Market surveillance of Energy Labelling and Ecodesign product requirements

Overview of challenges and opportunities

Summary of relevant literature with a specific focus
on the ATLETE, ATLETE II, Come On Labels and Ecopliant project achievements

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ADEME
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european council for an energy efficient economy

About the projects:

The information in this document is mainly based on the following projects:

ATLETE – The Appliance Testing for Energy Label Evaluation Project, organised between 6/2009 and 7/2011 with five partners from five countries. *www.atlete.eu*

ATLETE II – Energy Label and Ecodesign Verification Tests of Washing Machines, organised between 5/2012 and 10/2014 with eleven partners from seven countries. *www.atlete.eu/2*

Come On Labels – Common Appliance Policy – Energy labels, organised between 12/2010 and 5/2013 with thirteen partners in thirteen countries. *www.come-on-labels.eu*

Ecopliant – European Ecodesign Compliance project, organised between 4/2012 and 4/2015 with eleven partners from ten countries. *www.ecopliant.eu*

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Content

How to read this document and its structure

This document analyses the main findings and recommendations of four European projects focusing on market surveillance related to energy labelling and ecodesign legislation. The document is therefore structured in the following way:

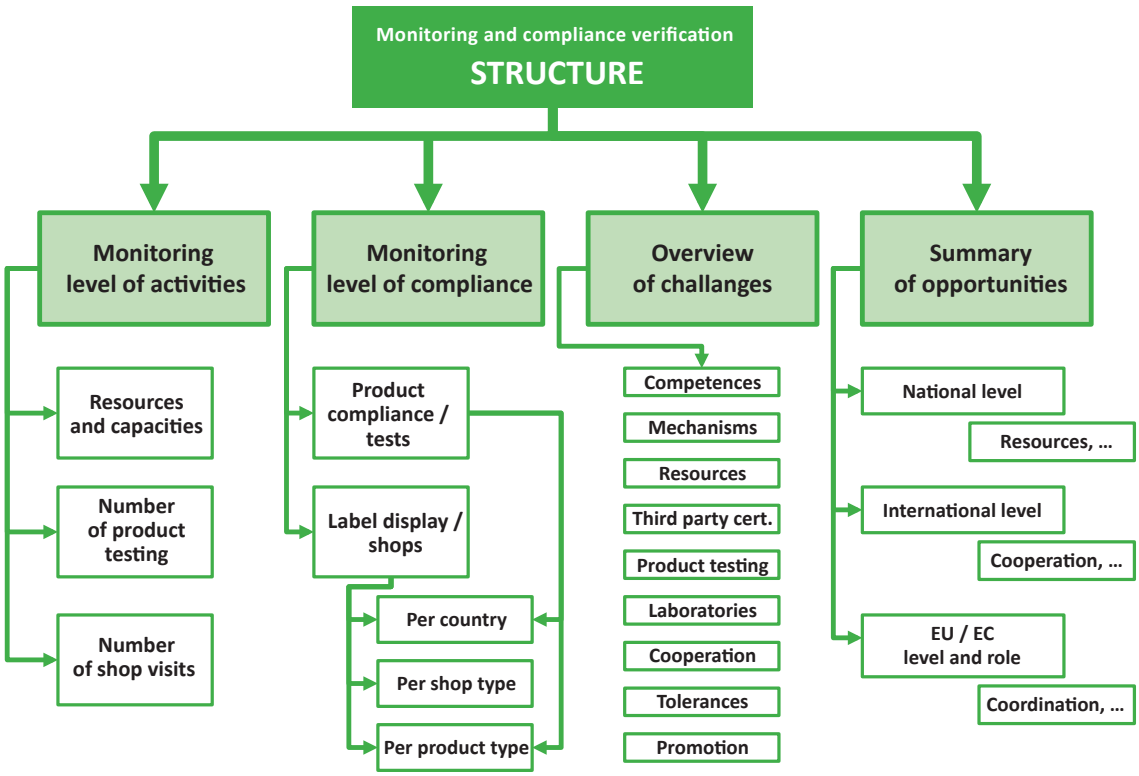
- **Monitoring of the status of activities**
  Collection and comparison of information available about the level of market surveillance activities (e.g. number of tests and shop visits) and the national surveillance infrastructure (e.g. resources) related to energy labelling and ecodesign.

- **Monitoring of impact**
  Collection and comparison of information available about the results of market surveillance activities, mainly product testing, document inspection and shop visits, including the rates of compliance and non-compliance identified.

- **Identification of barriers**
  Summary of barriers, identified by the projects, which are preventing from conducting more and more effective market surveillance.

- **Identification of opportunities**
  Summary of the opportunities for increasing the levels of compliance and increasing the level of compliance verification activities – both from a national and international cooperation (possibly including EU central level cooperation) point of view, as identified by the three projects.

- **Summary**
  Main recommendations summarised, as identified by the projects reviewed.



The chart summarises main issues dealt with in market surveillance as covered by the projects researched, as well as other energy label and ecodesign market surveillance related literature – in the structure of this publication.

Introduction: Why this document

Energy consumption related to the usage of products and appliances in households and other premises is one of the many human contributions to environmental pollution, and is a rising financial burden that consumers have to deal with.

Energy labels and minimum energy performance standards are recognised among the most important ways to influence the market and ensure that the operation of products using energy does not result in this consumption being unnecessary high. The exact requirements related to the energy labels and the ecodesign measures, valid in the EU, are all defined by the respective legislation, either the "Directive 2010/30/EU of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products", or the "Directive 2009/125/EC of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products", and all their individual Implementing measures (for Ecodesign requirements) and Delegated regulations (for energy label requirements).

All claims made on specific products related to these legislations, both concerning energy labels and ecodesign requirements, are issued by respective manufacturers in a form of a self-declaration, and displayed by the retailers at the points of sales. Market surveillance is the tool enabling the verification of individual claims displayed on the label, ensuring the proper format and content.

In the last years, several international projects, covering a range of EU member States, have taken place, thanks to the Intelligent Energy Europe programme. These projects have focused on implementing various aspects of market surveillance activities, from analysing the legislation and level of market surveillance activities, to performing product testing and to visiting individual shops to monitor the proper display of energy labels, and to negotiating with stakeholders, from market surveillance authorities to individual manufacturers and trade associations, on the results of these activities and suggested improvements and clarifications.

This publication takes the opportunity to summarise the activities, findings and recommendations of the most recent and important projects undertaken: ATLETE, ATLETE II, Come On Labels, and Ecopliant, summarising their overview of market surveillance in the EU and the recommendations and improvement opportunities identified.

The results of these projects are complementing each other in their activities and findings – e.g. by organising surveys on the level of market surveillance, and by elaborating best practice recommendations, hence the authors of this compilation felt it would be beneficial to summarise and bring these findings together and make them available to all interested stakeholders.

Since most of the findings listed here belong to the projects analysed, we hope that the summary provided in this publication will contribute to the further increase of effectiveness in conducting market surveillance of energy label and ecodesign requirements in the EU.

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February 2014

About the reviewed projects

This document contains information elaborated by the following European projects funded by the Intelligent Energy Europe programme and focused on certain aspects of market surveillance of energy labelling and ecodesign requirements.

ATLETE – Appliance Testing for Energy Label Evaluation, 6/2009 – 7/2011

The purpose of the ATLETE Project was to increase European-wide implementation and control of energy labelling and ecodesign implementing measures for appliances. Testing 80 refrigerating appliances, it was the first European project with a collaborative approach in product testing, with large number of products being tested, and fully publishing all test results. ATLETE was designed to demonstrate that market surveillance and testing can be done in a systematic, effective and cost-efficient way, thus helping to transform the market to ensure the highest benefit for consumers, manufacturers and the environment.

Consortium:

Project Coordinator: ISIS – Istituto di Studi per l'Integrazione dei Sistemi / Research and consultancy firm, Italy
ENEA – Italian National Energy for New Technologies, Energy and Sustainable Economic Development / National energy agency, Italy
CECED – European Committee of Domestic Equipment Manufacturers/ Association of manufacturers, EU
ADEME – The French Agency for the Environment and Energy Management/ National energy agency, France
SEVEn – The Energy Efficiency Center/ Non-profit energy efficiency consultancy, Czech Republic

ATLETE II – Energy Label and Ecodesign Verification Tests of Washing Machines, 5/2012 – 10/2014

The goals of the ATLETE II project are to check the pan-EU compliance of washing machines with energy labelling and ecodesign requirements using the new harmonised measurement method for the testing of washing machines, to improve the capacity of testing laboratories and at the same time support co-operation among national Authorities for effective market surveillance. It tested and analysed results for 50 washing machines selected from the EU market.

Consortium:

Project Coordinator: ISIS – Istituto di Studi per l'Integrazione dei Sistemi / Research and consultancy firm, Italy
ENEA – Italian National Energy for New Technologies, Energy and Sustainable Economic Development / National energy agency, Italy
CECED – European Committee of Domestic Equipment Manufacturers/ Association of manufacturers, EU
ADEME – The French Agency for the Environment and Energy Management/ National energy agency, France
SEVEn – The Energy Efficiency Center/ Non-profit energy efficiency consultancy, Czech Republic
ECOS – European Environmental Citizens Organisation for Standardisation/ Environmental NGO association, EU
AEA – Austrian Energy Agency/ National energy agency, Austria
University of Bonn – Germany
Swedish Energy Agency – National Energy Agency and market surveillance authority, Sweden
ECEEE – European Council for an Energy Efficient Economy/ European energy efficiency NGO, EU
ICRT – International Consumer Research and Testing/ Consortium of Consumer organisations, EU

Come On Labels – Common Appliance Policy – Energy Labels, 12/2010 – 5/2013

The main purpose of this project was to be a catalyst within the new household appliance labelling system – to initiate new awareness and promotion actions and to make an effective implementation happen on both national and European level, which will last long after the project termination. The Come On Labels project aimed at summarising the best European experience related to the energy labelling of appliances and supporting the proper implementation of the new labelling scheme. Its goal was to enhance the visibility and credibility given to the EU energy label and to improve the market for labelled products. Within the project no product testing activity took place, but some 900 shops have been visited to review the proper presence of energy labels at the points of sale.

Consortium:

Project Coordinator: SEVEn – The Energy Efficiency Center/ Non-profit energy efficiency consultancy, Czech Republic
AEA – Austrian Energy Agency/ National energy agency, Austria
CURBAIN – Brussels Energy Agency, Belgium
ELMA – Elma Kurtalj Ltd/ Engineering and consultancy company, Croatia
Öko Institut – Öko-Institut e.V. Institute for Applied Ecology/ Research and consultancy institute, Germany
SWEA – Severn Wye Energy Agency/ Regional energy agency, UK
CRES – Center for Renewable Energy Sources and Saving/ National energy agency, Greece
ENEA – Italian National Energy for New Technologies, Energy and Sustainable Economic Development / National energy agency, Italy
Ekodoma – Energy engineering consultancy, Latvia
PiM – Projects in Motion/ multidisciplinary research organisation and cluster platform, Malta
KAPE – The Polish National Energy Conservation Agency/ National energy agency, Poland
Quercus – Associação Nacional de Conservação da Natureza/ Environmental NGO, Portugal
ESCAN S.A. – Consultancy company, Spain

Ecopliant – European Ecodesign Compliance Project, 4/2012 – 3/2015

The objective of Ecopliant (European Ecodesign Compliance Project) is to help deliver the intended economic and environmental benefits of the Ecodesign Directive 2009/125/EC and provide a level playing field for business. It will achieve this by strengthening market surveillance and so increasing compliance with the Directive and the relevant implementing measures. The project consortium consists of market surveillance authorities, national agencies and one Ministry, and product testing takes place within the project.

Consortium:

Project Coordinator: DEFRA – Department for Environment, Food & Rural Affairs, UK
ENS – Danish Energy Agency/ Market Surveillance Authority and national government, Denmark
TUKES – Safety and Chemicals Agency/ Market Surveillance Authority, Finland
BAM – Federal Institute for Materials Research and Testing/ Market surveillance authority, Germany
MKEH – Hungarian Trade Licensing Office/ Market Surveillance Authority, Hungary
DCENR – Department of Communications, Energy and Natural Resources/ National government, Ireland
ENEA – Italian National Energy for New Technologies, Energy and Sustainable Economic Development / National energy agency, Italy
VI – Dutch Ministry of Environment in VROM Inspectorate/ Market Surveillance Authority and national government, the Netherlands

FFII-LCOE – Foundation for the Promotion of Industrial Innovation/ Market Surveillance Authority, Spain
Swedish Energy Agency – National Energy Agency and market surveillance authority, Sweden
NMO – National Measurement Office/ Market Surveillance Authority, UK

All of the above projects have been co-funded by the Intelligent Energy Europe programme, managed by the European Agency for Competitiveness and Innovation – EACI.

Please note that other literature sources have been used in this publication as well. These have been selected either when being directly used by some of the above mentioned projects as well, or when being directly linked to the specific topics of energy label and ecodesign market surveillance.

Market surveillance – overview of the situation

The first chapter of this document summarises the level of market verification and compliance monitoring of energy label and ecodesign activities around the EU, as collected and evaluated by the four projects. The efforts of the projects have been unique, and first, in obtaining more detailed information about the real level of market surveillance conducted in individual countries.

The ATLETE (2010), ATLETE II (2013), Come On Labels (2013) and Ecopliant (2013) projects have all organised their own surveys, contacting individual market surveillance authorities and researching the level of activities undertaken. While the ATLETE, ATLETE II and Ecopliant projects requested information from all individual EU member States (for Ecopliant also EEA countries) in a form of a questionnaire, the Come On Labels project researched the situation in 13 specific countries (where the project was active) by questionnaires and individual interviews with the authority representatives.

While the general level of activities undertaken by a number of EU member States in the field of energy label and ecodesign related market surveillance has been considered low, little evidence was actually available or publicly known on the specific level of activities undertaken.

In summary, according to the European Commission (2013, 3), there is a **significant activity in 5 Member states, moderate to low activity in most Member states, and no activity reported for 2010 in 6 member states** (of which 2 had activity in 2009).

The table below summarises information on the level of activities undertaken by individual countries in terms of the number of staff, number of product tests and number of shop visits undertaken.

Country/Source	Staff resources dedicated	Product testing activities	Number of shop visits
Austria	Declared confidential	No testing, or not published	Around 70 shops per year
Belgium	Up to 100 field inspectors	25 lamps in 2010 (22 non-compliant) 12 fridges in 2010–2011 (1 non-compliant) 5 dishwashers in 2011	202 in 2011, typically 100 – 250, sporadically more then 1000
Bulgaria	Up to 134 market surveillance inspectors	No testing	No/100–250
Cyprus	2 part time at ministry level	No testing	20–50
Czech Republic	2 part time at authority level, number of inspectors not known	No testing, only 6 refrigerators in 2011 (all compliant)	4 in 2010 18 in 2011, Ca. 300 in 2012
Denmark	5–6 part time at authority level	Yes, 60 per year + 150 technical declarations and CE marks in 2012, 500 in 2011	50 – 100 shops inspected, plus catalogues, internet shops, advertising
Estonia	2 part time at authority level	Yes, 2 per year	100–250
Finland	1 full time and 1 part time at authority level, 3 field inspectors	Yes, 5–10 per year	250 up to 1000 inspected, including Internet checks

Country/Source	Staff resources dedicated	Product testing activities	Number of shop visits
France	Part 1 part time at ministry level, 1 part time at energy agency	No testing	No (only 149 shops in a 2005 study)
Germany	Regional government responsibility, 1 part time at ministry	Yes, varies from year to year, not centrally reported	Unknown, not reported centrally
Greece	5 part time at authority level	No testing	7 in 2012
Hungary	30 part time authority level	Yes, 200 per year	20–50
Italy	Not available	Rarely, numbers or results not known	Ca 10–50, not reported
Ireland	Not available	Not known	300
Latvia	1 full time and 2 part time, plus 30 enforcement authority level	No testing, only in 2008	No/50–100 (different sources)
Lithuania	11 part time	No testing	No/50–100 (different sources)
Luxembourg	Not available	0–5 per year	20–50
Malta	4 on market surveillance	No testing	20 in 2012 and 20 planned in 2013
Netherlands	4 full time and 1 part time at energy agency	Yes, 70 – 100 per year	600 to 700 shops inspected each year, 250–1000
Poland	Not available	No testing	No, sporadically 20–50
Portugal	Not available, but 350 market surveillance staff	No testing	No in 2011 and 2012
Romania	40 inspectors	No testing	No / 460 to 1090 between 2003 to 2007
Slovakia	10 part time at authority level	No testing	At random or non-compliant
Slovenia	Not available	No testing	Not available, some 100 in 2009 and 2010
Spain	1 full time (energy agency) and regional government responsibility	About 40 by IDEA in 2008–2012 About 75 by Regional Governments in 2011–2012 About 20–30 by manufacturers in 2010–2012	In 10 regions, 450 appliances and 350 CFLs in 2011
Sweden	3 full time and an internal test laboratory consisting of 6 full time	Yes, varies from year to year, 50 in 2011	100 – 250
United Kingdom	6 full time, including ecodesign	Yes, between 20–100. EST 15 in 2010/2011 and 9 in 2011/2012.	188 in 2012, 50–100, not reported centrally.

