topten is known and its credibility recognised, more consumers will visit the site and choose to buy efficient appliances and more manufacturers will be willing to collaborate and hopefully develop energy efficient products. However, Topten does not spend money on advertisement, but grows thanks to the development of partnerships, which multiply opportunities to make Topten known.

The fieldwork is therefore substantial for the Topten teams who gather specialists in project management, energy efficiency, technical issues for specific products, communication, and procurement.



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#### The Topten teams:

#### **Manage & Coordinate**

• Establish a national Topten organisation (managing the project, the various content editors, the information towards consumers, the relations with

testing laboratories, partners, etc.).

## What is Topten?

Above the water 10% **Market Transparency** 

- Topten websites
- Consumer advice

Below the water 90%

- **Market Transformation**  Market research

  - Energy labels
  - Testing standards
  - Industry contacts
  - Retail programmes
  - Procurement
  - Discount & rebates



- cooperation Work in manufacturers in order to obtain as accurate product data as possible.
- Work in cooperation with retailers in order to help provide consumers with a full service: which are the best appliances, where to find them.
- Establish cooperation with the other national Topten projects to benefit from and create international synergies, through specific programmes such as the Euro-Topten Max project sponsored by the European Commission, and through the association Topten International Group - TIG (see below).

#### Energy efficiency for consumers, in policy and procurement



Topten reveals the best products in Europe:

Topten is a web portal guiding consumers to the most energy efficient appliances and cars in Europe. Find the best products available in your country, with a simple click! » Fact sheet



#### Topten documentation:

All Topten policy recommendations and other publications related to energy efficient products can be accessed here.



#### Professional procurement:

Topten Pro gives purchasing guidance for public procurers and other professional buyers. It provides clear guidance on tender criteria to buy the most efficient product on the market.

#### **Assess & Report**

- Undertake market research on energy using products to determine which product categories should be targeted given the national market characteristics (for example boat engines in Sweden). The most comprehensive Topten system has currently 8 major product fields online: domestic appliances, consumer electronics, office equipment, lighting, building technology, mobility (incl. cars, bicycles), leisure (incl. restaurants, vacation destinations) and green electricity.
- Define benchmark criteria for top energy efficiency for each product category in cooperation with national standard and labelling organisations. The selection is different for each product category and is based on widely-accepted industry testing procedures, if available, or on a testing procedure defined by Topten. In the case of products bearing labels based on well-defined procedures (e.g., EU energy Label, TCO (Sweden), Blue Angel (Germany)), Topten relies on the label information and on independent third-party testing.
- Create, operate and update data for Topten product lists. The primary technical task in establishing a national Topten system is to create an effective database for a national market. All information is adapted to local needs and market conditions. The data includes information for the most energy efficient and environmentally friendly products in each category. It includes product energy data, photo, sales price and all functional specifications of interest for consumers. It also includes a "second price" which shows the energy cost over the lifetime of the product, and a

comparison with an inefficient model however available on the market, to underline its relative importance for the buying decision.

- Exchange data with Euro-Topten Max partners to stimulate market availability of best products.
- Provide for each product category the selection methodology in details –
   It is crucial that the Topten selection of product is transparent and neutral.
- Provide for each product category recommendations for consumers regarding optimal use of the product.
- Monitor and evaluate segment and intensity of use of website, to guide future Topten development.

#### **Communicate**

- Focus on the website which must be user-friendly, in particular for first-time visitors who are more likely to be "average" consumers looking for products than "green" consumers looking for environmental information.
   The website also contains more technical information for professional users, procurement officers and media partners.
- Publicise Topten via print material in newspapers, journals, and dedicated leaflets to attract first users. Consumer organisations, environmental organisations and the media are key partners to raise awareness among potential users of Topten.
- Initiate dialogue with responsible government officials and private sector procurement officers on use of Topten for procurement.
- Initiate dialogue with producers and multipliers (for their campaigns).

In conclusion, Topten "backstage" activities are paramount to the websites' success, as they ensure consistency and accuracy of information.

#### **Topten: an established market shifter**

After some years of operation, from a policy point of view, the main advantages of such a tool are that:

- **Topten directly reaches consumers:** the number of visitors has been constantly growing
- Topten act as a resource centre for many articles in newspapers, consumer and environmental magazines
- Topten is flexible compared to a label, there is no additional information stuck on the product itself; the criteria are easy to revise and strengthen according to the markets progress
- **Topten can serve as a basis** for governmental programmes, such as rebate schemes
- **Topten provides specifications** for public/ private procurement programmes to increase market demand for the most energy efficient products
- **Topten stimulates competition** as detailed data is published, manufacturers can compete to be "at the

top" of the Topten list (no threshold effect). As the website is very often updated, the competition on the energy efficiency criteria is continuous. It creates a market pull effect, beyond existing minimum performance standards or recommended labels

- Topten is also a platform for dialogue with manufacturers and retailers: they cooperate, answer questions about appliances, availability, provide photos, discuss possible problematic test results and ask about new regulations and norms
- **Topten increases market transparency** and lowers barriers for consumers to purchase the most energy efficient equipment, products and services
- Topten supports ambitious government or European standards by providing real-time data on the efficiency level of the best products available on each national market, thus giving policy-makers confidence to propose ambitious levels for new/updated standards

# The Topten projects act at both local and international levels

# The Strength of the European framework, supported by national market expertise

Each step of the nine-year Topten market monitoring has confirmed that the European market for appliances remains both internationally and nationally driven hence the necessity for Topten to cover both international and national issues: On the one hand, many elements of the market chain drive it towards homogeneity: a few large manufacturing companies are present in all countries and are able to supply all countries; products are generally the same from a technical point of view; the European Energy Label and Ecodesign Requirements allow for homogenous information across the whole of Europe; etc. But on the other hand, there are important differences between **countries:** design variety and corresponding differences in model references requires study of the market at national level in order to reflect national preferences and availability in shops; the market structure is also less international than it may seem: on the manufacturers' side, especially in the white goods sector (as opposed to the brown goods where the situation is easier to track), national branches are rather independent in their management: they choose the products they want to sell (from a production line proposed by the headquarters), they decide the marketing positioning of the various brands they manage, the price is set at national level, etc. This is how we get to important differences:

- In terms of **national preferences:** e.g. Nordic consumers will prefer a freezer at the bottom of a cold appliance; Latin consumers will buy a significant share of top opening washing machines.
- In terms of **supply policy from manufacturers:** at the end of 2014 / beginning of 2015, the distribution of A+++ cold appliances with a maximum consumption of 200 kWh/year in Europe is very uneven: 99 models in Germany, 68 in Czech Republic, 52 in Switzerland, 40 in Italy, 28 in Spain, 21 in France and Portugal and 9 in Norway<sup>2</sup>. Likewise, the efficient heat pump driers are not proposed and sold equally in European countries, even if they present comparable equipment rates<sup>3</sup>.

These differences – which can be explained by cultural variations between countries, average wages, the sensitivity to environmental issues, policies implemented (or not) by public authorities, etc. – are taken into account by Topten, which mixes national market information targeting consumers and global action towards manufacturers, by working in parallel on two axis:

- At national level, a field market analysis, based on national market preference and product availability; each country uses the same Topten concept but is free to adapt the web site design and the working methodology according to its own national context.
- At international level, the development of a "Topten system" in order to gain critical mass, share knowledge, compare data, understand the products' energy efficiency *status quo* and contribute to European policies.