Source: the table is compiled from the following market surveillance survey documents: ATLETE (2, 1), ATLETE II (1), Come On Labels (1).

It is estimated that, for the whole of EU, some 80 full time equivalents staff work on Ecodesign and Energy label compliance verification. The annual budgets for Energy Labelling compliance activities range from 1 200 Eur (Luxembourg) to around 390 000 Eur (Denmark). Budgets allocated to Ecodesign compliance activities range from less than 1 000 Eur for Iceland, to as much as 500 000 Eur in the case of Denmark. The larger combined compliance budgets, i.e. over 500 000 Eur, are seen in Denmark, Norway, Sweden and the UK. Sweden's budget, of 180 000 Eur for market surveillance and 200 000 Eur for testing, is split between both Directives. Total EU/EEA-wide annual expenditure on equipment energy performance regulatory compliance appears to be about 7 million Eur (Waide et.al., 2011).

Some general issues raised within the reviews, concerning the implementation of market surveillance in individual countries:

Products tested: The most commonly tested product categories are lamps, refrigerators and dishwashers. In most cases, the test results are not available, and many of the surveyed countries perform no testing at all, or perform only few individual tests.

Seven out of the 13 countries surveyed by the Come On Labels project performed no tests in the recent years, three countries performed individual (anecdotal) tests, and only two countries performed tests on a regular basis (activities in this field for one country were not available to the public).

In total, some 124 tests have been mentioned for the period of the last 3 years, as monitored by the project's survey findings.

Shops visited: In total, considering information available with relevance between 2011 and 2013, up to ten EU countries seem to organise shop visits with a certain surveillance plan and regularity. Another ten countries conduct the visits based on individual cases (e.g. consumer complaints), or only in some years. Three countries did not organise any shop visits recently, and two countries did not disclose any information.

Out of the countries reporting some activities in this field, about ten countries conduct over one hundred shops per year on average (ranging from 10 to 300 shops).

Information about fines imposed and summary results of such visits is largely unpublished, with very few exceptions.

Main barriers mentioned by the surveyed authorities are in most cases very similar:

Different priorities (e.g. food and safety focus of surveillance authorities), lack of financial resources, lack of human capacities. In some cases, it is also a declaration of a lack of national accredited laboratories. The amount and complexity of legislation arising for individual product groups is also a barrier for performing more market surveillance.

One worrying fact is that while the survey of the Come On Labels project focused on energy labelling activities, some of the authorities have also specifically stated that they are unable to perform any ecodesign related surveillance activities and for the nearest future have no intention of doing so. Some countries plan some formal check of the technical documentation, but declared to have no plan for performing product testing (Come On Labels, 2013, 1). But note that the Ecopliant project is fully focused on the ecodesign legislation, including product testing, where procedures and results are adapted on both the project and some of the partners' national levels.

Main opportunities: Most of the country representatives have claimed that international exchange of experience and best practice, is the best possible way for improving the situation. They also showed in some cases an interest for international projects.

It seems to be therefore important to support authorities with the development of best practice guidance and templates, and with opportunities for sharing experience. This should enable them to learn from each other, gather common understanding, and to achieve higher resource efficiency and impact in performing their activities.

Some evidence, as collected by the projects, is presented below in terms of **infrastructure and resources devoted** by individual authorities:

Institutional framework: Two countries (Germany and Spain) have a federal structure, where individual regional governments are in charge of enforcement and market surveillance. In a number of countries, a selected ministry is appointed with the transposition of the legislation, while another body is responsible for the market surveillance. In Denmark this is subcontracted to a private company, instructed by the national Authority. Most countries appoint single enforcement authority, with exceptions being Germany and Spain due to the federal structure and Greece and Poland (ATLETE, 1). A number of member states have also split the responsibility for Ecodesign and for Energy Labelling market surveillance into different authorities (Ecopliant, 2013, 1).

Human resources: Very few enforcement authorities benefit from full time employees being dedicated to energy labelling (ATLETE, 1). Typically one full time staff is dedicated to Labelling, whilst 3 to 6 full time staff in authorities are dedicated to market surveillance in general, with some 2 to 30 part time equivalent inspectors, performing other tasks as well.

Internet sales: As of 2009 (ATLETE, 2), more than half of the EU member states did not carry out checks on catalogues and the internet, either considering this distribution channel to be of low importance, having a lack of human resources or dedicated capacity. By early 2013 (ATLETE II, 1), 13 out of 21 member states responding to the survey claimed to perform internet checks and 5 more countries to intend to do so in the future – therefore an improvement can be observed in this case.

Compliance monitoring costs: The information on the cost of monitoring retailer and product compliance is very scarce (ATLETE, 2). It is also difficult to obtain data in a fully comparable structure, e.g. including both the staff costs of inspectors involved (also including shop visits), and the external costs dedicated to product testing. The declared expenditure ranges from 1 200 Eur in Luxembourg to 200 000 Eur in Sweden. Latvia spends about 4 100 Eur per year on monitoring (but no budget in 2009), and one of the Federal States in Germany reports spending of at least 50 000 Eur. ATLETE II (1) reports 1 000 Eur in Latvia to 11 000 Eur in Finland for energy labelling and 4 000 Eur in Luxembourg to 100 000 Eur in Finland for Ecodesign.

How products are selected for testing: Seven countries reported to have conducted product testing based on complaints (ATLETE, 2), e.g. consumer complaints, from consumer associations, or from manufacturers. Some countries, e.g. the Netherlands, the UK and Denmark, select products for testing based on their yearly plan, market research and past experience, as well as high risk suspicion. Note that both ATLETE and ATLETE II projects, within their own testing activities, have defined a semi-random product selection category, in which the market is divided by intervals of market shares for the EU and selected national markets, from which individual models have been selected fully randomly.

Selection of laboratories: The need for accreditation is mentioned by five countries – whereas six countries report no stipulation in national legislation to select accredited labs (ATLETE, 1). Facing a lack of accredited laboratories in a number of countries or taking a long time to obtain the accreditation was often mentioned among the key barriers preventing national testing activities. One country underlined that using "accepted" laboratories ensures more legal security in case of a court decision. While selecting laboratory for testing usually takes place on a national basis, four countries – Austria, the Netherlands, Sweden, and the UK, declare making use of both national and international test facilities (ATLETE, 2, 1), depending on the product category.

Sanctions: Fines differ between countries, and also within each country, according to the extent of the infringement. Penalties range from 25 Eur (e.g. for a warning) to 450 000 Eur (ATLETE, 1). The maximum range could be applicable for a court case, but this is not known to be applied. Several countries also mention the option of the withdrawal of a product from the market in case of non-compliance.

Sharing information between authorities: As of 2009 (ATLETE, 1) most (21) surveyed countries mentioned no national legal requirements for sharing information among authorities, as the EU Directive on Energy Labelling did not mention information sharing. Two countries, have however mentioned the Regulation 765/2008, concerning market surveillance, and its content concerning information sharing. As of 2013 (ATLETE II, 1), ten member states confirmed their participation in the Market Surveillance Administrative Cooperation (ADCO) on Ecodesign and Energy Labelling. Ten countries, represented by market surveillance authorities, energy agency or government bodies, are also participating to the ECOPLIANT project, "strengthening market surveillance practices and increasing compliance with the implementing measures that derived form the Ecodesign Directive".

Level of compliance – how much energy is lost?

The Ecodesign and Energy Label Directives are considered as key tools to contribute to the Europe's goal to reach its energy efficiency targets – with all its benefits to consumers and the environment. The Energy Labelling system, with first attempts in Europe in place since 1979, is in generally considered a very efficient tool to raise the energy efficiency of products. The assumption however is that the products available on the market are complying with the legislation – e.g. are as efficient as declared on their labels, or meeting the minimum efficiency criteria. Given the general lack of market surveillance in many countries, there is also, consequently, a lack of data on how many products on the market could be non-compliant and therefore how much of the potential energy savings could be lost as a result. This chapter summarises the information available about the level of product compliance with the energy label declarations and ecodesign requirements, and with the proper energy label display at the points of sales. This chapter is divided into two parts – compliance related to the proper display of energy labels at the points of sale, and product compliance with the declarations and results of product tests.

In general, as summarised by Waide et.al. (2011, 2), an effective regulatory compliance infrastructure is a highly cost-effective means of delivering energy services that competes very favourably with all supply-side options:

- If roughly 10% of projected Ecodesign/Labelling policy savings are lost through poor compliance it would amount to 100 TWh/year of lost energy savings across the EU by 2020–2030
- This lost energy has a projected value of roughly 14 billion Eur per annum or some 28 Eur per capita.
- Current total government expenditure on European compliance activities is about 7 million Eur across the EU and EEA and hence is only about one 2000th of the value of the energy being lost.
- Were average annual equipment energy performance compliance budgets to be increased to about 1 Eur per capita it would enable highly effective monitoring and verification systems to be set up across Europe and greatly strengthen the deterrent to non compliance
- This would reduce the energy lost due to non-compliance from a level of ~10% to 2.5% of the total savings potential and thus produce energy savings of ~7.5% of the combined nominal savings from the Ecodesign and Energy Labelling Directives
- The associated savings are valued at about 21 Eur per capita per annum without externalities factored in
- Across the whole EU/EEA region the total annual compliance costs would amount to about 0.5 billion Eur/yr but the corresponding value of the energy savings would be about 10.5 billion Eur/yr
- Some 47 Mt of annual CO_2 emissions would be avoided in 2020 (Waide et.al., 2011)

Compliance of label display in shops

The proper display of energy labels is essential for consumers to enable them to select more energy efficient models at the time of their purchasing decisions. This part of the publication reviews the information available on the degree of proper energy label display and identifies the most problematic shop and product categories, most often missing the energy label at the point of sale.

Out of the projects reviewed in this publication, only the Come On Labels project has made a detailed review of the proper label display in shops. The project partners have visited 900 shops together, in 13 countries (20 shops per country per three rounds of visits), over the period of late 2011 to early 2013.

Overall, the project identified about two thirds of the products being correctly labelled, some 14–19% of products having partial label display only, and 18–21% of products missing the label.

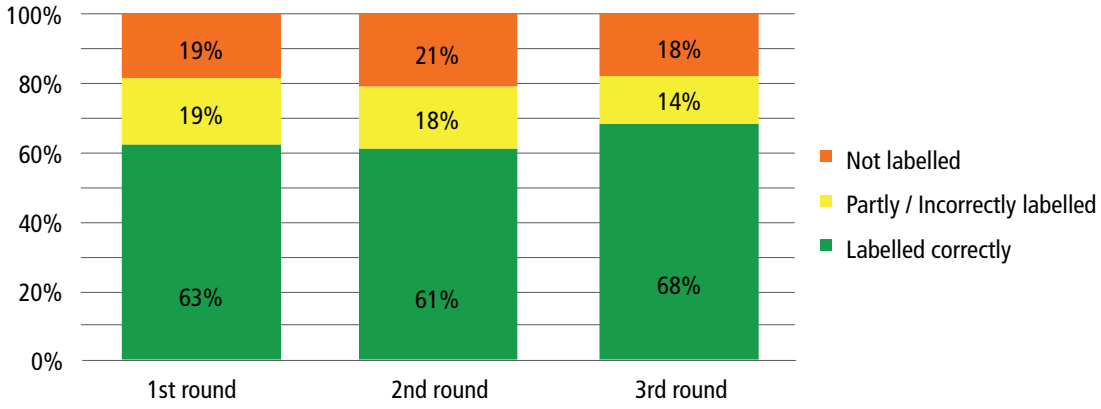


Chart: Overview of label display per products inspected, from late 2011 to early 2013, 900 shops from 13 countries included (Come On Labels, 2013, 5)

In general, there is a significant difference of compliance levels between traditional white-goods such as refrigerating appliances, washing machines, and dishwashers, and appliances that are found less often in households or which have carried the energy label for a **shorter time**, and / or are sold in **different types of shops**, such as air-conditioners, electric ovens, and tumble driers.

Furthermore, the introduction of the **new energy labels** has effectively contributed to a lower level of partly and/or incorrectly labelled appliances. This is mainly due to the fact that the new energy labels are supplied in one piece which reduces the possibility for partial or wrong display of the label. Furthermore, shops are more inclined to display them on the appliances compared to the old label. Consequently, a considerable share of the partly/incorrectly labelled appliances found in the third round of shop visits belonged to product groups still bearing the old energy label.

In terms of the **shop types**, kitchen and furniture studios were identified as the shop type with the lowest share of properly energy-labelled products followed by general hypermarkets and electric specialist shops. General hypermarkets showed a similar trend with an overall compliance just reaching 50% during the third round of shop visits (Come On Labels, 5).

Label display depends on a **number of factors**, such as the type of products offered, the turnover of specific models, the supply of energy labels by the manufacturer/importer, the knowledge and motivation of shop assistants, etc. The project concluded that shops where electric products are not in the focus of attention, either because they are selling a large variety of products or because their main product is the furniture, perform worse when it comes to displaying energy labels properly. The comparatively bad performance of the small electric specialists, in contrast, may be explained by the greatly varying motivation and information of the individual shop owners (in contrast to central management by a large retail chain).

The survey commented that retailers' compliance increased from 1997 to 2008. The data provided ranges from 45–50% (Austria and Poland), 60–70% (Belgium, Cyprus, and Latvia), 70–80% (Denmark, Finland, and Lithuania), 80–90% (Czech Republic, Estonia, France, Germany, The Netherlands, Romania, Sweden, and the United Kingdom) and over 95% compliance (the highest rates in Luxembourg and Hungary) (Fraunhofer et.al., 1).

Complementary information on retailers' compliance rates were also reported for Sweden and the UK. According to the Swedish Energy Agency, in 2005, 80% of the refrigerators and freezers and 70% of the ovens complied with the energy labelling in Sweden. Whereas compliance in shops for cold appliances were slightly below 2004 results (87%

and 84% labelled respectively for refrigerators and freezers), there had been a real increase in retailer's compliance for ovens, which were first inspected in 2004 with a compliance rate of 34% only. According to the Swedish Energy Agency, the increase in the share of compliance for ovens was partly due to the 14 notices of compliance regarding insufficient energy labelling that were published afterwards. In 2010, non-compliance in UK shops was estimated at 20%. (ATLETE II, 1)

The only other survey monitoring the presence of energy labels in shops around the EU on a larger scale has been conducted by a consortium of Fraunhofer ISI, GfK and BSR (2009, 1). The tables below compare the results from these two activities.

While the results are not directly comparable (due to different list of countries and number (and partly types) of shops included), they both indicate that **kitchen and furniture stores** are the most problematic ones in terms of correct display of energy labels.

Table: Level of proper label display per type of shop

Type of shop	Fraunhofer, 2009 (%) (all EU)			Come On Labels, 2013 (%) (13 EU countries)		
	Correctly labelled	Mislabelled	Not labelled	Correctly labelled	Mislabelled	Not labelled
Electro superstore	66	25	8	70	9	21
Electric specialist chain	60	27	13	56	12	31
Electric specialist independent	58	31	11			
Kitchen/ furniture store	39	43	17	26	15	59
Hypermarket/ Cash and carry	56	32	12	54	10	37
Department store	69	25	7		–	
Internet stores		–		52	38	10
Total	**61**	**28**	**11**	**52**	**14**	**34**

In terms of the product types, while, again, both surveys differ in the list of countries and shops included, and also the types of products included (TVs and wine coolers were not labelled in 2009), **air-conditioning units and electric ovens** are the types of products with the lowest level of label display at the points of sales.

Table: Level of proper label display per type of product

Type of shop	Fraunhofer, 2009 (%) (all EU)			Come On Labels, 2013 (%) (13 EU countries)		
	Correctly labelled	Mislabelled	Not labelled	Correctly labelled	Mislabelled	Not labelled
Refrigerators	63	29	8	78	13	9
Freezers	67	25	8			
Washing machines	65	26	9	77	13	10
Tumble driers	70	22	9	62	26	16
Dishwashers	62	30	8	72	15	13
Electric ovens	45	34	20	44	22	34
Air conditioner	26	24	50	38	28	34
TVs		–		63	9	28
Wine storage appliances		–		33	8	59
Total	**61**	**28**	**11**	**63**	**19**	**19**

The figures for individual countries in the table below are coming from three different sources – based on the declarations of the market surveillance authorities to the ATLETE II project, based on a detailed shop survey by trained market specialists (25 to 75 shops per country by GfK), and by partners of the Come On Labels partners (e.g. energy agencies, energy efficiency consultancies, non-profit organisations) in 13 EU countries (20 different shops three times per project, but to some degree focusing on shops with higher non-compliance probability).

Table: Level of proper label display per country, as declared by MSAs (ATLETE II, 2013, 1) and investigated by Fraunhofer, 2009 (all EU) and the Come On Labels, 2013 (%) (13 EU countries).

Figures in %	MSA declarations (ATLETE II, 2013, 1)	Shop surveys (Fraunhofer et.al., 2009, 1)			Shop surveys (Come On Labels, 2013, 5)		
	Compliance level per shops inspected	Full display	Partial display	No labels	Full display	Partial display	No labels
Austria		66	20	14	61	21	17
Belgium		58	24	19	54	12	33
Bulgaria		89	8	3	71	19	10
Cyprus	40	74	5	20			
Czech Republic	64	65	2	16	70	17	12
Denmark	100	84	4	13			
Estonia	90	75	12	12			
Finland	95	55	28	18			
France		79	14	8			
Germany		83	12	5	73	9	17
Greece		42	21	37	30	50	19
Hungary	99	94	2	4			
Ireland		82	13	5			
Italy		80	15	6	83	3	13
Latvia		68	14	18	63	22	14
Lithuania		61	28	12			
Luxembourg	85	70	30	0			
Malta	85	32	37	31	33	6	61
Netherlands		96	1	2			
Norway		90	4	5			
Poland		32	56	12	74	3	23
Portugal		93	3	4	49	22	28
Romania	85	92	4	4			
Slovakia	65	62	34	4			
Slovenia	60	92	4	4			
Spain		55	23	22	73	4	23
Sweden	75	90	2	7			
United Kingdom		80	10	9	57	53	25

Note that the Come On Labels figures are averages of three rounds of visits conducted between late 2011 and early 2013.

Besides the international overview of label presence by product type, between 2012 and 2013 also three relevant **national surveys** have taken place:

- Germany: (Dünhoff, et.a., 2013, 6), involving 52 shops and 3,8 thousand products , undertaken in the Germany´s bundesrepublik Rheinland Pfalz, and organised by a consumer-protection NGO.
- Italy: (Come On Labels, 2013, 5), involving 25 shops and 9,9 thousand products, undertaken by GfK / IFR, subcontracted by ENEA, Italian Energy Agency, within the Come On Labels project.
- UK: (Biswell, 2012, 4), Involving 188 shops and 28 thousand products, undertaken by a consultant subcontracted by the UK´s National Measurement Office authority.

All these surveys confirm that **electric ovens** are the product group with the lowest level of label display in shops, but also that **methodologies differ** in collecting data – for example very different levels of partial label display – from 69 to 0 for certain product groups, may not be attributable only to different retailer habits in various countries, but possibly also to different consideration of labels (e.g. black and white copies, or specific placements) to be considered as compliant or non-compliant with the legislation. *Note that only the UK´s review was done directly for an MSA.*

Appliance type:	Germany (%, 2013, 52 shops, consumer NGO)			UK (%, 2012, 188 shops, consultant to MSA)			Italy (%, 2013, 25 shops, GfK to energy agency)		
	Correctly labelled	Mislabelled	Not labelled	Correctly labelled	Mislabelled	Not labelled	Correctly labelled	Mislabelled	Not labelled
Refrigerators, freezers	31	64	5	68	20	12	98	0	2
Washing machines	73	2	25	77	5	18	98	0	2
Tumble driers	–	–	–	71	7	23	93	2	5
Dishwashers	26	69	5	82	4	15	96	0	4
Electric ovens	31	62	7	41	23	35	71	1	28
Air conditioner	–	–	–	–	–	–	88	1	10
TVs	76	0	24				85	1	14
Total	**69**	**11**	**20**	**76**	**33**	**16**	**91**	**1**	**8**

** A note has to be made about the GfK Italy´s unclear methodology in the evaluation of proper label presence in shops in terms of partial label display, as the same Come On Labels´ project overview undertaken by ENEA in the same period in 20 shops indicated a 24% partial label display in Italy.*

** An interesting comparison can be made with an older market review, according to the Cool Labels study (Winward, et.al., 1998, 11). The proportion of labelled products in shops averaged 56% across the EU (15) in 1997, varying from 17–94% in different Member States. The study also noted that in general, small independent stores have fewer machines fully labelled than chains or buying groups, though the difference was not great. Countries with a large number of smaller retail outlets (Portugal, Greece and Italy) had a harder enforcement task in comparison with countries where there were more large stores and chains (Finland, the Netherlands, UK).*

Both the Come On Labels project and the Fraunhofer at.al. survey have also collected the feedback or reasons made by retailers for why labels were not properly displayed in certain cases (not in a form of standardised questionnaire, but unstructured discussion in the case of the Come On Labels project).

Main mistakes in not displaying the energy label properly (Come On Labels, 5):

The most common examples of labels not being correctly displayed include:

- Labels covered with other stickers, advertising materials, or price tags
- Labels placed inside the appliance, on the side or on the back
- "DIY" labels, hand written labels made by retailers
- Labels sealed in a plastic envelope, not accessible to consumers in shops
- For old labels – only the data strip is displayed or only the background with the coloured arrows but with no figures
- Labels not matching the appliances
- Two labels for one appliance – in some cases also both the old/new labels, both showing a different energy class
- For internet shops, some of the prescribed data is missing
- Usage of non-existing energy classes, such as A+++++ or A+++–20% in internet sales, where it is used as the energy class indication.

Reasons claimed by retailers for not showing the energy labels correctly (Come On Labels, 5):

- The national system of the distribution of energy labels to shops influences the availability of labels. In countries, where labels are not distributed by supplier associations, the responsibility of individual suppliers to deliver the two parts of the old labels could be lower.
- Sometimes the energy label is sealed in a plastic bag, which neither the retailers nor the consumers want to open in the shop, since it could be perceived that the specific model is a used product, or that other parts included in the bag could be lost.
- Sticking a label onto the product could leave glue residues on the surface of the product or piece of furniture, when the label is removed.
- The aesthetics of the labels on the products, mainly for built-in and in kitchen/furniture shops.
- The use of the shop's own "eco" labels for retail stores. These labels, placed on selected products, are made clearly visible and are often part of marketing activities of the retail store. However, the criteria for selection are not always made available and in any case this behaviour is in contrast with the obligations of the retailers established in the energy labelling framework directive.
- Arguments of having no interest in labels, as if the label were simply a matter of choice.
- Slow turnover of some products, resulting in presumably old models being displayed that were placed on the market before the new legislation entering in force.
- Mandatory presence of energy class information generally unknown to managers of shops' general catalogue websites and in product advertising since this is a new provision.
- Claiming that a different legal entity is selling the products to consumers, than the one displaying the products in the shop.

Main factors influencing the incorrect label display by the Fraunhofer survey (2009, 1):

- One possible reason could be that in general the store manager makes the decision how to deal with energy labels – the salesperson primarily follows the given guidelines.
- A regular check by the store manager has a greater impact than an official store check.
- The design of the energy labels is another important factor which influences the handling of the labels. In general, a negative attitude towards the label design influences the handling of the labels in a negative way.
- If the salesperson is convinced that energy labels can be a vital part of the consumer consultation process, the handling of the labels improves.

Concerning possible improvements in the area of energy label display in shops, the following **suggestions for improvement** have been mentioned by ATLETE II survey (ATLETE II, 1): Four Market Surveillance Authorities suggested that an increase in the number of shop inspections would contribute to increasing the compliance of retailers. Simplification of the requirements for the retailers was mentioned by four MS as a way of facilitating compliance. Slovak representative recommended organising information campaigns and Denmark advised for the mandatory use of an electronic version of the label for the Internet and the Dutch authority proposed an international provision to effectively prevent misuse of the open space of Internet. In that regard, the EC is working on electronic labels. NGOs have proven effective at carrying out surveillance activities in regards to labelling and will registers complaints on behalf of consumers. Consequently, they could become watchdogs in the field, cooperating with MSA.

One of the activities undertaken to tackle the lack of proper label display in shops has been the preparation of a **retailer training programme**, delivered by the Come On Labels project in 10 different language versions[1]. Note that some other projects co-funded by the Intelligent Energy Europe project are also organising shop visit to monitor the proper label display, with results expected in 2014 and 2015. These are mainly the ComplianTV project[2], covering 200 shops in total in 5 EU countries for the specific presence of TV labels, and MarketWatch project[3], covering 660 shops in total in 10 EU countries covering all product categories with energy labels, and selected ones with specific ecodesign requirements.

Compliance verification by product testing

Testing products for comparison of the declared energy and performance parameters with real product characteristics is vital to ensuring product compliance and limiting the amount of the energy saving potential that could be lost. This part of the publications reviews the information available about the quantity of product compliance tests being carried out as well as some of the organisational issues that arise during these tests.

Which countries are active in performing tests? ATLETE (2010, 2) identified that more than half EU Member States declare to perform tests in practice in order to verify the accuracy of energy labels' classifications (this level was also confirmed by ATLETE II survey conducted early 2013). These are: Austria, Denmark, Estonia, Finland, Germany, Greece, Hungary, Italy, Latvia, The Netherlands, Spain, Sweden and the United Kingdom. It should be noticed that in federally structured countries (i.e. Germany and Spain), energy efficiency tests to verify the correct classification of household appliances are under the responsibility of regional governments (Bundesländer or Comunidades autónomas). However the Spanish energy agency IDEA, which runs a national subsidy scheme, still conducts a first round of tests basic results of which are sent to the regional governments, which claims to carry out further tests if necessary.

How many models are tested? The average number of appliances tested per year differs from one country to another, with up to 200 appliances (claimed by Hungary – mainly light sources) tested per year. A significant number of tests (50–100) are conducted in Denmark and The Netherlands. This number varies from one year to the next, e.g. in Sweden in 2009, 11 ovens and 11 tumble driers were tested. Five appliances are normally tested every year in Finland, but no test occurred in 2009.

Some member states have remarked that regarding testing, it is often not possible to have consistent and long-term planning in place due to changes in resources and budget. Regarding **irregular, or sporadic testing**, in Latvia for example, 20 samples of lamps were tested in 2008 and 1 non-compliant lamp model was found. In Estonia, two commercial

1 http://www.come-on-labels.eu/displaying-energy-labels/retailer-training-manual
2 http://www.compliantv.eu
3 http://www.market-watch.eu

references were tested in 2001–2002 (one of them was a washing machine and the other was a refrigerator). The Czech Republic tested 6 refrigerating appliances in 2010 for energy consumption and volume, all were found compliant.

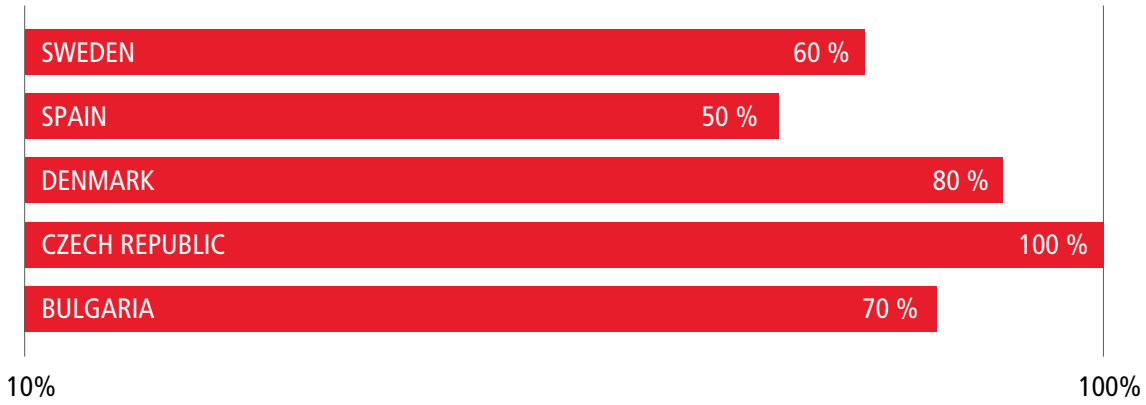
As a general rule, the focus up to now has been on testing refrigerators, freezers, washing machines, tumble driers and lamps in the EU countries.