<sup>2/</sup> October 2014 / February 2015, various Topten websites

<sup>3/</sup> For example, the availability of A+++ heat pump tumble driers in February 2015 varies from 16 in Germany to 10 models in Switzerland, 2 in France (source: national Topten websites)

#### b.1 A nine year growing network

The Topten concept was first developed in Switzerland in the year 2000 by S.A.F.E., the Swiss agency for efficient energy use. Within limited financial resources, S.A.F.E. chose to build a flexible tool supporting consumers but that would not need the design and implementation of a complex infrastructure across the country. Topten benefited from a close cooperation with WWF Switzerland, which used its notoriety to make the concept and the website known to the general public. Since then, Topten Switzerland has grown steadily up to a point where www.topten.ch provides today an unquestionable service recognised by the public authorities which largely supported it: 8 product fields (office equipment, home equipment, mobility, etc.), 56 product categories segmented in more than 200 sub-categories presenting close to 3 000 Topten products, 60 partners, 540 000 visitors in 2014.

Early 2004, and after the sound local anchorage of Topten Switzerland, the Swiss Topten team started to contact their European colleagues, as it appeared that a much larger impact could be gained thanks to a European critical mass:

- European consumers face the same situation when they want to buy electricity-consuming equipment.
- Electricity demand is growing all over Europe.
- Manufacturers develop at least European-wide strategies: any tool aiming at market transformation should integrate a European dimension in order to be able to discuss with the manufacturers' head offices with one united voice asking for concerted improvements.
- Participating NGOs, such as WWF also offer both national and European coverage.

The first countries to develop a Topten concept in cooperation with the Swiss team were:

- France at the end of 2004: www.guidetopten.fr was launched as a
  partnership between an environmental organisation WWF France and a
  consumer organisation CLCV with support from ADEME (French agency
  for environment and energy management); it is today managed by an
  independent company.
- Austria in 2005: the Austrian Energy Agency launched www.topprodukte.at as part of a large governmental "klima:aktiv" programme, still on-going.
- And Germany where in 2005, the Öko-Institut launched www.ecotopten.de, with support from the Federal Ministry of Food agriculture and Consumer Protection as well as from the Stftung Zukunftserbe (a German foundation for sustainable projects) and in 2006 dena, the German energy agency went on line with www.office-topten.de on which the most energy-efficient PCs, notebooks, monitors, printers, copiers, scanner, and multifunction-devices are presented.



#### b.2 Expanding to 21 partners with the Euro-Topten Max project

The European Union's Intelligent Energy-Europe programme (IEE) supports "action aimed at overcoming non-technological market barriers for energy efficient products in the residential and tertiary sectors". One way of doing so is to promote the best technologies, while guaranteeing end-user comfort levels. This promotion can be done through the implementation of various activities (including information campaigns, awards, benchmarking, voluntary agreements, exhibitions, training, best practices, etc.) so that the market share of energy-efficient products goes up and less efficient products are gradually phased out. The ultimate goal is that "products are designed, manufactured, purchased, installed, used and disposed of in the most energy-intelligent way".

The Topten concept fits perfectly within the IEE objectives and activities and therefore, in 2006, the "Euro-Topten" project was launched in the framework of this programme, followed by the "Euro-Topten Plus" project in 2009, and the "Euro-Topten Max" project in 2012.

The projects aimed at encouraging consumers to ask for, choose and properly use energy efficient products, while getting retailers and large buyers involved, and at creating multinational pressure to orient manufacturers toward more energy efficiency across their range of products. They use synergies with existing instruments such as the European energy label and Ecodesign requirements, utility programmes, and information campaigns.

The projects' short-term goal is to create the best conditions to shift the market towards higher energy efficiency, i.e.: sharing experience, and reaching the necessary critical mass through the efficient network of Topten websites.

The Euro-Topten Max project was built around 21 core formal partners, as an open platform, to share information with a wider circle of countries and to welcome organisations interested in the project, and willing to develop a Topten project in the future, or leading complementary initiatives – the Topten Steering Committee gathering these non-formal participants had four members at the end of the project. As a result, 19 Topten European websites were developed or joined the Topten movement between 2006 and 2014.







# Euro-Topten Max Steps and components

The Euro-Topten Max IEE project has gathered 21 partners committed to implement a work programme composed of 6 major components (all public deliverables are available from www.topten.eu).

## 1 - Project management Coordination: ADEME

Partners of projects gathering numerous teams must be able to rely on a solid yet lively management. The project gathered 21 official partners and 4 additional organisations interested in the Topten concept and implementation.

- Euro-Topten Max gathers teams with different and complementary backgrounds: energy specialists, energy agencies and research institutes, environmental NGOs and consumer organisations with communication competencies.
- A small coordination team led by ADEME (3 persons) deals with contractual and administrative issues, manages joint expenses in order to generate economies of scale, and also acts as a hot-line regarding technical issues on all products and dissemination activities (see component 2).
- Two websites have been developed and maintained: a collaborative working tool dedicated to partners and a user friendly tool for the public (www.topten.eu) also acting as a portal to the national websites and providing information on European best appliances.

#### 2 - Developing the Euro-Topten Max network Coordination: ADEME

This component is at the core of the Euro-Topten Max project: elaborating the Topten product selections is the most time consuming activity (as it is continuous) but constitutes the basis for all the other activities and feeds-in the other components.

The coordination teams provides internal seminars for new staff, a manual
on how to run a Topten website, and a hot-line on all issues: market studies,
development of adapted selection criteria and thresholds, information on
specific products, advice on web development, possible contacts with
manufacturers, communication issues, relationships with retailers, etc.

• Each partner is in charge of developing its national website and implementing the numerous related activities: market studies, media events, partnerships with cities, etc.

#### 3 - Technical specifications Coordination: AEA, Öko Institut

This component aimed at providing the necessary technical and general market elements to a Topten team willing to update and / or start a new product category.

- One of the European added values of the Euro-Topten Max project is that this technical information is developed once, by the most qualified partner, for the benefit of all partners.
- Once the national situation has been analysed for a given product (energy consumption, energy saving potential, interest from visitors), the Topten teams can find in the Topten "criteria papers" and "technology papers" all the needed information and guidelines for approaching manufacturers (thanks to a sound knowledge of the European market) and are able to fine-tune their selection criteria at the national level.
- 8 criteria papers of our documentary source were updated for the following products: LEDs directional, LEDs non directional, TVs, tumble dryers, household coffee machines, imaging equipment (inkjet printers & multifunctional), room air conditioners and monitors. 2 new criteria papers were developed for water heaters and vacuum cleaners and 2 technology papers were produced on efficient servers and data storage equipment and photovoltaics.

This component also covered the organisation of the Euro-Topten product competition (competition rules, announcement and raising manufacturers'

#### **Topten Winners at** the "expoEnergy Wels 2014"

The Topten product competition enables manufacturers to publicize their innovative highly energy efficient products at European level.

The Euro-Topten Competition winning models in three categories of products were awarded by Vincent Berrutto from EACI (Head of Unit Energy Efficiency in Buildings, Industry, Equipment and Transport of the European Commission) on February 28th, 2014 at "expoEnergy Wels" in Austria.

Winning products:

the production processes.

- TVs: model Panasonic TX-L39BLW6
- LED lamps: Onlux Globolux 60R 927
- Tumble dryers: V-Zug Adora TSL WP



It also allowed to have a constructive dialogue with a LED spot manufacturer on



From left to right: Beat Sidler (V-Zug), Christoph Treczokat (Panasonic Österreich), Vincent Berrutto (European Commission), Thérèse Kreitz (ADEME, Euro-Topten), Werner Rüedi (Onlux), Stefan Kreidler (Onlux).

interest in the participation, product evaluation, award ceremony organisation, communication activities). Competitions are highly appreciated by manufacturers who see their R&D efforts publically rewarded through opportunities for product differentiation. The competition was the occasion to perform energy consumption tests.

# 4 - Engaging with multipliers on the demand-side Coordination: ICLEI, Oeko Zenter

The aim of this component was to prepare documents in order to facilitate the cooperation with public procurers and retailers, and share experiences between the Euro-Topten Max partners.

- A specific section of the website was developed from where ready-made specifications and procurement guidelines can be downloaded for 10 product categories of particular interest for public procurers (office equipment, lighting including office luminaires, dishwashers and cars including reference to the Clean Vehicle Directive.) The Euro-Topten Max project and its "professional buyers" section in 12 countries and on the European portal was presented during targeted events and in relevant publications circulated throughout Europe (for example at EcoProcura conferences in Malmö in 2012 and Gent in 2014, or using material from the IEE Buy Smart and SMART-SPP projects). Feedback from public authorities on the procurement guidelines was incorporated and the criteria continuously updated to reflect the evolving product standards on Topten.eu.
- Regarding retailers, material examples on how Topten can support retailers and be present at the point of sales were gathered, including those showing the difficulties of working with this specific target: time consuming activity, integration of Topten in retailers' business models and in their stock of models, presence in shops, monitoring and evaluation of collaborations, training sessions for sales staff, etc.

## 5 - Market monitoring and evaluation Coordination: WIKUE

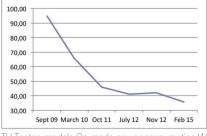
Topten has been constantly monitoring the market for years, and its studies confirm that even though the appliance market is a global one, it remains driven by strong national preferences at consumer level, and by national supply policies at manufacturer/importer, and at retailer level.

The various Topten projects converge as much as possible concerning selection criteria, but take into account their national market situation when setting the thresholds. For example, all Topten projects take as a basis the energy label for the selection of refrigerators, but in France it is possible to select only A+++ appliances with a maximum of between 100 and 200 kWh/year, while in Greece the threshold must start at A++ level in order to reflect the Greek market, which matters to Greek Topten visitors.

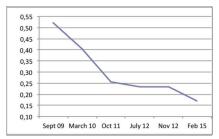
However, this component provided a monitoring tool at the national and European levels on most efficient products and their evolution, on the number of visitors, on visitors' behaviour, and on the Topten added value perceived by its partners:

• Regarding the products presented on-line: each Topten projects reports twice a year on key figures regarding the products available on-line: the number of categories, of products, and mean values regarding energy consumption and qualitative information. The objective is not to make a strict comparison, which would make little sense since the threshold of selections may vary from country to country, the sub-category may follow different logics, the updates are implemented when it is best suited at national level, etc. The monitoring activities nevertheless allow for a better understanding of major trends. For example, all Topten websites were able to tighten the selection criteria for several products, underlining a positive evolution on the market. The next table shows the Topten Italy TV energy consumption improvement over the years which was accompanied by a drop in prices. This evolution should be similar in most countries.

| Diagonal     |         | Power co | onsumpti | on On (V | V)     |        |         | Ene      | ergy Effi | ciency lı | ndex   |        |
|--------------|---------|----------|----------|----------|--------|--------|---------|----------|-----------|-----------|--------|--------|
|              | Sept 09 | March 10 | Oct 11   | July 12  | Nov 12 | Feb 15 | Sept 09 | March 10 | Oct 11    | July 12   | Nov 12 | Feb 15 |
|              |         |          |          |          |        |        |         |          |           |           |        |        |
| 19-26 inches | 41,38   | 27,00    | 24,20    | 21,52    | 21,11  |        | 0,51    | 0,43     | 0,28      | 0,27      | 0,27   |        |
| 32 inches    | 74,00   | 66,14    | 41,00    | 35,26    | 35,28  | 26,00  | 0,52    | 0,47     | 0,27      | 0,25      | 0,25   | 0,20   |
| 37-42 inches | 116,00  | 76,00    | 48,67    | 45,86    | 47,31  | 38,00  | 0,55    | 0,40     | 0,24      | 0,22      | 0,22   | 0,18   |
| >46 inches   | 148,09  | 94,91    | 69,75    | 62,50    | 63,77  | 43,00  | 0,50    | 0,32     | 0,23      | 0,19      | 0,19   | 0,14   |
| Average      | 94.87   | 66,01    | 45.91    | 41,29    | 41.87  | 35.67  | 0.52    | 0,41     | 0,26      | 0,23      | 0,23   | 0,17   |
|              | ,       |          | ,        |          |        |        | -,      | ,,,,,,   | -,        | -,        | -,     |        |
|              | Sept 09 | March 10 | Oct 11   | July 12  | Nov 12 | Feb 15 | Sept 09 | March 10 | Oct 11    | July 12   | Nov 12 | Feb 15 |
|              | 94,87   | 66,01    | 45,91    | 41,29    | 41,87  | 35,67  | 0,52    | 0,41     | 0,26      | 0,23      | 0,23   | 0,17   |



TV Topten models On mode power consumption W (Italy)



TV Topten models Energy Efficiency Index (Italy)

- Regarding web visitors, their number is monitored on a monthly basis, despite some difficulties linked to the use of and switch to different monitoring tools. The objective is to learn from comparisons between countries, between media events generating traffic, etc. A web-based visitor survey was implemented in two consecutive rounds to assess first the Topten information tool itself and secondly the behaviour of visitors (whether Topten has influenced their purchases), and the related reduction in energy demand and CO<sub>2</sub> emissions (see part C).
- Regarding the Topten evaluation by its partners, 59 interviews were performed with manufacturers, retailers, large buyers, Ministries, public authorities, utilities, green NGOs, consumer organisations and insurance company – working with Topten across Europe (see part C).

#### 6 - Communication

#### **Coordination: Keep Britain Tidy**

Most communication activities are implemented at national level by the Topten teams in order to make the Topten website known and visited. They concentrate on the media: without paying for publicity, the more Topten is quoted in printed magazines, daily newspapers, on the radio, TV, on the Internet... the more visitors will browse on Topten, get to know the site, the concept and the stakes about energy savings in their homes.

- At national level, Topten teams regularly make interviews with journalists on their Topten site, on specific products, and on wider issues as recognised experts able to popularize complex issues; they publish press releases and organise press conferences, make presentations at conferences and fairs, organise the publication of posters and leaflets, sometimes targeting specific target groups such as procurement officers, link Topten with national campaigns on energy savings and climate change mitigation.
- At European level, the promotion focuses on the www.topten.eu portal and the "Best of Europe" results. The project has been widely promoted at conferences and meetings with decision makers (i.e. presentations at the EcoProcura conferences, institutional and technical presentations at the BEHAVE conference, the eceee summer study and EEDAL conference), meetings with manufacturers and public procurers.



# **Euro-Topten Max project's deliverables to the European Commission**

(All the public deliverables are available from www.topten.eu)

Del. N° Deliverable name

D1 Home page www.topten.eu

D2 18 national websites up and running

Conclusions and recommendations from the interaction with manufacturers Upgraded software for the Topten websites

**Euro-Topten-Max Manuals** 

**Newcomers seminars** 

Sustainability plans documenting fund raising activities Reports on activities of the Steering Committee

D3 1 Framework paper: life cycle costs at the consumer level

8 updated criteria papers

2 new criteria papers

2 technology papers

A successful product competition for 3 product categories, including product tests and a report on the barriers and opportunities for cooperation on product testing

D4 10 Procurement Guidance sheets

10 New "PRO" sections on national websites targeting professional buyers Case studies for 6 pilot actions with large buyers

LCC/CO2 calculation tool for public buyers accessible on the portal Report describing Topten experiences with retailers and consumers Report gathering agreements developed by the Topten partners

D5 4 Monitoring reports

2 Topten added-value evaluation reports

2 European press books

2 European visitor feed back survey reports

D6 Monthly update of portal www.topten.eu

Report on all communication and dissemination activities

Training material

Promotional video

Euro-Topten competition award ceremony

6 monthly reports on national communication plans and activities

# Next step: Topto



Topten websites need time to be established at national level and become well known. By covering several product groups and engaging in continuous communication they succeed in becoming widely known and generate considerable impact. No Topten website can "rest on its laurels". If the market surveys are not updated regularly, and / or if communication activities slacken, awareness levels and website visitor numbers drop sharply within just a few months.