While ATLETE, ATLETE II and Ecopliant projects conduct their own testing, the Come On Labels project has not tested products, but **collected information** available about compliance tests known to the public. Below is a summary of tests described in the Come On Labels project documents (Come On Labels, 2, 3):

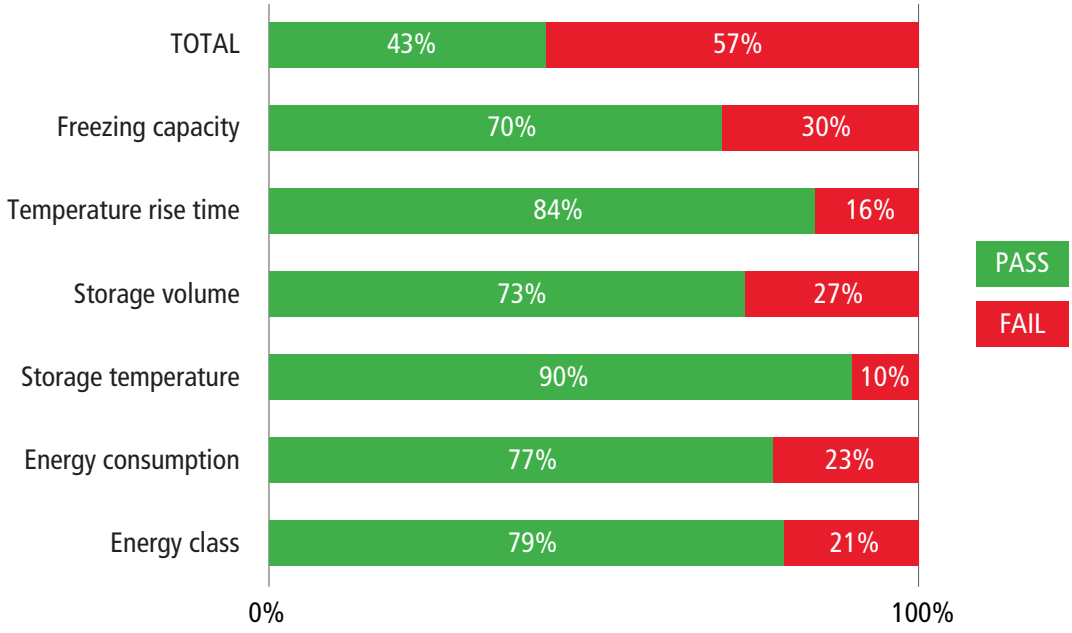
Country	Testing organisation	Year	Product category	Summary
UK	National Measurement Office	2011–2012	Washing machine Dishwasher Washer dryer Chest freezer	For each of the models, the model name was published, as well as specific non-compliance found and the remedy action agreed on with the supplier, such as upgrade of products, and/or donation to environmental charity.
Nordic project	Market surveillance authorities of the Nordic region countries	Since 2011	E.g. refrigerators	The main aspect of this initiative was the sharing of information and application of results in more countries.
The Netherlands	Dutch Market Surveillance Authority	2009	White goods, light sources	The main information is about testing the products by a foreign laboratory
UK	Energy Saving Trust	2010–2012	Refrigerating appliances	Testing of products for selected energy label and ecodesign requirements, to verify their eligibility to be listed in a high-efficiency promotion programme
Spain	IDAE – The Institute for the Diversification and Savings of Energy	2008–2011	White goods	Similarly to the EST UK, testing of products to verify their eligibility to be listed in a subsidy scheme
EU	Intelligent Energy Europe	2009–2015	Refrigerating, Washing machines, light sources, televisions, motors, etc.	Introduction to the European projects, co-funded by the EC, explaining the product categories tested by these projects.
EU	ATLETE project	2009–2011	Refrigerating appliances	Detailed explanation of the ATLETE project results, including country and model specific results.
EU	CECED	2008–2009	Refrigerating appliances round robin test	Results of manufacturer association´s round robin tests
International	Australia, international	Since 2009	Lighting, air-conditioning units, appliances, etc.	Examples of other non-EU and international testing activities.

See below the overall levels of compliance rates for the products tested, as declared by individual market surveillance authorities, based on their own product testing experience – with different product selection strategies, different product groups and number of models covered, as well as parameters tested.

Chart: Percentage of compliance of products tested by MSAs (ATLETE II, 2013, 1) (chart taken over from original publication including the scale of bars):



Among European projects, the ATLETE project was the first to test a substantial number of products (80 refrigerating appliances), to test the full scale of required performance parameters (not only e.g. energy consumption and volume), and to fully publish the summary and indeed all individual results for all the products tested, up to the level of technical reports from laboratories. The overall results are shown in the chart below (ATLETE, 2011, 4):



The ATLETE project has also managed to negotiate numerous remedy actions with the individual manufacturers, such as updating the product declarations (energy class, storage volume, freezing capacity, etc.) on the energy label and the product fiche, and in three cases to discontinue the production of the specific model.

In the close future, thanks to the Intelligent Energy Europe programme, further lists of product tests are expected between 2014 and 2015 by a wider set of European projects (see library of IEE projects, 11):

- **Atlete II** – tests results in 2014, testing 50 models of washing machines (all Energy label and Ecodesign parameters, except noise),
- **Ecopliant** – testing in 2013–2014, focus on e.g. motors, external power supplies, lights in the first testing phase. Air conditioners and fans , tertiary lighting, circulators, water pumps, EPS, TVs, domestic lighting in the second phase (all Ecodesign). A third phase is expected.
- **Euro Topten Max** – test results in 2014, focus on TV, LED, cloth drier (selecting the most efficient models on the market),
- **PremiumLight** – testing in 2013–2014, selecting 70 CFLs, LEDs from the "premium" model segments,
- **MarketWatch** – testing in 2014–2015, with a capacity of 100 simplified and 20 full range tests, product categories to be determined,
- **ComplianTV** – testing in 2014–2015, selecting 125 TV units (both for energy label and ecodesign, selecting models from all market ranges).

The following section discusses the experience and procedures with product testing among market surveillance authorities, as formulated by the project review activities.

Are tests conducted after complaints? Among the 13 EU Member States conducting regular testing, 7 countries (Austria, Estonia, Finland, Germany, Greece, Hungary and regional governments in Spain) report to have carried out tests following complaints, which refer to suspicions on an appliance's energy class conformity. However most complaints related to household appliances are not directly linked to energy classification issues, they mainly refer to other appliances' features such as safety issues; indeed, several countries mentioned that complaints on energy labelling were not frequent.

There is no special framework to receive **complaints** on energy labelling in Austria and complaints could come from anybody to the national authority. In Estonia and Hungary, complaints usually come from consumer associations; they can also come from the State Consumer Protection Board in Estonia. Individual consumers in Greece are able to make a complaint directly to the authorities.

Beside consumers' associations, complaints may come from manufacturers. In Spain, ANFEL (Spanish manufacturer organisation for white goods) is active in supporting market surveillance by denouncing non-compliant household appliances and relevant suppliers. Complaints from manufacturers are also mentioned in Hungary.

Beside complaints, which are the other triggering factors for appliance testing? Countries which conduct tests after complaints often consider **suspicion** (from the enforcement authority) as a triggering factor. Finland, for example mentioned that complaints represent less than 1% of all tests undertaken, suspicion and random selection being the main sources of appliance testing. In Spain, whereas tests are undertaken after complaints by the regional governments, they are only conducted upon suspicion by IDAE, if identified as possibly not meeting the required criteria of the subsidy scheme.

In Denmark and The Netherlands, tests are not carried out after complaints:

- In The Netherlands, the testing is implemented under a yearly plan, based on market research and past experiences.
- Similarly in Denmark, the Danish Energy Agency and the Secretariat for energy labelling market surveillance (private subcontracted company) define guidelines based on chosen criteria; these include all types of appliances and lead to focus on appliances which appear to be non-compliant.

In the UK, under the new framework with the National Measurement Office (NMO) – tests should be fulfilled following the risk bases – selecting products with higher likelihood of non-compliance, and after a snapshot of the market. It is considered that "risk" can arise from a number of problems, such as complaints raised, previous test results, etc.

In Ecopliant's subtask 1.3 (Ecopliant, 2013, 4), different techniques for selecting products for testing have been studied. 20 Ecodesign MSAs have answered questions on their most important criteria when selecting models for inspection. The most frequent responses were:

- Model highlighted by other Member State complaints
- Model highlighted by intelligence from consumer groups and/or individuals
- Model for which the technical documentation indicates possible risks for technical non-compliance
- Model highlighted from complaints or findings of other organisations (i.e. environmental NGOs, EU projects, etc.).

Where do the tested products come from? Generally, appliances to be tested are picked up at retail shops. IDAE (Spain) indicated that it would pick up the required appliances from a market store in order to reproduce the casual circumstances encountered by any consumer; IDAE therefore needs to buy the products. IDAE also specified that manufacturers would sometimes offer to pay for the products and the tests (see later section in this publication for the Ecopliant project´s discussion on third party cost sharing of test activities).

In Denmark, appliances are obtained from central stocks where all types of appliances are available (except for lamps which are bought at retail shops). As according to the Danish legislation, suppliers have to deliver the required appliances. After the tests, suppliers may request the unit back.

For which reasons are tests not conducted? Thirteen EU Member States (Belgium, Bulgaria, Cyprus, Czech Republic, France, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia) do not carry out appliance tests of energy labels' accuracy, or only occasionally.

All surveyed EU Member States (ATLETE, 2) evoke the problem of high costs, in terms of time and resources, of performing verification tests related to energy labelling. The major difficulty relates however to **financial costs**. Usually, the prices are changing according to the appliance that is to be tested. In Spain, the cheapest test would cost 1 800 Eur (electric ovens) and the most expensive one would reach a cost up to 2 400 Eur (refrigerators and freezers). Tests would cost between 2 000 Eur and 6 000 Eur in The Netherlands, where the most expensive are the ones related to dishwashers and air-conditioners (where setting up test conditions is critical). Even more remarkable, the total costs of testing a single reference to demonstrate that it is under performing can easily reach 11 000 – 16 000 Eur or more in the United Kingdom. However, some countries report lower costs. In Estonia they would be around 640 Eur. In Finland, an energy consumption test costs about 500 Eur whereas a regular safety test would be about 1 000 Eur per item tested. Naturally, the price varies across laboratories, but Finish authorities report to be more concerned about variations in testing methods and results rather than their price.

Another limit in performing labelling verification tests is the **time** required for getting completed test results. The time required from the decision to launch a test to the results varies from 2 to 6 weeks in Greece (depending on the type of appliance tested); about 1 month in Hungary and Estonia; 1 to 2 months in Finland; up to 3 to 4 months in Denmark and the United Kingdom.

For Denmark, the results of the market evaluation performed in 2011 by the Danish Authorities show that (as quoted by ATLETE II, 1 from CSES, 2012, 7):

"A total of 202 products were subjected to **documentary checks** in relation to both energy labelling and the Ecodesign Directive, with a further 58 products (Air Conditioners) were examined in relation to energy labelling only. Eighty products were subjected to laboratory checks in relation to both pieces of legislation and another 11 (again air conditioners) just in relation to energy labelling. The results included the following:

- For televisions, of the 40 products whose documentation was checked, 97.5 % passed, while of 10 products that had laboratory testing, 100% passed.
- For the other product groups, a relatively high proportion of standby (96%) and electric motors (93%) passed the documentation check, while 80% of household washing machines passed and only 35% of household dishwashers.
- The pass rates of the other products that had laboratory testing were somewhat lower, ranging from 82% in the case of electric motors to 50% in the case of cold appliances.
- Overall, for the products where checks related both to energy labelling and the Ecodesign Directive, the average pass rate (weighted by the number of products examined) was 86% for the document checks and 74% for the laboratory tests."

Note: see later section of this publication where the principles, obstacles and barriers in compliance verification by checking the documentation are discussed.

A special section in ATLETE (2010, 2) is also devoted to the selection of **laboratories**.

Which is the required accreditation scheme? Nearly all EU Member States underline that laboratories authorised to perform energy labelling verification tests must be selected under a strict accreditation scheme. As a general rule, the laboratories must have a national accreditation, like ENAC certification in Spain, accreditations delivered by the Estonian Centre of Accreditation in Estonia, by the Hellenic Accreditation System (ESyD) in Greece, etc.

Some countries report that international accreditations may also be considered while authorizing laboratories to perform energy labelling verification tests (Finland, Hungary…), as well as ISO/IEC 17025 on the "General requirements for the competence of testing and calibration laboratories" (Denmark, Slovakia, the United Kingdom...). Austria underlined that accreditations were based on the EA (European cooperation for Accreditation) scheme.

National or foreign laboratories? Testing laboratories are usually sourced at national level in the EU Member States. However, 4 countries (Austria, The Netherlands, Sweden and the United Kingdom) declare making use of both national and foreign laboratories. This also depends on which kinds of appliances are considered: the Electrical engineering section in Austria, for example, sometimes needs to turn to foreign laboratories as Austrian laboratories are not accredited to conduct tests on the complete range of electrical appliances. In The Netherlands, a German laboratory is requested for white goods testing, whereas two national laboratories test lamps, air conditioners and cold appliances. As for Sweden; TV sets, for example, have previously been tested in a laboratory based in the United Kingdom. ATLETE (2010, 3) also mentions that six countries report no stipulation in their national legislation about the institution which should perform appliance tests. On the contrary, five other countries underline that, following their national legislation, tests must be performed by accredited laboratories.

Making results public: The Ecopliant project (2013, 6) noted that the majority of Member States do not publish their activities by making the results of product testing publicly available. Publishing of test results ensure greater visibility and transparency, and is by some countries considered a good way to contribute to higher levels of compliance due to manufacturer´s fear of negative news.

Among the EU Member States conducting regular tests, only 5 countries (Denmark, Estonia, Hungary, Sweden and the United Kingdom) do make results public:

- It is part of the communication strategy in Sweden where results are sometimes published through press releases.
- In Denmark, anonymous test results are made public through the publication of an annual report, available on the DEA's website in both Danish and English. Danish officials are currently working on a new framework allowing the removal of anonymity of test results.

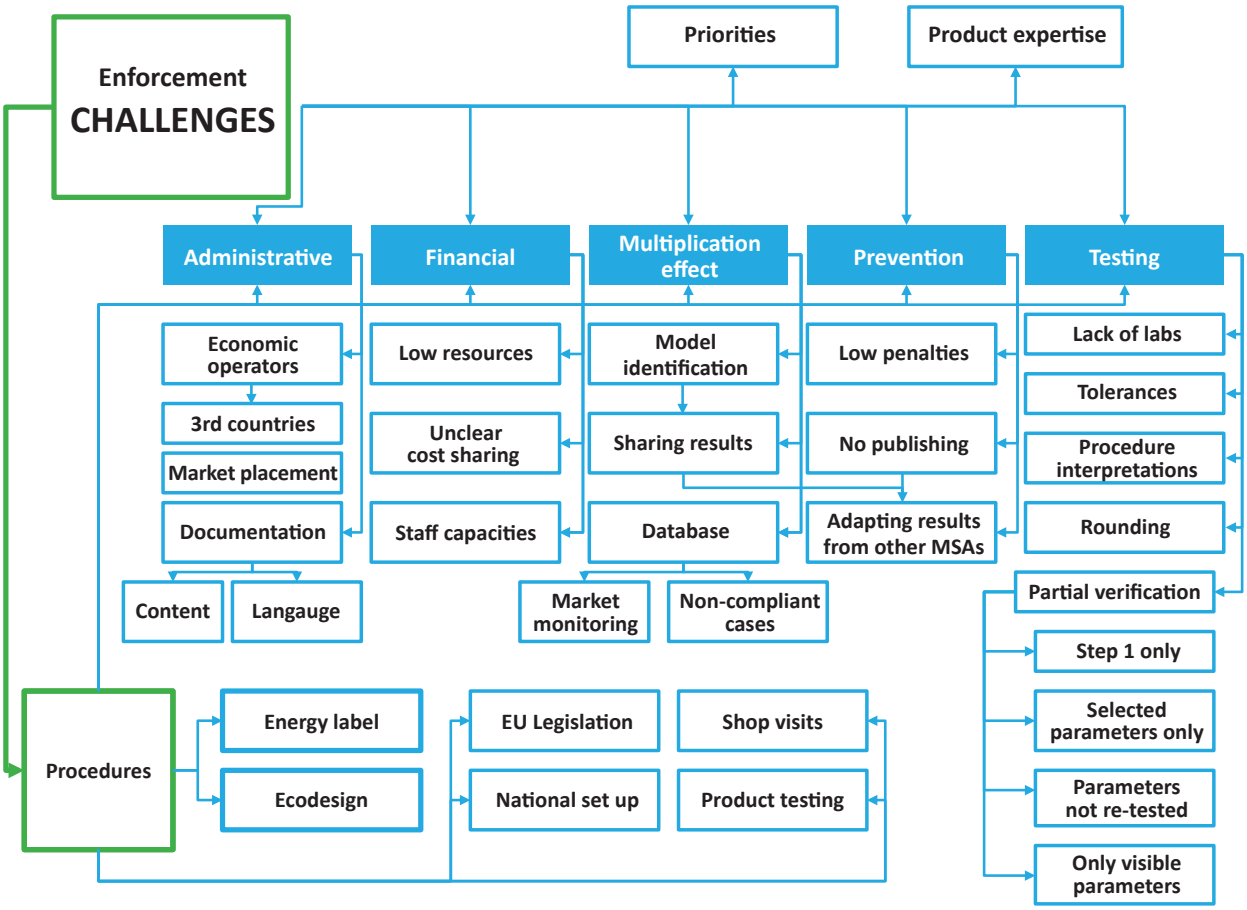
- In the United Kingdom, test results were published on Defra's Efficient Products website. For the first time in November 2009, the results named the manufacturers in question. The cases published were selected by the UK authority and included information on individual manufacturer remedy action that had been agreed with Defra.
- Tests results are published on the enforcement authority's website in Estonia and Hungary.

Results are not *per se* made public in Spain; however, they can be sent to retailers' organisations which may then withdraw non-compliant appliances. IDAE also withdraws these appliances from the online public database of appliances included in the list of subsidised products.

As regards to countries which do not publish test results, the main explanation provided is that it was not required within the EU Directive. In Greece, for example, only non-compliant manufacturers are informed about test results.

Challenges in market surveillance – an overview

As outlined above, market surveillance concerning energy label and ecodesign legislations is not considered to take place to a sufficient level in most EU countries, despite generally being considered as an effective tool to ensure the fulfilment of EU and national goals on energy efficiency. While costs, staff resources, laboratory availability and, increasingly, complexity of legislation are generally considered as the most common problems in market surveillance, the list of obstacles and barriers is in fact larger – starting from administrative, to financial, or technical aspects. Read further to find out what barriers (as well as opportunities) have been identified by the individual projects. Note that this chapter highlights some of the challenges and barriers identified by the projects reviewed, but that most of the improvement suggestions are listed in the following chapter.



The chart lists the main challenges identified within energy label and ecodesign market surveillance – by the four projects evaluated in this publication, and, in part, also by other relevant literature. The structure has been designed by the reviewers.

General difficulties in market surveillance, as summarised by (ATLETE II, 1), include:

- The absence of laboratory facilities in many countries;
- Implications of the new Energy Labelling Directive (2010/30/EU) and the Ecodesign
- The cost of appliance testing;
- The insufficient number of checks when it comes to imported goods from outside the EU;

- The insufficient level of resources for market surveillance in some countries; and
- Penalties for non-compliance are not high enough.

ATLETE (2010, 1) also highlights a general problem, the lack of details in the European legislation text on surveillance policies and requested level of specific actions to be undertaken in case of non compliance. Even though this was motivated by the respect of the **subsidiarity principle**, it has led to a certain **disparity** in means and methodologies used among Member States. Energy labelling conformity assessment is thus not considered as an imperative topic in several EU Member States.

The project suggested that improvements on these issues can only come from the revision of the Directive on Energy Labelling (adding for example; concrete specifications on actions to be undertaken for market surveillance, a European coordination of information exchange between Member States) and the specific product regulations within the Ecodesign Directive process (usage of the tolerance margins, how the energy consumption is to be calculated to better reflect consumer use, better positioning of the label's scale).

Reasons for not conducting product testing for energy label compliance, as summarised by ATLETE (2010, 2) (*Note that ecodesign requirements were not really reflected in the survey as of 2010*):

- The main reason for not conducting tests is that these procedures are considered too expensive (Belgium, Bulgaria, Czech Republic, Malta, Portugal and Slovenia).
- In Cyprus, Romania and Slovakia, tests are not undertaken because finding an appropriate laboratory or independent company to proceed to the tests is rather difficult. Belgium also underlined that existing laboratories would have to upgrade their facilities in order to be accredited on energy labelling tests related to household appliances.
- Lithuania, Luxembourg and Poland report that tests are not carried out mainly because the controlling institution has too many other subjects to deal with, in particular related to safety issues.
- Cyprus, France, Lithuania, Luxembourg and Portugal indicate that the only surveillance carried out is focused on retailers' compliance. Yet, the controllers have many other issues to check: product safety, prices, fair competition, etc.

The Come On Labels (2013, 1) project has formulated the following main barriers:

- Different priorities, lack of financial resources
- Lack of human capacities
- In some cases, it is also a declaration of a lack of national accredited laboratories.

The Come On Labels project noted (based on a survey conducted in early 2013, and also quoted by the Ecopliant project literature) that "*one worrying fact is that while the survey focused on energy labelling activities, some of the authorities* [among the ones interviewed within the project] *have also specifically stated that they are unable to perform any ecodesign related surveillance activities and for the nearest future have no intention of doing so. Some countries plan some formal check of the technical documentation, but claimed no plan for performing product testing.*"

The ATLETE project (ATLETE, 2011, 4), based on the results of 80 refrigerating appliances of 40 manufacturers has formulated the following **main tendencies** in product compliance rates:

The purchasing price	The results have shown that the purchasing price is a good indicator of possible non compliance: more expensive models have generally higher probability to be compliant, while cheaper models are often more non-compliant.
The manufacturing place	When the country of manufacturing is not indicated or indicated in a very generic way such as "EU" the probability of non-compliance is higher then when the country is clearly stated. The same indication occurs when the products manufactured in a specific EU Member State are compared to the products manufactured in non-EU countries.
The expected energy efficiency class	A correlation appears to exist between the declared energy efficiency class and the compliance rate: the higher the energy efficiency class the higher the probability to find a compliant model.

Some very practical and hands-on experience concerning market surveillance and problems related to energy label and ecodesign legislation implementation have been mentioned at the ATLETE II project´s International advisory committee workshop (ATLETE II, 2013, 2):

- Unclear definitions of the **market entry dates** (influencing the validity of certain Tiers), defined possibly by customs clearance (out of EU manufacture) and leaving manufacturer site to other legal institution (EU manufactured), but with different interpretations, even between the EC´s DGs, leaving MSAs unconfident about on decisions as to whether certain units should meet specific requirements.
- **Low power mode declarations** – where the ecodesign legislation requires a two-digit figure, some manufacturers only declare to comply with the threshold limits, declaring a particular product '<X' as opposed to the formal figure to two decimal places. The ATLETE2 project has raised this issue, with specific regard to washing machines, with the EC, whose position has been made clear, noting that: "we share your understanding; the values of the weighted power consumption of the off-mode and of the left-on mode have to be provided in Watt and indicated with two digits also in the product fiche.
- Imposing more and more requirements which cannot be measured by parameters but evaluated on a **qualitative** level.
- **Third party test results**, where some national MSAs would not be able to use laboratory results if not ordered by themselves, other MSAs could use them with direct enforcement actions, or use these test results as intelligence of suspicious products.
- **Equivalent model names** – the same product can have different names or numbers in different EU countries, making it difficult for MSAs to identify products verified by other MSAs in other countries, or, on the contrary, a product with the same name, being technically different, when sold in different countries. Note that this issue is currently being addressed by the Ecopliant project with a prototype database being constructed to identify base models and all subsequent models with identical technical specifications.
- Lack of information sharing between the MSAs that would allow them to **share** surveillance activities. Concerning products on an international basis, if a product that has been tested non-compliant with respect to specific requirements in one member state, would allow other MSAs to take a decision, either to react or neglect. Note that a database being launched under the Ecopliant project will begin to address this issue. Also the existing ICSMS is already in place for such information sharing, however, it is generally considered not an appropriate tool by most MSAs for sharing energy label and ecodesign related information and intelligence.
- **Different suppliers for the same model** – in Steps 1 and 2 of product testing procedure, where one and three units of the same model are tested, in total four units of a given model are tested. The national supplier is responsible

for the accuracy of declared values. In ATLETE project, in some cases a unique supplier could not be identified because the same appliance with the same commercial code number was imported by two different suppliers in different EU member States. Should each supplier be responsible only for the units placed on the market under its own responsibility?

- **Two step procedure** – highlighting that some MSAs only conduct compliance verification in Step 1, but the ATLETE experience showed that almost 25% of models tested in Step 2 (that is suspected non-compliant in Step 1) occurred to be fully compliant after Step 2. In addition, if a product is suspected to be non-compliant in Step 1, the measurement of Step 2 should concern all relevant parameters, not only the ones failing measurement in Step 1.

ATLETE project (2011, 4), focusing on refrigerating appliances has identified the following product testing, and test result evaluation-related issues:

- Different formats of **laboratory reports** being submitted, providing different levels of information, and making sure the verification on compliance should to be done by the Authority, not the laboratory.
- **Different labels for the same model** and **declaration of different suppliers**: the same models but with different declared values for the energy consumption and/or the storage volume, or same commercial code numbers for technically different appliance models or even different suppliers (importers) for the same appliance model. In this last situation, which of the suppliers will be – from the legal point of view – responsible for the non-compliance or for the eventual correcting action or a possible sanction?
- **Rounding**: the project has experienced "the importance of a clear description for the rounding up of measured values for the compliance verification. This is of great importance for the models that are 'border line' with the energy efficiency class thresholds or accepted tolerance or specific minimum conditions requested by the standard. Actually it may come about that the compliance or non-compliance status depends to the number of decimal digits with which the annual energy consumption has been calculated." Therefore, "rounding rules have to be both improved and better specified: not only for the declaration of the parameters but also in the intermediate calculations".
- **Storage volume measurement:** "storage volume measurement is still critical, at least for some manufacturers and products configurations. The need for further clarification should be evaluated by the standardisation experts. The use of 'cold plates' (eutectic accumulators) should be ruled and the impact on the load plan and the appliance volume measurement described. The use of eutectic plates can be accepted but only in accordance with the already established standard conditions for the volume measurement."

Concerning **partial verification**, when only selected parameters are tested, ATLETE noted that "in some verification action only the energy consumption and the storage volume were tested, probably considering them the most important parameters and trying to reduce the time and costs… Giving a lower importance to a parameter may result in lower attention by the supplier and a higher non-compliance rate."

Ecopliant makes the following observations on this topic:

- When only some parameters (e.g. energy consumption and volume) out of those required in ecodesign (and energy labelling) are measured, it should be considered as an example of a partial compliance verification test and not of the application of a "screening technique". The risk of such approach – that indeed allows to save some financial/time resources due to a reduced number of tested parameters – is that parameters indirectly related with the energy consumption (such as for example the storage temperature(s) for refrigerating appliances or functional performance aspects) but perceived as less important or more difficult to be tested are not verified. As consequence a specific model can be found compliant with the ecodesign (and/or labelling) energy efficiency requirements due to a poor functional performance that has not been checked (Ecopliant, 2013, 4).

- This type of engagement (testing of only some parameters) together with single tests or use of simplified procedure in order to provide reasonable indication of energy performance at a lower cost and more quickly than in full verification test (i.e. screening techniques) should not be underestimated. If used effectively, positive changes in behaviour can and in turn lead to compliance within industry and specific business (Ecopliant, 2013, 5).

Pros and cons highlighted by some MSA in the Questionnaire answers about the application of screening techniques are:

- **Pros:**
  - Quicker and (to be subject to further verification) lower resource consuming product screening although based on a measurement method that deviates from the harmonised standard.
  - Can be a good way to select models for full compliance testing.
  - Shorter time for reaction against the manufacturer (if the results of a screening technique are eventually used to start a dialogue with the manufacturers/suppliers).
  - Application to very simple measurements such as the power consumption (of low power modes) where a simple equipment and in-situ measurements give a good results in terms of identification of models with higher risk of non-compliance.
  - Application also to other more complex products (white goods and lighting) with a less substantiated saving of resources.
- **Cons:**
  - Risk that the results of a screening technique – with an unknown accuracy and based on a deviation from the harmonised standard – are used to take immediately actions against manufacturers/suppliers. This should never be done, according to Ecopliant.
  - Some MSAs consider a product exceeding the declared values but within the allowed verification tolerance – as results of a screening technique with an unknown inaccuracy – as suspected of non-compliance. On the contrary in this case the product is instead compliant according to the EU labelling and ecodesign legislation.
  - The actual reduction in resources could be more a perception and expected than real, at least for complex products, and derived from running a partial test involving only parameters perceived as the most important and not all parameters covered by the EU legislation.

On a partly related topic, **verification of product documentation**: The Ecopliant project (2013, 2) has identified the following problems in the area of checking product´s technical documentation (however, note that some of the listed cases show the actual situation on the market but is not always acceptable according to the legislation):

- The documentation sometimes does not cover the ecodesign requirements of all the units covered under the same model identification (e.g. for products with alternative components, the documentation does not cover all the constructions).
- Test reports show sometimes values that do not correspond to the rated values and no justification for these values can be found in the documentation.
- Sometimes not all of the values requested for the determination of the indexes and rated values in labels are covered in the test reports.

Another important barrier in increasing the impact of market surveillance is the **model's univocal identification:** "The ATLETE field work has shown that not always appliance models are univocally identified by their commercial code number (or a similar coding). The challenge is to ensure that units apparently belonging to the same model are actually the same product. Or in other words how far two apparently identical units of a model can have different cha-

racteristics (different components, technical details, performance declarations, etc.) and still be considered two units of the same model? In this respect a better system of univocal identification of models should be developed."

Concerning this topic (model names and identification), Ecopliant (2013, 2) makes the following observation on identified problems (again, please note that some of these examples state the situation on the market, but are not necessarily legally correct):

- There are sometimes different trademarks and model identifications for the same product.
- The same model (product) has sometimes different construction (volume, functions, accessories, etc) depending on the market where it is sold.
- There might be different alternative components within the same model (motors, electronic controls, etc).
- A specific product model might be sold under different product model numbers in different EU-stats, even if it is more or less exactly the same product.

Two or more products can be stated as "equivalent" by the manufacturer/importer if the products have only aesthetic differences, different trade marks, or different model references, but are equal regarding the requirements of the Ecodesign directive. In this case, this should be stated in the technical documentation issued by the manufacturer/importer. Within the Ecopliant project´s survey, out of 20 MSAs that answered the survey, very few (16%) state that they always or occasionally/frequently, prior to selecting a specific product on the market for analysis/testing and possible market surveillance action, investigate how many products already on the market that can be considered equivalent to the product according to the requirements following the Ecodesign regulation. Half of the respondents state that this is never done, and over a third answers that they cannot provide any information about this (Ecopliant 2013, 2).

One of the other challenges deals with **publishing market surveillance plans** beforehand and the concluded results of these activities. According to the Ecopliant project research (Ecopliant, 2013, Subtask 1.0), six MSA do sometimes or always make public announcement beforehand to inform manufacturers, representatives or importers about market surveillance action they are planning to run. Some of these six MSAs publish their yearly market surveillance programme on their website. 13 MSAs claim to publish the results, e.g. on their website. By making the results of product testing publically available, greater visibility and transparency to the activities carried out by the MSA's is ensured. The manufacturers' fear of negative media attention, which may be the result of publishing the test results, is likely to lead to a higher level of compliance. However, some Member States have their own reasons not to share test results publically.

Sharing results: what are the reasons that there is still **so little sharing of information and use of foreign data amongst MSAs?** It is important to note that only in a few cases it seems to be a problem of the legal system that makes it difficult to use foreign data for enforcement actions. Sharing details of planned testing programmes is not a legislative provision of the Directives, although sharing results on non-compliant products is instead mandatory. Most countries indicate that there are no direct barriers in their legal system to use foreign information. However, on the other hand, there are no points that facilitate the use of foreign data. If the information meets requirements e.g. the foreign data are coming from an accredited laboratory and there is a good support from the country where the data originate, no fundamental problems seem to prohibit the use of these data in an enforcement action (Ecopliant, 2013, 6).

The Ecopliant project (2013, 6) has made specific observations and recommendations concerning the usage of foreign data. The usage of foreign data is considered as one possibly key tool to enable authorities to increase impacts of its activities, without increasing the number of tests, or by enabling to use foreign intelligence.