Up until the end of 2008, Topten projects within the Euro-Topten network have been focusing on technical issues in order to ensure sound and up-to-date information for consumers and a credible ground to exchange information with the manufacturers. From 2009, increasing communication activities have been developed to promote Topten to individual consumers, therefore contributing to consumer awareness on potential energy savings, and more recently towards retailers and public procurers - with a focus on office equipment. In the period 2012-2014, with 19 Topten websites working together, more products categories were presented, generating more visits, reaching more retailers and partners. A product competition, including product testing, has been organised.

The new European programme Horizon 2020 has selected Topten to be funded as one of the few projects fulfilling its call on "Consumer engagement in sustainable energy". Hence, the project Topten Act will start in March 2015, for three years. It will gather 16 European partners who will continue maintaining and developing their Topten websites, focusing their activities on consumer actions, working more with retailers so that most efficient products can be bought easily.





In parallel, some Topten partners will start developing a new Topten field of activity working on professional and commercial cold appliances, for which the potential energy savings are very large.

#### **TIG** - Topten International Group

Next to the national and European Topten projects (implying dedicated budgets and work programmes), the association Topten International Group-TIG has been founded with the objectives to support the launch of and co-ordinate national Topten projects.





# en Act – 03.2015 / 03.2018

The "Topten umbrella" has thus been created, which provides a continuum in time to maintain international collaboration between national Topten projects on the long run, and in space to welcome Topten projects from outside Europe and therefore allow for a better international understanding and the development of benchmarks. Any country can join at any time.

Each of the national Topten has its own web site, which can be accessed through the common portal www.topten.info. Euro-Topten partners and TIG members follow the Topten Charter whose purpose is to guarantee Topten quality and neutrality vis-àvis the market actors (see appendix 1).

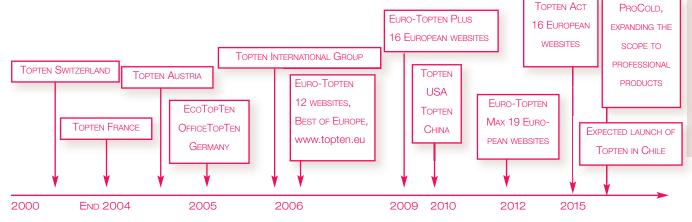
TIG oversees the continuous development of:

- 19 Topten projects in Europe accessible through www.topten.eu.
   At European level, TIG runs the project "Best of Europe", which
   addresses researchers and policy makers, presenting the best
   available technologies in Europe for specific products (see part
   C.2). This concept identifies the most energy efficient products
   available across Europe, indicating the countries where they are
   marketed.
- TopTen USA, which was launched in October 2010 and now presents 10 products categories, linking to rebate programmes of each State www.toptenusa.org
- Top10 China, which was launched on October 2010 in Chinese and English, and now presents 11 product categories www.top10.cn
- The first Latin American country, Chile, will launch its Topten website on-line mid 2015, soon followed by Argentina. Topten India is also expected to start after a positive feasibility study.

| None | None

"As a third-party organization, Top10 China works effectively on energy efficiency in China, which is necessary and helpful for policy implementation. In addition, it educates the public on energy efficiency. I hope its impact keeps growing in 2015".

XU Dingming, The State Council



TOPTEN - CLICK YOUR WAY TO ENERGY SAVINGS

FEBRUARY 2015

# C Topten's achievements: over 270 product categories, 176 000 visitors/month, over 95 partnerships

**Multiple levels results and impacts.** Topten covers a wide range of activities, from detailed market and technical studies to dissemination to various target groups including the general public. This versatility offers many keys for evaluation. A city modifies its procurement policy; a utility decides on a rebate programme; policy makers favour ambitious regulations; NGOs communicate on energy savings in homes in order to link individual behaviour and climate change issues; retailers choose to adopt energy efficient positioning and revise their product range; manufacturers develop new efficient models and strongly market them; consumers' demand for efficient models grow – Though these decisions depend on the strategies stakeholders decide to adopt, Topten may weigh, more or less explicitly, in all of these decisions transforming markets.

Within the market transformation toolbox, Topten is considered as a "soft measure", a measure that definitely impacts the market on crucial aspects: it is a market shifter, a facilitator, an education tool, a decision-making aid. The resulting number of saved kWh can be best quantified in the framework of a structured and comprehensive evaluation project.

Several evaluation studies have been carried out in order to evaluate Topten's multiple impacts<sup>4</sup>. These studies confirm that the estimate of 300 kWh savings per unique visitor on the Topten websites is a very reasonable and conservative one, when considering all together the impacts on manufacturers, retailers, policy markers, consumers and professional buyers.

When the European Topten websites gather 2 Mio visitors a year, it means 600 GWh final energy savings are triggered each year.

For 2014, given the number of visitors, savings were as high as the residential electricity consumption of the city of Lisbon in a year.

The monitoring activities undertaken within the framework of the Euro-Topten Max project confirm other important trends:

- A constant growth of the websites' contents (in number of product categories)
- The fact that all Topten projects were able to strengthen their selection criteria for several product groups showing that the best on the market have evolved positively enough to look for even better performance.

Next to the deliverables of the Euro-Topten Max project, Topten brings about

<sup>4</sup> See for example the web based visitor survey undertaken in the framework of the Euro-Topten Max project (2014), and the University of St Gallen "Topten International: Developing comparable measures to evaluate impact on market transformation towards energy efficient products", Chloé Burkhardt, 2012 — which locical framework is presented in Appendix 2.

three major positive impacts, which all together contribute to save energy.

- Visitors get to know very quickly and simply about best appliances. They save energy and avoid CO<sub>2</sub> emissions.
- The www.topten.eu portal has enabled the Topten partners to develop synergies and develop the "Best of Europe" activity which identifies best available technologies and presents the status quo on efficient products.
- Through their daily activities, the Topten teams generate substantial
  positive impact and play a range of market functions that add value for
  the full range of market actors: consumers, manufacturers, retailers,
  procurement officers, policy makers, utilities, the media, NGOs. These
  three major types of impact are detailed below.
- c.1 Topten available to millions of people

The best indicators of the vitality of a project largely based on internet are the numbers of visitors, together with the numbers of quotes in the media. Notoriety can only result from the intensive Topten teams' communication activities. A deficit in communication activities means fewer visitors, less interest from manufacturers, and from large-scale buyers and less credibility, this is why the Topten teams have actively worked to reach over 273 million readers, listeners and viewers, and more than 6 million web visitors over the three years of the project (2.11 millions in 2014). These numbers are expected to grow in the future.

However, the number of web visitors is difficult to assess, due to data discrepancy from one web analysis software to another. Topten partners have worked on harmonizing the method: the majority uses today the least "optimistic" tool, which leaves out random bots hits, but some webmasters use other software, with different metrics. It also depends on many external factors that do not fall under Topten's control: the public's general awareness and sensitivity to energy, environmental issues changes according to the international context (economic crisis, climatic catastrophic event, raise or drop of oil and energy prices...) and political agendas; the fact

that media follow trends and have the final say for what they publish even if Topten provides high quality material; the varying degree of interest and willingness of partners to collaborate with Topten; etc.

#### Across the European media

Regarding the quotes in the media, few Topten teams have the means to do an exhaustive follow-up and assess the value of their media coverage, but all try to keep track of the number of "media contacts" – i.e. how many times their Topten project is being mentioned in the press, on the radio, the TV, on the internet etc. and how many viewers/ listeners or spectators are covered by each of these mentions.

- **142 000 average** monthly visitors for the Euro-Topten Max partners' websites (2014)
- 176 000 average monthly visitors for all European websites, including Topten Switzerland (2014)
- Up to **1.70 million** visitors attracted by the Euro-Topten Max partners' websites and its portal (2014) and **4.72 million** visitors for the 3 years duration of the project
- Together with Switzerland, all European Topten websites gathered **2.11** million visitors in 2014, and up to **6 millions** between 2012 and 2014
- Nearly 273 million readers / listeners / viewers had a media contact with Topten in the 19 countries over the project's duration

# EcoTopTen in the German press: more than 4.2 million Euro worth of press coverage

Germany was successful in gaining repeat coverage with large national and regional publications such as Frankfurter Rundschau, Hörzu (a weekly television listing magazine), Rheinische Post and Süddeutsche Zeitung. Across the 456 pieces of printed coverage secured, the total value of printed coverage about Topten in Germany was 4 233 881€. This represents a

huge amount of added value to the project both in Germany and overall.



"ECOS is a European level, nonprofit umbrella organisation working to defend environmental interests in the development of standards and product policies.



Topten provides us with a solid evidence base concerning BAT for various products on the mar-

ket, as well as product specific technical expertise. Both aspects are crucial for our work on Ecodesign and energy labelling measures."

#### **Stamatis Sivitos**

Senior Policy Officer EU Ecodesign and Energy Labelling Policies,

European Environmental Citizens' Organisation for Standardisation (ECOS)

# c.2 www.topten.eu Portal and Best of Europe

- The portal www.topten.eu is an axis for all Topten projects: it provides access to the national URLs, to the Topten Pro section for professional buyers, information on the Euro-Topten Max project, and also proposes a specific international activity: "Best of Europe".
- Best of Europe targets policy makers and researchers with up-to-date information on the best products available on the European market. The objective here is to provide explicit and transparent information on best available technologies and the *status quo* on energy consuming products on the European continent.

The information is displayed in the Topten user-friendly way (quick access to the information, various functionality of the products, etc.); additionally, the site provides global market analysis and recommendations for policy makers. These comprehensive product information overview fulfils two main functions:

- Best of Europe supports the national Topten teams:
- As a key source of information: teams starting to benchmark a new product use the European selections as a market comparison basis, they benefit from the already developed selection criteria, from information in English on the product itself, etc.
- As a quality control tool: information issued by manufacturers' headquarters can be checked in the field, in order to harmonize national Topten selection and best of Europe selections.
- Best of Europe provides explicit data on Best Available Technologies and their presence on the European market.

In a market covering 28 countries, Best of Europe is the only review of the supply of efficient appliances.

# Find out best products in Europe

#### **Cold appliances**

- Free standing refrigerators
- Built-in refrigerators
- Chest freezers
- Upright freezers

Washing machines
Dishwashers
Air conditioners
TVs

#### **Tumble driers**

- Residential use
- Semi professional use

## **Vacuum cleaners Coffee machines**

- Fully automatic
- Capsule espresso machines

#### **Energy saving lamps**

- LED lamps
- LED spot
- Office Luminaires

#### Office equipment

- Notebooks
- Computer monitors
- Laser printers
- Laser multifunction printers
- Inkjet printers

#### Cars

- Mini
- Small
- Compact
- Middle class
- Upper middle class
- Vans 5 seats
- Vans 6 seats and more

Electric water heaters Circulation pumps Professional cold appliances Eventually Best of Europe data are to be used for future policy design, labelling strategies, dissemination programmes, as a basis for standard harmonisation and the adoption of minimum efficiency requirements and specifications for large-scale buyers. They offer the opportunity to coordinate a common understanding and empower decision makers to launch new initiatives promoting efficient products.

#### Topten helped revise european labels

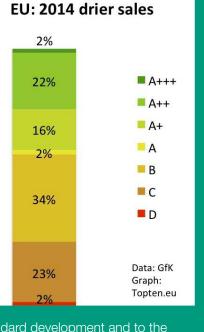
The evidence on Best Available Technology published on www.topten.eu, accompanied by policy recommendations, support regulation makers when deciding on performance levels for Label classes or on allowed minimum energy performance. Information on Topten and input from the Topten team contributed to more effective Ecodesign regulations in several cases, for example:

#### Coffee machines:

According to the amendment of the Standby regulation, all coffee machines must powerdown since January 2015. When starting to list only coffee machines with an auto powerdown function, Topten was a pioneer. Topten experts



- **Tumble driers:** The new Energy Label, mandatory since May 2013, reserved the classes A and better for heat pump tumble driers. In 2014, their sales share had risen to 40% in Europe. Topten has always promoted heat pump tumble driers, which save 50% electricity compared to conventional driers.
- Vacuum cleaners: a power cap of 1 600W now applies for vacuum cleaners, and will be tightened to 900W in 2017, which Topten had shown is enough to reach a good cleaning performance.



"As the person overseeing the regulation on domestic tumble driers, I used the information found on www.topten.eu and the related Topten Focus publication. Market data and product performance background information are key to the success of a good regulation accepted by all stakeholders and ensuring energy savings."

#### **Juan Moreno Acedo**

Policy Officer, European Commission – Directorate-General for Energy



#### c.3 Positive Impacts on target groups

With nine years of steady international growth, Topten has built an unparalleled experience and represents a full educational and technical services package, a unique best practice database. In short, Topten serves as a genuine public service. Topten plays a range of market functions that add value for the full range of market actors. We have chosen to illustrate the Topten impacts through a collection of sample activities led by the Topten teams.

#### Consumers' full information

- A user-friendly interface to identify most efficient products
- Information on total cost (purchase price plus energy bill minus incentives)
- Information on the good use of products
- General awareness on benefits of efficient products for climate protection

In Europe, 6 millions visitors have used the Topten websites in the last three years. Consumers regularly contact the Topten teams to congratulate them about the service, suggest improvements on the user friendliness of the site (Topprodukte in Austria offers a specific on-line form for suggestions), ask questions on specific models, or on the market in general (noticing the differences between countries for example, asking about the new European energy label), question the selection criteria, spot evolutions on the market, etc.

# Topten €co: Why should energy efficiency be expensive?



# **Topten €co: specifically tagging economic Topten models**

Since October 2010, the French Topten team has

been undertaking specific market surveys for white goods in order to spot the Topten models with a price equal or below the market average price and tag them as "Topten €co". The Topten €co initiative in France revealed that –before the new label- up to one third of Topten models were not more expensive than average energy-greedy appliances, in opposition to the common belief that energy-efficiency is always costly to the consumer. After introduction of the new label, it dropped nearly to zero (probably because a new marketing strategy accompanied the new best classified products), and went back nearly to 25% at the end of 2014. Topten updates of lists constitute real-time market snapshots and help assess the respective impact of marketing, introduction of new regulations and of publicity on pricing policies.

Εξοικονόμηση στην πρίζα www.ecotopten.gr



Two nation-wide consumers' associations collaborated with WWF Greece in order to promote energy efficient products. "EKPIZO" has promoted the ecotopten.gr platform through its own webpage, while "KEPKA" provided links to the ecotopten products as part of their environmental advice strategy and published an article on its bulletin "Consumer choices".



Topten Croatia launched an educational quiz aiming at increasing the visibility of the Topten project, raising awareness of Croatian citizens, and promoting energy-efficient appliances. Several communication channels were used to reach out consumers: Facebook ads, personalized e-mails (most efficient channel), ads on portals for prize games, and web portal of REGEA partners such as the Society for Sustainable Development Design or the Croatian Association for Consumer protection. Consequently, 2 500 people participated in the quiz, which proved to be a very efficient way to promote Topten appliances.



WWF Spain printed Topten postcards with the slogan "Wake up in the Energy Efficiency" promoting the Topten web page. 66 000 postcards were available in more than 500 public places (e.g. cinemas, theatres, bars, etc.) in Madrid, Barcelona and Bilbao. 53 600 were consumed during the two weeks of the campaign, which is a very high rate of dissemination.

#### Manufacturers' marketing facilitator

- A support for market introduction of new products
- Independent, objective marketing of products
- A channel for incentive, and increased demand for innovative products

Throughout Europe, in their daily work, the Topten teams are in contact with hundreds of product managers, marketing and R&D staff checking data, availability, prices, etc. in order to promote best models on line – hundreds of products are highlighted by Topten, following a neutral and transparent methodology.