In principle foreign data (from another MSA or a project like ATLETE) are considered as data that possibly can be used in enforcement actions. However the result of the enforcement action will, depending on the quality of the data (accredited laboratory or not) and also on the different legal systems, give more or less possibilities to use this different kinds of data.

The starting point, according to the Ecopliant project, should be not to exclude any kind of foreign data for possible enforcement action. However, since the experiences in this area are still limited in most Ecodesign MSAs, practice should make clear what is possible and what is not.

Using foreign data as a basis of enforcement actions is important and necessary for various reasons:

- Countries that have no laboratories to conduct tests in the own country, it is desirable that data that comes from a foreign laboratory can be used for an enforcement action.
- The high costs of testing and the sometimes low budgets that are available for MSAs make it necessary to come to a high efficiency enforcement operation by using all information and data available.
- Using foreign data makes it possible to do tests where the knowledge and the experience are strongest. It will also help to come more and more to a uniform approach in market surveillance and will help to realize a level playing field across the EU.

Experiences/conditions to use foreign data in order to take an enforcement action, according to many Ecodesign MSAs:

- Testing data comes from accredited laboratories within the EU.
- Data from the foreign MSA is based on statutory procedures and general accepted methods of measurement.
- The forwarded material (test reports, communication etc.) must clearly show evidence of non-compliance.
- Support from the MSA in the country where the data is coming from is often necessary e.g. to give additional information on the data.

Barriers

— Lack of information, lack of communication by the member state supplying the information, the time elapsed since the product was purchased and tested.
— Only some comments indicate that it is not possible to impose penalties outside the formal legal procedure for selecting, taking and testing samples from the market.
— Unclearness in definition and responsibility in the Ecodesign directive of an economic operator: who can be regarded as economic operator when the manufacturer is located in another country than the one controlling? And may he be addressed in case of non-compliance?
— Choosing a non-accredited laboratory, which is possible regarding the Ecodesign directive, can create problems when the manufacturer brings tests coming from an accredited laboratory.
— Especially if using foreign data, a suitable database used by all countries would be important and is now being missed.
— Test reports are often made in the national language which creates problems in understanding and is unsuitable for sharing the test results.

Solutions

— Clarification of the role of 765/2008, and its articles and clarifications in 125/2009 Ecodesign directive e.g. explanation about the definition of ”economic operator”, the definition of ”placing on the market” etc.
— Important is: giving support by the country where the data is coming from, start to try out in some cases in different countries how it works in practice.
— Use of database; A joint European suitable database should be set up which should be legally binding for all MSAs to use; the data base to developed within Ecopliant can be a first step.
— Countries that have more resources to spend can expand the cooperation with Member States which have not, i.e. sharing test results and best practices without demanding anything in return.

— A pan European practical guide for market surveillance will help to set a uniform procedure and approach for market surveillance.
— MSAs must communicate with each other if foreign data is to be used and test reports to be written in English language appears to be most desirable (Ecopliant, 2013, 6).

Location of the economic operator: National and European legislation give no possibility to take enforcement action in another country. In practice, this means that when a MSA finds a non-compliant product on his market, and it turns out that the responsible manufacturer/importer is situated in another EU-country, the MSA can often not put any enforcement action on this manufacturer/importer. According to the Ecopliant project, the practical handling of these cases differs very much between member states, which is a problem. A lot of countries, when finding non-compliant products, notify the responsible MSA in the EU country where manufacturer/manufacturer's representative/importer is situated. Other MSAs take action against the economic operator that is situated within their own country (Ecopliant, 2013, 6). This diverse and unclear situation affects also the fact that some MSAs have difficulties handling foreign data: if a MSA cannot take action against a manufacturer that is based in another EU-country, but instead notify/send the test result to the MSA in that other country, this second MSA should preferably be able to use the foreign data to take action; otherwise there might come a situation where test have to be made all over again or, even worse, no MSA takes action against the non-compliant product.

Another challenge often described concerns the **sales of products on the internet**. The research of the Come On Labels (2013, 5) project indicated that in terms of displaying energy labels only partially and/or incorrectly, internet shops are the most problematic type of shop when comparing all three project' s rounds of shop visits. Despite an improvement compared to the second round of shop visits, in 35% of the cases internet shops do not provide consumers with all the required information from the energy label. The current EU energy labelling legislation does not demand the display of the label itself, but requires a specific set of information, displayed in a specific order, with the product offered on internet or catalogue sales. Whereas data such as the energy class or the volume of products are commonly displayed, other information such as noise or climatic class (for refrigerating appliances) is often missing.

In terms of sales channels, the internet has been considered one of the more challenging distribution channels, in part due to its increasing market share, and in part due to the fact that it was not specifically named in the "old" Energy Label Directive. According to the Fraunhofer et.al. (2009, 1) survey, the worst result of the survey of the retail trade was observed for mail order and Internet stores. On the whole, only 5 % of appliances were correctly labelled in accordance with the Directive, which means that the mandatory information was provided completely and in the stipulated order. The main failings were not missing, but incomplete information or not shown in the right order. Though the general level of compliance was relatively low in all countries, the share of correctly labelled appliances varied between 41 % in Denmark and zero in the case of a considerable number of countries. The survey stated that it seems that although there is a general willingness to inform buyers on the part of the retailers, the large amount of information required by the Energy Labelling Directive and the stipulated order cause difficulties for this channel of distribution.

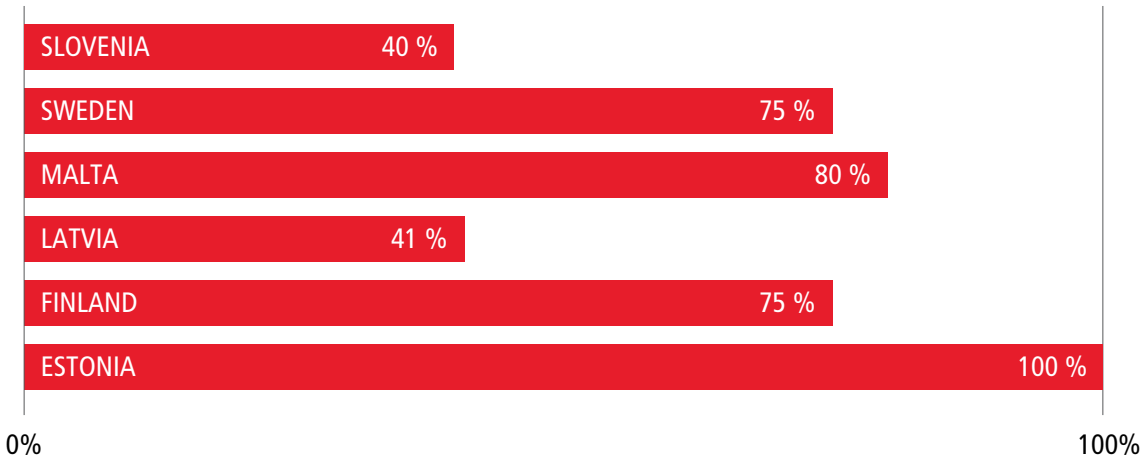
Concerning internet sales, ATLETE (2010, 2) made the following summary of problems:

- Topic issue: Internet or catalogue selling is considered not very common in the country, or was not considered as such until recently (Greece, Portugal, Romania, Slovenia, Sweden). There are no complaints on catalogues and Internet offers (Cyprus). The information provided is considered to be compliant on Internet website (Poland).
- Capacity issue: Need of a dedicated authority, or dedicated controllers on this topic within the current enforcement authority (Hungary, Lithuania). Hungary for instance mentioned that new prerogatives could be attributed to the HACP, with the establishment of a new department for distant sellers monitoring (with new human financi-

al resources). Lack of human resources to be assigned to actions that are not widely spread in the country (Malta). The state enforcement authority has too many subjects to deal with (Poland on catalogue offers).

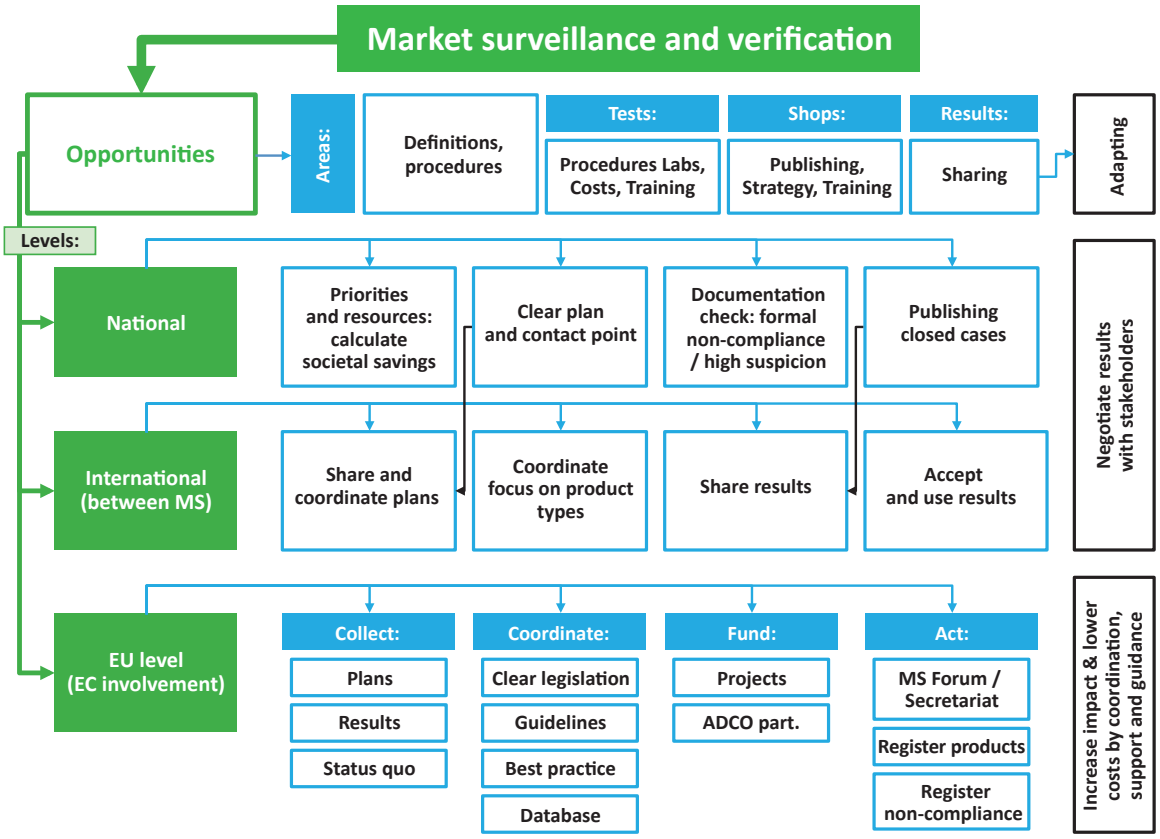
- Methodology issue: Difficulty to identify the liable person for energy labelling on Internet offers (The Netherlands).
- Regulatory issue: The 1992 framework Directive did not cover Internet selling (Sweden).

Chart: Percentage of compliance of checked Internet stores in 2012 (ATLETE II, 2013, 1)



Opportunities for a more effective market surveillance

This chapter summarises and highlights the main opportunities identified by the individual projects for implementing market surveillance on a more effective basis – from increasing the level and impact of market surveillance activities to ensuring higher compliance rates and reducing energy consumption losses due to product non-compliances. This chapter also refers to other relevant literature, providing further evidence to the recommendations made by the ATLETE, ATLETE II, Come On Labels and ECOPLIANT projects.



The chart highlights the main opportunities identified in the literature reviewed in terms of increasing the effectiveness of market surveillance of energy label and ecodesign legislations. The individual points mentioned in the chart are all listed by the individual projects, as well as other topic-related literature, but the structure of the scheme, dividing the activities to three levels, has been designed by the authors of this publication.

General recommendations

Some general, but highly relevant recommendations were made as a result of the **Evaluation of the Ecodesign Directive** (CSES, 2012, 7, also quoted by ATLETE II, 1):

- "Effective enforcement is essential for the credibility of the whole system and to avoid undermining the efforts of enterprises committed to the spirit of the legislation. Member State surveillance authorities need to **scale up the**

level of activity in this area and **be more transparent** across the range of their activities. Given the savings resulting from the Ecodesign Directive requirements there is strong justification for additional effort in this direction."

- "The **Commission should take a more active role** in promoting co-operation (through the ADCO (Administrative Cooperation for Market Surveillance group) and the sharing of information, including the sharing of investigation results. Furthermore, a review and comparison of penalties imposed by Member States should be undertaken and kept up to date."
- "Consideration should be given to the feasibility of introducing a requirement in the Ecodesign Directive or in individual Implementing Measures for the **registration of new products** by those placing these products in the EU market. The registration should be at an EU level and designed to minimise administrative costs. It would assist in market surveillance but also serve as a key source of information to monitor developments in the market."
- "Surveillance authorities should publish the results of their activities on a dedicated website for Ecodesign and related activities (such as the Energy label)."

The individual projects, reviewed in this publication, have made the following recommendations:

The **ATLETE II project** (ATLETE II, 2013, 1) has summarised its first key recommendations, based on findings of a survey among most EU market surveillance authorities, the following way (*bold highlights by this study authors*):

- **More cooperation** among member states (MS) and coordination of MV&E activities at EU level will quickly and effectively promote the **adoption of best practices** on carrying out market surveillance activities. At present only a little more than half of MS (10 MS out of 17 MS who provided feedback) in EU confirmed their participation in know-how and experience sharing through the Administrative Co-operation Working Group (ADCO) and a total of 10 member states also participate in the ECOPLIANT project.
- The lack of access to adequate testing laboratories infrastructure in certain MS is a major challenge but it should not discourage these member states from conducting product testing. This can be achieved by **encouraging resource sharing within the MSA of different member states**. For example, either by **promoting the use of laboratories from other member states** or endorsing the test results already performed in other countries within EU. The promotion of use of testing laboratories can be encouraged if each member state would publish the list of independent test laboratories in their country. Such a list would allow other MS, particularly with insufficient testing infrastructure in their home country, accessing to competitive product testing facilities in other member states. Given the diversity of languages spoken in EU, it is not surprising that endorsement of test results is not very common. However, the linguistic barriers can be overcome by **facilitating translations** of the results into official EU languages using standardised formats.
- Further increase in consumer awareness on the benefits of energy efficient products will pull the market further. As in many MS the compliance testing of products was carried out based on **consumer complaints**, an increase in level of awareness of consumers may positively impact the identification of likely non-compliant products via an increase in consumer complaints, thus positively influencing the overall MSA.
- Records of enforcement actions should be made **publicly available**. It is surprising that majority of MS in EU do not give importance to publicising their activities by making the results of the product testing publically available. A few Member States (four: BG, CZ, DK and UK) already provide some information concerning compliance checks in shops but no testing results are reported. Such practices should also be followed by MSA of other countries in EU and should cover **at least information on compliance checks in shops** as a first step. The results of product testing can be made public as the next step highlighting both the compliant and non-compliant product models/companies. This would ensure greater visibility and transparency to the activities carried out by the MSA.

It should likely **push the market towards greater compliance levels due to the fear of transgression** being punished.

- National governments should allocate **more funds to MV&E** activities as a significant number of MSA's reported that they are facing staffing constraints. Allocation of appropriate amount of funds should ensure that MSA have adequate resources to carry out their activities and to streamline the exchange of information between MSAs. The enhanced cooperation between different MSAs and better use of scarce resources such as well-targeted product testing should allow MSA to control enforcement of products to ELD and Ecodesign Directive.