"Topten, as well as BSH Bosch and Siemens Home Appliances, foster a rapid market transformation towards more energy efficiency. The Topten ranking offers a valuable help for consumers in the selection process of highly efficient home appliances."

#### Peter Böhm

Head of Corporate Responsibility, Vice President, BSH Bosch and Siemens Home Appliances

The Topten Romania logo was displayed directly on several producers' websites willing to highlight their most energy efficient products.





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#### **Topten.pt Sticker**

The sticker covers all the topten.pt categories (washing machines, dishwashers, cold appliances, monitors, printers, air conditioners, coffe machines, cars and lighting). The layout is sent in jpg format, to be used in promotional written materials or media, to be displayed on specific qualifying appliances. However they cannot be changed by the brands or used for other models or after the expiration date.

It was formally launched in 2012, April 10th, with 16 brands participating (on the 71 brands contacted), with a good media coverage:

- A TV short report about Topten.pt sticker in "Good Morning Portugal" -RTP 1 morning news programme.
- One "Green Minute" and one "Minute for the Earth" – 2 daily programmes for the TV and the radio - were produced about the Topten sticker.
- Two press releases and one article on Quercus bimonthly newspaper were published.
- More than 12 internet articles about the launching event, published by the brands or specialized websites.

In December 2014, 46 brands have joined this initiative, using the Topten sticker to highlight their Topten products.





Two editions of a competition for windows' manufacturers and retailers were organised in collaboration with the Energy and Environment Agency from Wroclaw in 2012 and 2014. The most efficient windows were listed on the Topten website and allowed to use the Topten logo in promotional material, as well as a voluntary label powered by the Agency. The number of participants rose for the second edition.

#### **Topten lists matter**

In the UK, manufacturers started to show interest when their products featured, and had begun to use low cost channels to promote this and publicise Topten as well, such as using Twitter and Facebook.





| Market Actor                             | Topten Value Proposition   |
|--|--|
| Consumers                                | <ul> <li>User-friendly interface to identify most efficient products</li> <li>Educate consumers on total cost (purchase price plus energy bill minus incentives) and good use of products</li> <li>Communicate benefits of efficient products for climate protection</li> </ul>  |
| Manufacturers                            | <ul> <li>Support market introduction of new products</li> <li>Provide independent, objective marketing of products</li> <li>Channel incentives and increase demand for innovative products</li> </ul>  |
| Retailers                                | <ul> <li>Increase of high mark-up products' sales</li> <li>Position retailer as trend setter and build trust in the message against climate change</li> </ul>  |
| Large Buyers<br>and Procurement Officers | <ul> <li>Support formulation of procurement specifications and award criteria</li> <li>Ensure that very efficient products are available on the market (no pilot product, lower risk of unsuccessful calls for tenders) from brands that are able to provide all associated services</li> <li>Reduce operating costs to enhance value-for-money</li> </ul> |
| Policy makers                            | <ul> <li>Provide real-time market data on the "best" products, with energy efficiency as a key criterion</li> <li>Pave the way for new and more stringent standard &amp; label specifications</li> </ul>   |
| Utilities                                | <ul> <li>Continuously identify the highest-efficiency products</li> <li>Serve as a basis for rebate programmes</li> <li>Serve as a source of information for their clients</li> </ul>  |
| Media                                    | <ul> <li>Serve as credible, independent source of information</li> <li>Issue regular updates</li> <li>Provide one-stop shop for broad range of product categories</li> </ul>   |
| NGOs & Institutions                      | <ul> <li>Concrete actions to illustrate their campaigns on sustainable consumption and climate change</li> <li>Material and information for their campaigns</li> </ul>   |

#### Retailers' objective sales aid

www.oekotopten.lu

- Increased sales of high mark-up products
- Clear positioning as trend setter, trust in the message against climate change

"By 2015, at least one third of electrical appliances offered in Migros' stores will be within the highest class of the energy label. Migros is committed to Topten, which ranks the most energy efficient appliances available. In the next couple of years, we will greatly expand our range of energy efficient products."

#### Sandro Glanzmann

Sustainability Expert, Swiss retailer Migros

# Nearly 60 supporting retailers published on OekoTopten.lu Oekotopten, a label of excellence

Topten-compliant ecological, high quality products are clearly marked in shops with the distinctive Oekotopten.lu label, in 57 retail shops and chains across the country. The label conveys the image of a specialised store with a clear environmental awareness, which is increasingly important to consumers.

All products listed on oekotopten.lu may wear the distinguishing label, whether physically exposed in shop windows, on shelves at exhibitions or virtually. Oekotopten provides partner stores with electromagnetic stickers and small stickers. Partner stores receive the logo in an electronic format, free of charge, to personalise their advertising material. In case of criteria reinforcement, the retailer gets immediate notice. Only compliant products with the new

specifications may remain labelled.

The Oekotopten-team regularly visits the partner stores to supply new documents and control the use of the label on site. Short staff training may be organised in store or at Oekotopten.



#### **Spotted in Saturn and Media Markt stores**

In Germany Oeko-Institut and Utopia.de, an internet platform on strategic consumption, cooperate with the retailer Saturn in order to highlight all products meeting the EcoTopTen criteria. Consumers are thus



able to easily identify the best products on Saturn.de, Saturn's e-store, and in several local Saturn shops.

Also in Austria, Media Markt on-line developed a Green Zone where efficient products are marketed. The Topten logo is shown on-line, attached to the products selected by topprodukte.at.

#### Euro-Topten Max for procurement

- Support in the formulation of procurement specifications and award criteria
- Assurance that very efficient products are available on the market (no unsuccessful call for tenders), from brands that are able to provide all associated services
- Reduction in operating costs to enhance value-for-money
- Integration of lifetime costing into tender evaluation
- Sharing experience and expertise to fine tune procurement Guidelines



# Finnish Ministry for Foreign Affairs: Topten inside!

The Finnish Ministry for Foreign Affairs includes Topten criteria in its 2013-2014 Environmental Programme carried out throughout its network of 1 600 employees and 97 overseas offices.

One of the Finnish Government's objectives is to be the world's leading Clean-tech country: Environmental perspectives must be considered in all acquisitions made by Central Government. The Ministry for Foreign Affairs developed the Environmental Programme, which covers a variety of impact areas such as travel, estates, waste and procurement.

One of its overarching priority objectives, due to its high level of impact, is increasing the energy efficiency of all technical equipment: copiers, multifunctional devices (MFDs), printers, faxes, refrigerators, freezers, dishwashers and washing machines specifically refer to Topten criteria as part of the specification goals.

"The Topten Pro website has offered useful ideas about efficiency criteria to be used on tendering processes. It has considerably eased up our work."

Asmo kemppainen, Ministry for Foreign Affairs



#### Officially an authority on circulation pumps

The Swedish Competition Authority offers support to public procurers on legislation and procedures but also on energy efficiency specifications. It publicises on its website the most energy efficient circulation pumps with a link to Topten Sweden.



#### **Training public procurers**

WWF Spain organised a seminar targeting Municipal public procurement officers at the National Environmental Congress (CONAMA). Participants came from the municipalities of Vitoria-Gasteiz, Malaga, La Coruna, Granada, etc. and from other public organisations. Topten approach and selection criteria were presented, as well as activities from ECOINSTITUT, a non-profit organization with a lot of experience in local sustainable public procurement and collaborator of ICLEI in Spain. In addition, WWF sent "thermometer cards" to 19 targeted Municipalities to be disseminated among their citizens and employees.



#### Impacting policy

- Real-time market data on the "best" products, with energy efficiency as a key criterion
- Indications on the way for new and more stringent standard & label specifications

Policy makers can use the Topten ready-made analysis for several purposes: to base their policy decisions (at national and European levels), to promote Topten to their citizens or to set an example.

#### Showcasing at a major summit

In Croatia, Topten organized in cooperation with Bosch, Lipapromet and TP Vision an exhibition at the most important energy event of the year: the Sustainable Energy Finance and Investment Summit: CROENERGY 2013. The summit's objectives were to identify ways of financing renewable energy projects using innovative financial instruments, as well as highlighting the importance of regional cooperation by promoting energy efficiency investments. Promotional booths with displayed energy efficient appliances were the focal point of the exhibition space. Topten leaflets were disseminated through the 'goody bag', which every attendee received upon registration. CROENERGY 2013 was attended by the President of the Republic of Croatia, the Minister of Transport, by a number of county, city and municipality mayors as well as representatives from major international institutions, financial and non (EBRD, EIB, EIB-EPEC, the European Commission, FEDARENE, etc.).





#### French market 10-year monitoring

Guide Topten organised an event for its 10<sup>th</sup> anniversary and presented a market analysis on most efficient appliances of the period, which shows that:

- Even if large white goods consume far less energy than 10 years ago, the residential electricity consumption has continued to grow because of the boom of brown goods, the multiplication of energy consuming appliances in homes and user behaviour.
- The whole market has progressed towards energy efficiency: for new models, the average fridge performance in 2013 reaches the level of the best models selected by Topten in 2009. However, the savings potentials are still very important: models recommended by Topten in 2013 consume 20% energy less than the average offered on the market - for the same service.
- France could save up to 25 TWh/year if by magic all the installed appliances would reach the Topten levels of energy performance (lighting, wet and cold appliances, monitors, vacuum cleaners and printers). This represent 160 €/household/year, the electricity generated by 3.5 nuclear plants, or the annual residential electricity consumption of a 10 Mio inhabitant city.



#### Utilities' reference

- Continuous identification of the highest-efficiency products
- A basis for rebate programmes
- A source of information for their clients

More and more utilities become interested in energy services for their residential clients – in some cases because regulators oblige them to invest in energy efficiency, in others because they view the promotion of energy efficiency as a way to build clients' loyalty.

#### **AB LESTO / Topten partnership**

Topten Lithuania experts cooperated with AB LESTO in 2012 during The World Earth Day, and the European Energy Week, in the First Ecological Footprint study, and coorganised a contest for Lithuanian schools in 2014. AB LESTO found Topten as a trustworthy partner for communication with consumers. Topten's expertise bring valuable input to their famous sustainable energy project "Tiek, kiek reikia" ("As much as you need"). This partnership brought meaningful visibility to Topten energy efficiency tips, including a participation in several TV shows called "Life academy".



# Cooperating with the Prague Energy Utility

Events and Press conferences took place in December 2013 in Prague, in cooperation with the Prague Energy Utility. Journalists were informed about the energy labelling legislation, its impact on consumers, and were guided for the selection of most efficient products on the market, to relay to readers and consumers.



# The energy-Quiz 2014 of the City of Vienna Knowledge saves energy and pays off!



Participants can win a total of 20 vouchers of 500 euros each for energy-efficient electrical appliances that meet the criteria of topprodukte.at (a service of the klimaaktiv campaign). The vouchers can be used in the online shop at Media Markt / Green Zone. In addition, the team of topprodukte.at offers advice on energy efficiency in the home. The main prize is photovoltaic panels.

A third edition of the energy-Quiz of the City of Vienna will take place in 2015. The aim is to raise awareness about energy savings, motivate an economical use of energy. Prizes are expected to contribute to energy saving and support further the expansion of renewable energies in Vienna.



#### Topten is a well-known media source

- A credible, independent source of information
- Regular updates
- One-stop shop for a broad range of product categories, Topten provides media with dependable and straightforward resources through the promotion of the products' selection (press releases, press conferences, etc.) and ready-to-use editorial material for news articles, journals, TV and radio reports. The resulting direct referrals by major media outlets and on-line consumer resources (e.g. Google) are in turn a major boost to Topten websites traffic.





#### **Topten "Minutes" broadcasted in Portugal**

The Topten team in Portugal regularly develops Topten information for:

- A TV programme called "Minuto Verde" (Green Minute), 500 000 viewers on average: the Topten website is used and quoted each time the Green Minute focuses on products consuming energy.
- A radio programme called "Um Minuto pela Terra" (One Minute for the earth), 6.5% audience share: Topten is used and quoted whenever energy-consuming products are the focus of the programme.
   Topten Internet buzz videos are also posted on Topten.pt, with gueststars suggestively voicing the respective qualities of their latest crush (a washing machine and a refrigerator).



#### **Topten helps "Live Better"**

The Guardian Online is the most-read online paper in the UK with over three million daily visits to its website. In 2014, The Guardian Online ran a nine-month long "Live Better" campaign encouraging readers to take action to improve their wellbeing and decrease their environmental impact. As part of their focus on energy in Spring 2014, Keep Britain Tidy was invited to produce a series of articles about energy using appliances. Five pieces were produced which included facts about appliances, tips on how to buy and use efficient appliances and links to the Topten website. All five articles were displayed on the homepage (part of which generated by the articles which are most-read). Articles were shared widely, commented, and there was a demonstrable increase in site visits during the period.



#### **Topten in the Czech daily newspaper**

Among dozens of articles published and media coverage in the Czech Republic, this article in the most read Czech daily non-tabloid press, informed about the new EU legislation on vacuum cleaners, gave clear guidance on the energy efficiency parameters of vacuum cleaners, and tips for the most efficient models on the market.

# NGOs' and institutions' campaigns support raising awareness with Topten

- Concrete actions to illustrate their campaigns on sustainable consumption and climate change
- Material and information for their campaigns

Most Topten projects benefit from a close relationship -and in some cases are co-managed- with a consumer organisation or an environmental NGO. For Topten, this feature is essential to reach the general public and public authorities, and to gain support (be it in the form of money, data or referrals in the media); for these NGOs Topten brings information and a live illustration of actions that can be implemented to mitigate climate change and consume in a judicious way – two major objectives of these stakeholders. Likewise, many partnerships are developed with institutions, themselves leading awareness campaigns and looking for synergies with concrete projects enabling citizens to act (e.g. "Klimaaktive" in Austria, "Earth Hour" in many countries, etc.).

#### The app that helps making smart decisions

Several Euro-Topten partners are involved in the ecoGator Intelligent Energy Europe project.

ecoGator is a free of charge smartphone App which provides:

- A shopping guide based on the Topten products
- The unique possibility to scan the energy label in shops, obtain advice on the product's performances and compare products
- •Tips on easy, practical and profitable ways to save energy
- Quiz and challenges to test your knowledge, play, change habits and win prizes.







#### The Earth Hour in Italy

WWF Italy organises every year the Earth Hour events, with the participation of about 400 cities, involving WWF's local network and a large central event, usually located in Rome. Several initiatives are organized on the Italian territory, and Topten is promoted through various communication materials, such as the flyer for Earth Hour 2014 presenting details of Topten as a tool to help increase individual energy efficiency.







#### A postcard to share and make the buzz

Topten.be has worked together with BIM/IBGE, the department of environment of the Brussels government for the last three years. The BIM IBGE provides information and support to the Brussels' inhabitants on how to save energy on small and large scales. Topten.be provides information on market evolution, energy labels and Ecodesign, and energy saving tips.

A postcard promoting topten.be is available on order, and meets success with already 1 500 copies sent out.



#### "My old refrigerator: a "hole" in my grandmother's budget"

Topten Romania led a public awareness campaign in association with the Romanian Association for Recycling, demonstrating how replacing old and inefficient appliances by energy-efficient models listed topten.info.ro can be highly profitable.