In its final report and the survey on market surveillance, **ATLETE project** (2011, 4 and 2010,1) has made the following recommendations:

- The ATLETE Project has shown, beyond any doubt, that market surveillance is essential to guarantee the compliance of the specific products with energy labelling legislation.
- The ATLETE Project has demonstrated that market surveillance is **essential, technically possible and cost effective**. Lack of market surveillance in the area of energy labelling and ecodesign of energy related products leads to unfair competition enabling "free-riders" to gain potentially considerable market advantage over the competitors, which in turn creates market distortion and undermines the possibility to achieve the demanding EU energy efficiency targets. Lack of market surveillance also undermines the trust of the consumers in the EU energy efficiency policies and makes their search for high energy efficient products somehow ineffective.
- The verification procedure followed in the ATLETE Project is based on the standard procedure applied in EU energy labelling and ecodesign legislation. Although it has been validated against the old energy labelling and in the specific case of refrigerators and freezers, it is fully applicable to the new delegated regulations. The procedure is based on a two-step approach: in Step 1 the check is performed on one sample of the model; in case of suspected non-compliance Step 2 is conducted, testing three additional samples of the same model. Depending on the parameter to be verified, a verification tolerance (to cover uncertainty in the laboratory measurements) is applied to both Steps.
- The ATLETE Project has proven that this two-step approach is necessary for the proper assessment of the product compliance. Almost 25% of the refrigerating appliance models suspected of non-compliance in Step 1 and tested in Step 2 ended up being fully compliant with energy labelling requirements.
- **Cooperation of testing laboratories** and the exchange of the experiences gained during the product testing foreseen within the procedure developed in the ATLETE project has proven to be helpful in achieving fully comparable test results. The four meetings with the testing laboratories, project partners and international experts have provided useful suggestions for the fine tuning of the verification procedure.
- Market Surveillance **should be conducted both at country level as well as at EU level**. The exchange of experiences between the national Market Surveillance Authorities is also needed for a better planning and coordination of the national efforts.
- National Market Surveillance Authorities should guarantee that testing laboratories assure the lowest possible measurement uncertainty. This will in turn allow comparability of the verification results.
- Encourage or make mandatory the **publication of tests'** results at a European level, in order to generate a greater impact on manufacturers. The broadcast of tests results seems an efficient tool to improve compliance rates without carrying out tests on a large scale. Results can be broadcast to consumers, consumers' associations as well as to retailer chains.
- Stipulate that manufacturers should be charged with the **cost of the testing** procedure in case of non-compliance, in addition to the sanction applied. This can be another dissuasive factor as well as a mean of slightly reducing national monitoring costs.

- **Make importers legally responsible** for energy labels' accuracy in national legislations, or at least make them responsible for the presentation of the technical documentation proving the energy consumption declaration of the product they import.
  - Concerning the topic of economic operators, ATLETE (2010, 2) makes also the following remark: "As regards non-CECED manufacturers, this is a common challenge underlined by several Member States. Hungary and Malta, for instance, report to have difficulties in sanctioning non-CECED manufacturers (mainly Chinese manufacturers), which are quite impossible to legally reach and whose importers are not considered legally responsible. Sweden also experienced difficulties considering the longer delays necessary to establish contacts with the head offices, or to even identify the representatives on the EU market."

The **Ecopliant project** (Ecopliant, 2013) formulates the following problems and possible solutions (at the time of writing this report, December 2013):

- Some MSA strongly ask for quick and **low resource** (human, financial) verification **methods**, somehow irrespective of their actual accuracy, to be used for market surveillance, possibly achieving results to be immediately usable against apparently non-compliant models and manufacturers. However, MSA actions against economic operators should not start based on a screening test result, but instead only on the basis of a suspected or verified non-compliance following the two Step procedure described in the EU ecodesign legislation. Screening tests can however be used for targeting products for further investigation and/or to initiate an informal dialogue with the manufacturer to clarify some aspects of a product.
- Barriers to sharing – It is important to note that only in a few cases it seems to be a problem of the legal system that makes it difficult to use foreign data for enforcement actions. Most countries indicate that there are no direct barriers in their legal system to use foreign information. However, on the other hand, there is no point that facilitates the use of foreign data. If the information meets requirements e.g. the foreign data is coming from an accredited laboratory and there is a good support from the country where the data originate, **no fundamental problem seems to prohibit the use of foreign data in an enforcement action**. Countries that have data that is appropriate to use for an enforcement action against a manufacturer in another country should give this data to that country and stimulate that an enforcement action follows in which as much as needed support is given.
- Penalties – **Member States should determine the penalties to be applied in cases of non-compliance; these penalties should be effective, proportionate and dissuasive, taking in account the extent of the non-compliance and the number of units of non-complying products placed on the Community market.** Looking at the verification approaches (document inspection and/or testing), the kind of enforcement action in case of non-compliance (ask for explanation or e.g. request for correction), the amount of the fines/penalties for non-compliant products, etc. there are many differences between countries. In practice there is an approach that starts by confronting the manufacturer/importer with results showing non-compliant products. Depending on the reaction of the manufacturer/importer, the MSA then takes action, which could be tests of additional three products, or a fine, or a prohibition to bring a product on the market, depending on the situation.
- Different trademarks and **model identifications** for the same product. As the EU market for certain products looks today, a specific product model (appliance) is sometimes sold under different product model numbers and different trademarks, even if they are in technical terms the same product.
  In line with the legislation, two or more products can be stated as "equivalent" by the manufacturer/importer if they have only e.g. aesthetic differences, different trade marks, or different model references, or commercial code numbers, but are equal regarding the technical characteristics (volume, size, load, energy & water consumption, efficiency, functional performance, etc.) and the applicable requirements of the Ecodesign directive and relevant implementing Regulation. In this case, this equivalence has to be stated in the technical documentation issued by the manufacturer/importer.

- Most MSAs providing feedback to the project survey state that prior to selecting a model for inspection they do not consider how many products on the market can be considered equivalent.
  In order to identify the equivalent models and models whose technical documentation is derived from the same "basic model", the following documents can be requested:
  — Identity declaration. To establish the appliances covered by the same technical file (equivalent models) and/or those derived by calculation from the same "basic model".
  — Test reports. To identify the basic model.
  — Calculations. To justify the changes, if any, in the nominal values of some models with respect to the test report of the basic model.
- **Use of tolerances** – intended to use by the authorities when conducting lab tests, seem also to be used by several manufacturers for other purposes. **The European Commission should as soon as possible issue an instruction on how the tolerances in the different regulations may be used correctly**. Manufacturers and MSAs should follow this instruction.
- **Technical documentation** – Document inspection is an important part of market surveillance and should be considered when establishing national inspection programmes. Document inspection is a stand-alone activity: if the documentation of a product does not meet the requirements of its corresponding ecodesign regulation, the product does not comply with the relevant implementing measure under the Ecodesign Directive. An effective document inspection can lead to significant costs saving in market surveillance and should be considered when establishing national inspection programmes. It can also be used as a very useful method to select products for further compliance verification through lab testing.
  — The document inspection, however, may not be always easy and may require some experience. **It is essential to define the same procedures for document inspection in all the MS**. **Training** is recommended to clarify the importance of the document inspection.
- Most MSAs are more focused on product energy consumption than on the consumption of other resources and the overall products environmental impacts as criteria. On the other hand it is known that the energy consumption is a relatively simple parameter to be measured, compared to – for example – **functional performances**. But energy consumption and functional parameter(s) are in most cases strongly linked. This could lead to products with a high energy efficiency but poor performance being considered compliant with the ecodesign and energy labelling legislation on the basis of an incomplete check.
- **Third party funding** – 50% of Ecopliant research respondents consider third party financing as acceptable, provided certain conditions are fulfilled, other 50% consider it not acceptable to conduct market surveillance. However, the meaning of third party financing might be different for different MSAs. "Third party" can be industry organisations, cost recovery after a certain test, or EU-financing such as part of Ecopliant. Using the UK example, in all cases where the legislation allows, the appointed market surveillance authority will pursue cost recovery. However, all financial resources recovered are to be paid into the Consolidated Fund and will not be retained by the MSA. The Consolidated Fund is the Government's general bank account at the Bank of England. The practical and financial implications of cost recovery, e.g. administration, finance and follow up placed on the market surveillance authority, must be considered before cost recovery is pursued. As monies are not retained by the MSA, cost recovery may in practice prove financially detrimental to the MSA. The Hungarian MSA confirmed that the authority recovers the costs of the laboratory from the manufacturer or from the distributor if tests results prove non-compliance, adding that the authority has to remain totally independent, however.
  — Some MSAs strive to build successful and proactive relationships with industry in order to develop and progress market surveillance projects which are mutually beneficial to both parties. Cooperation can come in many ways; direct funding (subsidies), indirect funding (man hours) and shared work.

This form of funding is considered as a mutually proactive form of third party funding. Trade industry association objectives are all dependent on the industry that they represent. The majority of trade associations strive to strengthen the industry they represent and to promote the benefits of good quality products by representing aspects of national and international legislation and standards whilst protecting the interests of both the public and members. To achieve this, competitive, high quality marketplaces are essential.

Shared actions between the MSAs and Trade industry associations are often tabled, to assess compliance of sector specific product groups under Ecodesign Implementing Regulations. Trade industry association publicity is often a suitable deterrent and can move industry towards compliance as one.

However, Sweden indicate that "there could be some negative media interest if MSAs are too involved with industry" and Norway argues that "third party funding can bring along inefficient management of the market surveillance if the funding cover all the costs. (Ecopliant, 2013, 5)"

- Other problems requiring more clear definitions include the economic operators, including **the role of an economic operator within the Ecodesign framework** in the own country, when the manufacturer is located in another country and if he may be addressed in case of non-compliance.

The **Come On Labels project** (2013, 6) has made its recommendations both concerning product testing and shop visit strategies. Concerning product testing, its main aim was to contribute to the creation of an effective verification procedure for the EU legislation on energy-related products:

- **set a clear, transparent and precise procedure, to be largely publicised to all market actors and thoroughly followed by national Market Surveillance Authorities**. This should include (the list is not exhaustive):
  - — the use of an appropriate measurement method and test conditions
  - — the commitment to run the 2 Steps of the verification procedure as set by the relevant EU labelling/Ecodesign product specific measures
  - — in case of failure of Step 1, the supplier should be given the possibility either to accept the results and go for an immediate remedy action or to ask for the development of the second Step.
  - — the verification of all parameters requested by the legislation provisions (e.g. energy efficiency class, energy consumption, water consumption, capacity). All parameters have the same importance when product compliance is considered.
- foresee and support the **discussion with the supplier about the possible reasons for non-compliance**: the understanding of the non-compliance causes is as important as the identification of non-compliant products;
- **define staged and timely corrective actions to be applied by the national Market Surveillance Authority**: such actions should always follow the identification of a non-compliant product and should possibly include an initial approach to the product supplier for the correction of the product declaration(s), followed by – if and when considered necessary – the application of penalties or sanctions (effective, proportionate and dissuasive) down to the obligation to remove the non-compliant product(s) from the market;
- **set a "working plan" for the market verification**, to be announced to all market actors, to publicise the concept that no products will be forgotten and that market verification is a routine action and not an exception.

Concerning the organisation of the **shop visits**, the project has made the following general recommendation: The institution/s responsible for verifying proper appliance labelling in shops should **carry out inspections** in order to verify the compliance with the legislation provisions.

The decision about the size of the sample for the different shop categories can be done on the basis of (i) a statistical analysis, (ii) previous experience and knowledge, or (iii) individual complaints from consumers.

The check of the correct label presence in the shops should **follow the same procedure** for every visit in order to make inspection results comparable. As there is no European law specifying how shop visits should be conducted, the

Come On Labels project has developed some recommendations, based on the experience of other projects and its own surveys.

Some further activities, based on shop visits undertaken by the project partners, could be also recommended for further adaption:

- involve retailer in **training** on how to display energy labels properly, and suppliers in ensuring the full disclosure of ecodesign related information
- **educate the public** to be aware of the energy labels and ecodesign related information provided to take them into consideration in their purchasing decisions
- **sharing results among the authorities**, discussing the levels of label display among different types of shops in order to adapt the national shop visit plans and strategies
- **consider the publication of shop visit results**, at least on aggregate levels, ensuring higher awareness of retailers on the requirements for information provision.

EU plans and opportunities for cooperation on the European level

This further section is specifically devoted to the opportunities for international cooperation on conducting market surveillance, which is widely seen and considered as the most promising way in ensuring higher effectiveness and impact of market surveillance.

At the moment, contacts between Member States countries are considered as not always optimal and there are still countries that do not have the basic level of implementation to take over the responsibility of action against the manufacturer/importer (Ecopliant, 2013, 6).

One of the examples of **functional regional cooperation** is the Nordic project: Throughout the Ecopliant project survey, all Nordic countries mentioned regional cooperation, which began in 2011. The concept, described by Norway, is as follows: "Nordic countries share their sketch market surveillance plan, and we consider both type of monitoring and product categories when we make our final national plan. We also wish to avoid to choose the same model as somebody else for testing compliance, so if we plan to test the same product category we ask the others which models they are going to test." (Ecopliant, 2013, 5).

The ATLETE (2010, 1) project has highlighted the following aspect in this regard: A recommendation can be to further assess the efficiency of current institutional frameworks, as indicated in the Regulation 765/2008, Article 18 "*Obligations of the Member States as regards organisation*": *"Member States shall periodically review and assess the functioning of their surveillance activities. Such reviews shall be carried out at least every fourth year and the results thereof shall be communicated to the other Member States and the Commission and be made available to the public, by way of electronic communication and, where appropriate, by other means*".

The Ecopliant Consortium members also believe that significant improvements in product compliance rates can be achieved if MSAs **actively coordinate** market surveillance activities, using a range of best practices to help them do so in the most resource efficient way. There are, however significant challenges to establishing such coordinated action. These include the "alignment" of the differences in national market surveillance strategies and priorities, national legislation, and the structure and responsibilities of MSAs, together with the lack of common formats, procedures and mechanisms (such as shared databases) to share information (Ecopliant, 2013, 5).

The cooperation and increased level of market surveillance is also supported by the **industry associations**. For example, several industry associations confirmed repeatedly the need for increased level of market surveillance, and CECED, DIGITALEUROPE, ORGALIME, and TechAmerica Europe have commented in a joint statement concerning

the new Market Surveillance regulation proposal, that they also welcomed the specific fact that the proposal strengthens the role of the European Commission for the co-ordination of Member States' market surveillance activities, with a view to ensure their effectiveness (CECED et.al., 2013, 12).

When commenting the results of the ATLETE project, General Director of CECED, one of the project partners said: "The level of compliance with energy label requirements must improve. These results are disappointing but they do not detract from the industry's position on this issue. Industry constantly pushes for a strong level of market surveillance within Europe. Strong market surveillance is the best way to ensure a level playing field, fair competition for domestic equipment manufacturers operating within the Single Market and a high level of protection for the consumers. It is essential that Governments provide adequate resources to ensure market surveillance".

So far, enforcement authorities are using the **ADCO** Ecodesign[4] and Energy Labelling forums to harmonise the enforcement of the implementing ecodesign Regulations, to share best practice and to exchange intelligence on products, to share plans for product testing and to work towards a proposal for a joint testing programme which will make good use of limited resources (Come On Labels, 2013, 4).

The Ecopliant project also quotes the following ADCO objectives:

- To inform each other of one's own national market surveillance mechanisms.
- To harmonise the effect of different surveillance practices.
- To spread good surveillance practice and techniques across the Community.
- To exchange views and solve practical problems.
- To exchange information on market surveillance interventions.
- To fix joint actions to be carried out.
- To contribute to the examination of the effectiveness of the established market surveillance mechanisms, in accordance with Article 18 of the Ecodesign Directive.