#### **Topten: The keys to success**

- Competent, neutral, independent: energy experts with no links to manufacturers nor retailers design selection criteria
- Transparent selection: all methodologies are available on-line
- Only very best products are presented: work and budget concentrate on efficiency
- Comprehensive variety of categories to attract visitors: hundreds of product categories and thousands of products
- Information on purchase price and global cost (with energy bills)
- Beyond energy features, market features that interest and attract consumers: photos and main functionalities of products
- Simple, fast and up-to-date: direct access to product information on what is available in shops (at least two updates per year)
- Advice for good use of the products
- Analytical studies of the market and technical expertise for specific products

# Topten

- 1. Topten is a concept with tools for end-users to speed up sales, focus on quality and lower barriers for market access of energy efficient equipment and respective information in households, offices, buildings, industry, transportation, etc.
- 2. Topten is internationally coordinated by the Topten International Group (TIG: a non-profit association, based in Zurich, Switzerland) in order to increase influence on energy efficiency standards, to safeguard high quality of operations, to maintain independence, to accelerate exchange of experiences and data and to provide access to tools and web-systems for national Topten organisations. TIG safeguards the use of the Topten concept worldwide. It will protect international property rights of Topten.info, its name, logo and web content.
- 3. Topten wants to move national and international markets, individual manufacturers and retailers, organisations of trade and manufacturers, international standard organisations, etc. to contribute to the efficient use of energy by providing, designing, building, marketing and operating more energy efficient equipment.
- 4. In order to achieve this goal Topten has led by TIG the following tasks:
  - a. Research in national an international markets for the best products.
  - b. Building and updating databases for energy efficient equipment.
  - c. Design of criteria catalogues for the Topten-qualification (cut-off line).
  - d. Providing independent testing facilities.
  - e. Support of procurement programmes for energy efficient equipment.
  - f. Design and hosting of a series of national and international web-sites.
  - g. Support of design and distribution of print products with information on energy efficient equipment, etc.
  - h. Training for personnel working in national Topten projects.
  - i. Contacts to national and international organisations to influence the sale of more energy efficient equipment.
- 5. Topten works in cooperation with, but is independent of, equipment manufacturers and retailers and their respective associations.
- 6. Topten is not engaged in the sales of equipment that is mentioned on any Topten site.

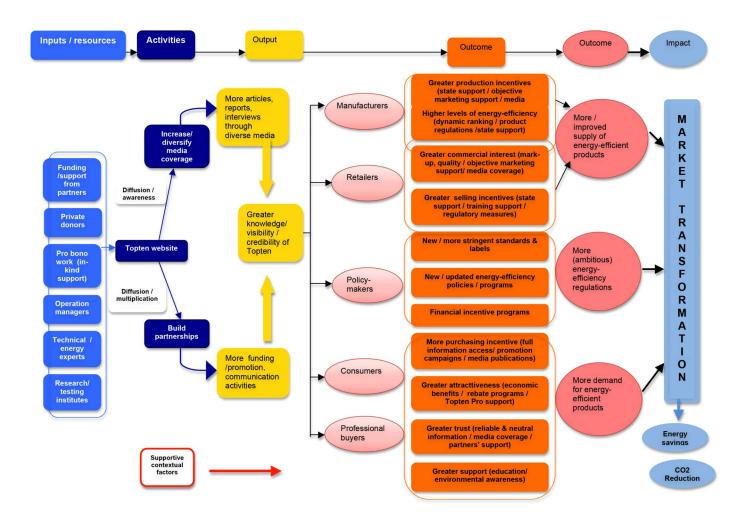
# Charter

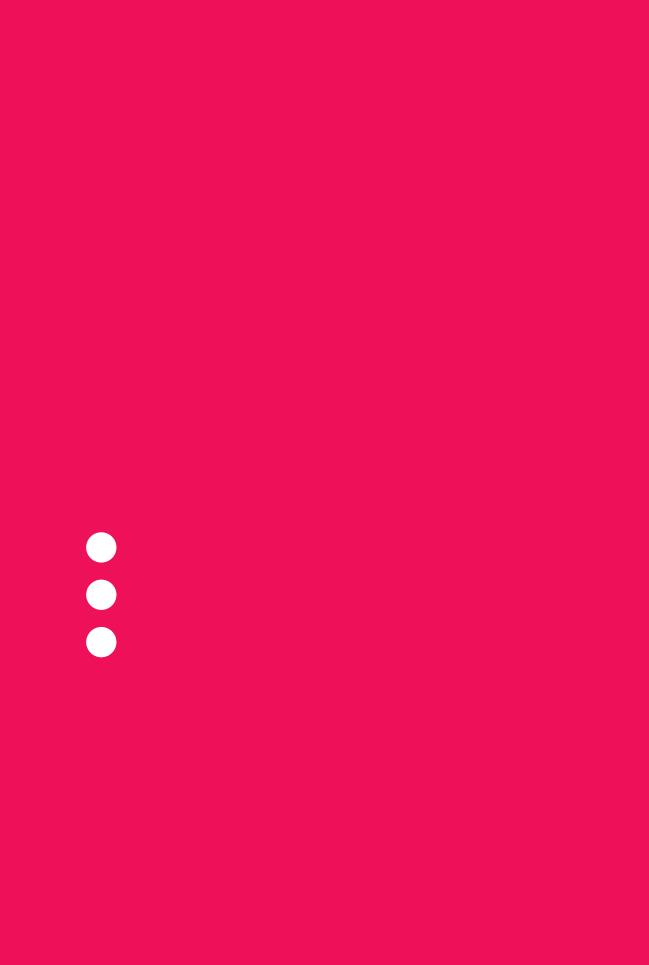
- 7. Topten is organised nationally in order to better understand and guide market conditions.
- 8. Topten is financed and supported by national, regional, local and international governmental agencies, consumer and environmental NGO's and other partners (utilities, media, etc.). No sponsor shall be directly linked to the manufacturing and selling of energy using equipment displayed in Topten.
- 9. TIG does not normally support national Topten projects with funds except in developing countries under special agreement.
- 10. TIG chooses, gives accreditation and supports national organisations that want to use and distribute Topten in their country according to the Topten Charter. For the process of accreditation the prospective national Topten organisation has to setup its national partners, funding, operation managers etc. and provide the relevant information to TIG. The accreditation procedure is a transparent process with a peer review.
- 11. TIG tries to avoid having more than one national Topten organisation in a given country / or in a given market.
- 12. All national organisations accredited by TIG are members of the Topten International Group and are linked to www.topten.info. They pay an annual membership fee. They can use the Topten logo, operate their national Topten system and have access to the Topten database and international market research.

Since September 2006

Topten impacts logical framework, in "Topten International: Developing comparable measures to evaluate impact on market transformation towards energy efficient products"

Chloé Burkhardt, University of St Gallen, 2012





#### Who is Topten

The Euro-Topten Max project is led by energy specialists, environmental NGOs and consumer associations and consists of the following partners:









French Agency for Environment and Energy Management (Coordinator)

Austrian Energy Agency, Austria

Federation for a better Environment, Belgium

**Ecological Center, Luxembourg** 







Keep Britain Tidy, UK



Local governments for sustainability



Norwegian Society for the Conservation of Nature, Norway







North Wes Croatioa Regional Energy agency, Croatia



Motiva Oy, Finland



Oko-Institut e.V., Germany



Fundacja na rzecz Efektywnego Wykorzystania Energii

Polish Foundation for Energy

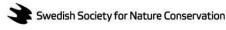
Polish foundation for energy efficiency, Poland



Lithuanian national Consumer Federation, Lithuania



Quercus, National Association for Nature Conservation. Portugal



**Swedish Society for Nature** Conservation, Sweden



SEVEn, The Energy Efficiency Center, Czech Republic

**Wuppertal Institute** 

for Climate, Environment and Energy

Wuppertal Institute, Germany

#### Additional partners are:



Deutsche Energie-Agentur GmbH (dena) German Energy Agency



Swiss Agency for Energy Efficiency



Topten, Switzerland



**WWF-Greece** WWF-Italy

WWF-Spain

WWF-Switzerland



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