ADCO has already been viewed as a key tool by Fraunhofer et.al. (2009, 1) research on label compliance, where the following topics and tools have been suggested by the study:

- Identifying and networking market surveillance actors in Member States and in relevant third countries.
- Active sharing of information in order to facilitate the work of Member States that have little experience in compliance testing, including possible financial support from the European Commission.
- Creating a 'Test Fund' based on possible funding from the IEE programme. Sharing the test results between Member States would help minimising test costs, as overlapping could be avoided and compliance tests be focused, when/if necessary, on most relevant products and Member States/regions.
- Consider dividing work and sharing of information on appliance testing based on the existing practices of various Member States in order to increase cost-efficiency and avoid possible overlapping tests. For example, appliances in MS markets may be sufficiently similar in some groupings of geographically closely situated Member States, such as in the Nordic Member States (where some regional cooperation between market surveillance authorities is under planning) to allow reinforced and targeted 'regional' cooperation.
- Develop an efficient way to notify the Commission in accordance with the Regulation on Market Surveillance.
- Developing a 'one-stop-shop' web site on market surveillance and compliance testing on energy-using products with links to existing databases and web sites by national Market Surveillance Authorities and Test laboratories. The new "ATLETE" project may be helpful in this respect.

4 For more details see http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2601

- Developing criteria and indicators (Euros spent, number of tests, notifications and warnings made, fines imposed etc.) on the basis of which market surveillance action can be assessed and compared, including criteria and indicators for test houses, if possible. This would prepare the grounds for the implementation of the Regulation on Market Surveillance (e.g. peer review, obligations to provide and share information) and for the judgement whether authorities have been provided with necessary resources and powers for their surveillance activities (Art. 3.2 of Ecodesign Directive).
- Exchange good practice and develop efficient mechanisms for cooperation between market surveillance authorities and manufacturers and suppliers to prevent the placing of the market of non-compliant products. In this respect, several Industry Associations have indicated interest in concretely supporting the Market Surveillance Authorities.
- Develop mechanism for cooperation with customs authorities in order to efficiently keep each others informed, and to take appropriate action based on the information received (Regulation on Market Surveillance).

Market Surveillance Package

The **European Commission** (2013, 5) within its **Market Surveillance Package**[5], plans to ensure improved cooperation between the MSAs. While the Market Surveillance Package mainly relates to product safety, several parts are highly relevant for energy labelling and ecodesign related legislation. Examples:

- *The Commission will ensure the **improvement of the data collection** system and determine, together with the market surveillance authorities, the most important key relevant enforcement indicators that should be collected in the medium term. The Commission will also collect data from the Member States on the results of border controls from 2013 and publish an annual report from 2015.*
- *The future EU Market Surveillance Forum needs **organisational assistance** to perform its tasks. The Commission will establish an Executive Secretariat that will assist the EU Market Surveillance Forum.*
- *The Commission will provide **financial support for joint enforcement actions**, allowing market surveillance authorities and customs to pool resources and expertise and to apply SME-friendly methods. The main objective of this initiative is to enhance the efficiency and effectiveness of the surveillance system in Europe, as well as to improve the coordination of the practical enforcement work carried out in relation to product categories or other priorities.*
- *The Commission will speed up its work to improve **product traceability** in the supply chain. It will evaluate the recommendations of the "Expert Group on Product Traceability" with the objective of improving the quality and availability of traceability information in the supply chain. Up-to-date guidance will be provided by the Commission, after consulting Member States, taking into account the specific needs and interests of SMEs.*

Within the Market Surveillance Package, adopted by the European Commission (2013, 5), more coordinated activities are proposed, including cooperation, training and information sharing. A specific recommendation includes the Facilitation of the "**portability" of the test reports** in the Union, maximising the benefits of the databases:

- *The Commission will promote the use, among the relevant market surveillance authorities including those responsible for external border controls, of results of tests already performed in one Member State by other Member States and will also facilitate their distribution via ICSMS.*

5 New package of legislative and non-legislative measures to improve consumer product safety and to strengthen market surveillance of products in the EU. The package, adopted by the European Commission on 13 February 2013, will be discussed in the European Parliament and in the Council in 2014 and is expected to come into effect in 2015. For more information, see: http://ec.europa.eu/consumers/safety/psmsp/

- *ICSMS will be developed further to collect, store and exchange information and best practices among all the actors directly concerned. This will include eventually the publication of test results, results of joint actions, guidelines and guidance for training of market surveillance authorities, case studies, statistics and overall information on market surveillance for products.*
- *GRAS-RAPEX and ICSMS have very distinct functions and are therefore kept separately. The Commission, in regard of the GRAS-RAPEX and ICSMS distinct objectives, will develop, however, synergies between both systems.*

The Ecopliant project also commented that there are some initiatives from the Commission that can bring improvements in this field, since sharing information is key to effective market surveillance. A **tailor-made database**, designed for use by all Ecodesign MSAs, will assist in developing a responsive market surveillance framework. Access to such information will enable MSAs learn from the experiences of others, share practices and results and increase the likelihood of rules being applied consistently throughout the single market (Ecopliant, 2013, 7). The ICSMS system will be improved and modernized e.g. to make it easier for the user to search product information. In the new proposal for horizontal rules for market surveillance, the Commission proposes that ICSMS and RAPEX are merged. With a merge or an interface between the RAPEX and the ICSMS system, ICSMS will then inject data in RAPEX. This could make it possible also for data concerning Ecodesign to be notified in a similar way as in the RAPEX system, e.g. in cases of extreme non-compliance situations. An important question is whether this is viable and if so, how would a MSA want to use RAPEX also for situations with a risk for the environment (Ecopliant, 2013, 6).

The Come On Labels (2013, 4) project also listed some of the main "MSA Package" elements, most relevant to product labelling and ecodesign:

- **Obligations to national authorities**: for information sharing and cooperation, for example that authorities must respond to requests of mutual assistance from their counterparts,
- **Obligations to manufacturers and importers**: to provide appropriate information on the product allowing its identification and traceability,
- **Obligations of distributors**: to check that the manufacturer or importer has duly labelled the product before its sale.

Other selected relevant MSA Package features, listed by the Come On Labels project, include:

- An aim at simplifying the Union framework for market surveillance of non-food products,
- Developing a multi-annual plan for market surveillance, consisting of individual **actions monitored by the Commission**:
  - — Facilitate the portability of test reports – the Commission could promote the use of results of tests already performed in one MS by other MS and to facilitate its distribution via ICSMS,
  - — Develop the system to publish test results, results of joint actions, guidelines and guidance on training,
  - — Ensure synergies between product surveillance databases used by market surveillance authorities (GRAS-RAPEX and the ICSMS systems),
  - — Complete and update the general risk assessment methodology, also to avoid double work.
- Support joint enforcement actions, allowing to pool resources and expertise.
- Complete short, simple and clear rules on products sold online,
- The Commission to prepare the Executive Secretariat to assist the **EU Market Surveillance Forum** to facilitate the implementation of the relevant EU legislation, whose tasks would be to:
  - — Facilitate the exchange of information on products presenting a risk, including test methods and results, *(Note: the definition of risk to be specified, distinguishing between immediate health risks and environmental and consumer risks caused by energy efficiency losses due to product´s non-compliance)*
  - — Coordinate the preparation and implementation of the general and sector specific market surveillance programmes,

- Organise joint market surveillance and joint testing projects,
- Exchange expertise and best practice,
- Organise training programmes and exchanges of national officials,
- Assist in monitoring activities implemented by MSA,
- Organise information campaigns and joint visit programmes,
- Improve cooperation at Union level with regard to tracing, withdrawal and recall of products presenting a risk, etc.

The European Commission´s specific plans

During the Ecodesign Consultation Forum in March 2013, the Commission (2013, 3) has reported the following planned activities, which very well summarise the steps that need to be done in order to address identified obstacles and to realise the proposed opportunities:

- Proposal for a **new market surveillance regulation:**
  - To be based on a proposal from the Commission from 13 February 2013
  - The proposal is replacing market surveillance provisions in regulation 765/2008, general product safety directive, and specific sector directives,
  - With ecodesign and energy labelling being covered, with specific product related provisions remaining and taking precedence, and planning to consider a change/repeal of specific provisions within the labelling and ecodesign review process.

- Market surveillance multi-annual action plan
  - Covering 20 actions, including:
    - » Promote cross-border use of test results
    - » Further develop the product database ICSMS
    - » Develop benchmarks
    - » Joint enforcement actions
    - » Financial/administrative support for ADCOs
    - » Guidance on enforcement products sold online
    - » Develop common risk approach to custom controls

- Intelligent Energy Europe Joint Action
  - Focusing on ecodesign, energy labelling, tyre labelling
  - Intended for market surveillance authorities

- Annual data collection exercise
  - Purpose:
    - » Understand how MS carry out market surveillance
    - » Identify common problems and challenges
    - » Provide greater transparency of the work and of the resources assigned
    - » Provide data that could be used for policy making
    - » Collect evidence on the resources devoted
    - » Start collecting data to ensure that the reporting obligation scheduled for 2014 will be fulfilled on time

— General results:
  » Data on public spending and inspections limited and very different, and combined with other sectors
  » Overall moderate to low level of activity (only a few member states with similar level as Australia – most important is how the EU is doing as a whole)
  » Comparison 2010 vs. 2009 – more ecodesign activity including testing, and similar energy labelling activity
— As a follow up, EU pilot projects are to be considered, in case no activity in 2010 and no improvement meanwhile. The Commission concluded that member states welcomed this exercise and agreed that more market surveillance activity is needed. It was also noted that many non-compliance cases have cross boarder dimension.

The main conclusion, shared by most of the resources reviewed, would be to increase the degree of EU-level cooperation, ensure sharing plans, resources and results, and cooperate on surveillance activities, so that individual results can be adapted as EU wide as possible.

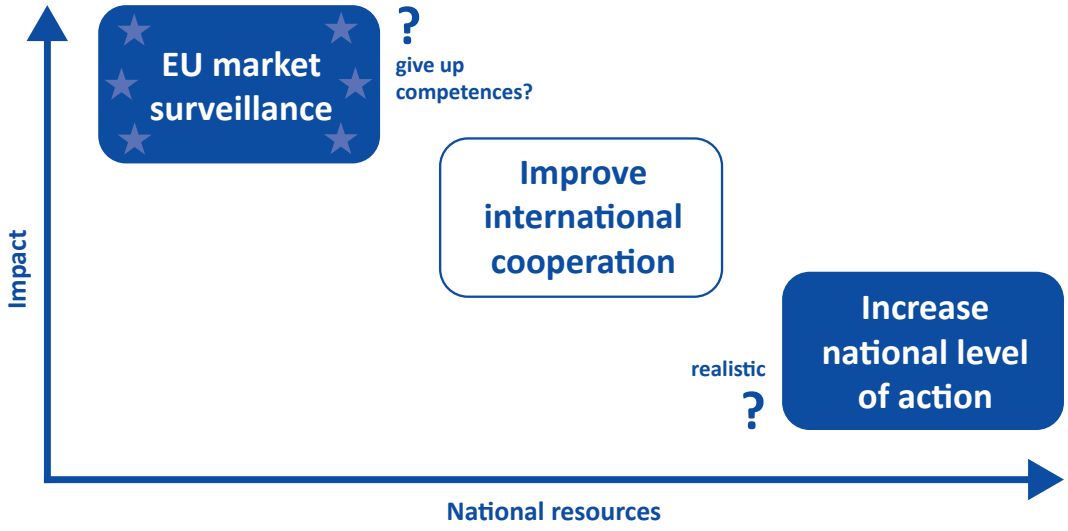


Chart: Options for improved efficiency in market surveillance (Waide at al., 2013, 8)

Summary of recommendations

The following recommendations have been selected and adapted by the authors of this document from individual recommendations of the projects and documentation reviewed. Authors chose to present these recommendations according to the level of action (from international cooperation to national activities) in order to reflect the current general discussions concerning market surveillance and ongoing energy label and ecodesign Directives' evaluation process.

International (EU) level

- **Support the active role of the EC to achieve overall higher efficiency of market surveillance actions**
- **Ensure exchange of experience between MSAs for a better planning and coordination of national efforts**
- **Support development and adoption of best practices among authorities**
- **Negotiate resource sharing between authorities**
- **Streamline the process of sharing and adaption of results of market surveillance from other countries**
- **Facilitate translations of specific documents and make English language the best practice usage for technical documentation**
- **Develop standardised formats for technical documentation and specific reports for manufacturers and shops**
- **Facilitate elaboration of guidelines or FAQs on proper label display, content of individual documentation, etc., and disseminate it to the stakeholders**
- **Resolve the issue of model identification (equivalent model names and families), both on the national and international levels**
- **Continue in the effort that tolerances are only used by market surveillance authorities, not by manufacturers for elaborating their declarations, since they should only declare the measured values**
- **Facilitate the use of foreign laboratories for product testing by national authorities**
- **Publish list of laboratories eligible for testing certain product groups**
- **Support cooperation among laboratories to ensure fully comparable test results**
- **Develop, negotiate and share (with laboratories and authorities) templates for test reports to be requested for individual product groups**
- **Standardise the formats of the technical documentation to be obtained from manufacturers, train authorities in evaluating the documentation effectively**
- **Define the position and responsibilities of the (national) economic operators, unifying their definition in both energy label and ecodesign Directives**
- **Negotiate and possibly define a minimum level of actions to be undertaken at the national level and unify the range of sanctions**
- **Support the ability of authorities to contact foreign operators, located in both other EU and non-EU countries and ensure cooperation among MSAs in this regard**
- **Define best practice in engaging manufacturers to respond to suspected non-compliance after Step 1 testing, ensuring testing of all parameters for Step 2 only in case of lack of appropriate response**

National level

- **Define clear priorities, specify and make public annual plans with the concrete level of activities to be undertaken**
- **Make sure the contact points regarding the enforcement of individual legislation within the authorities are clearly identified and available to stakeholders – and that the energy label and ecodesign related areas are clearly listed among their priorities**
- **Ensure public availability of the record of enforcement actions and results, both concerning the status of shop visits and product testing cases**
- **Ensure sufficient, even increased, resources available to the authorities, to be able to effectively perform its duties, which is considered highly cost effective from the societal point of view**
- **Consider the ability to charge the costs of tests of products confirmed as non-compliant to the respective manufacturers**
- **Make sure the penalties for non-compliance are truly effective, proportionate, and dissuasive**
- **Undertake evaluation of the technical documentation and negotiate results of Step 1 testing phase with the respective manufacturers, ensuring quicker processes, lowering resource requirements, and ensuring appropriate remedy activities**
- **When selecting specific models for surveillance checking, consider the full list of equivalent product models available on the market**
- **Support increased level of consumer awareness on energy label and ecodesign requirements and ensure the opportunity to submit consumer complaints in addition to using intelligence and data from civil society stakeholders**

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7. CSES, Evaluation of the Ecodesign Directive (2009/125/EC), 2012
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12. CECED, DIGITALEUROPE, ORGALIME, TechAmerica Europe, 2013, Joint Industry Response to IMPCO Draft Regulation on the Proposal for a Market Surveillance Regulation, Brussels, 8 July 2013

Further recommended reading:

Readers interested in general principles of market surveillance and its implementation on national level are recommended to consult the following publications:

- Monitoring, Verification and Enforcement – Improving compliance within equipment energy efficiency programmes, International Energy Agency, 2010,
- Compliance Counts: A Practitioner's Guidebook on Best Practice Monitoring, Verification, and Enforcement for Appliance Standards & Labeling, Mark Ellis & Associates with CLASP, 2010,
- Best Practice Techniques in Market Surveillance – safeguarding consumers, supporting fair competition, effective consultation, Prosafe Project. (primarily covering market surveillance in consumer safety area)

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Overview of challenges and opportunities

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