



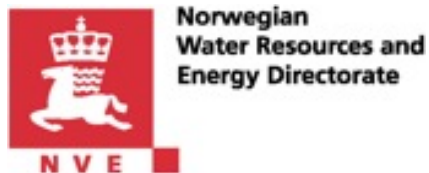
NORDSYN

Nordic Market Surveillance Cooperation

Lovisa Blomqvist

Energiavirasto

26 June 2018



- Ecodesign and energy labelling can save 10% of energy use in the EU in 2020 and 500 Euro/household
- ..contribute to energy saving targets as well as climate targets and resource efficiency targets
- Ecodesign facilitates the transition towards a circular economy by ensuring that products can be repaired, reused and safely recycled.
- Efficient market surveillance is essential if this is to be realized
- Nordsyn aim to improve the efficiency of Nordic market surveillance
- Nordic authorities, producers and consumers can benefit and green growth be supported – and it can be duplicated in other regions



Nordsyn:



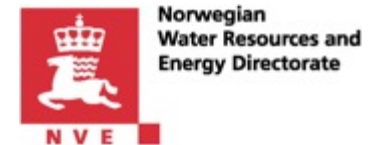
- Nordic cooperation on market surveillance and policy for ecodesign and energy labelling
- The cooperation started in 2011 and is since 2018 a continuous cooperation with support from the Nordic Council of Ministers
- Project leader Lovisa Blomqvist, Swedish Energy Agency, and an active steering group of cooperating Nordic agencies

Partners Nordsyn:

- **Denmark: Energistyrelsen/Danish Energy Agency;** Thore Stenfeldt (earlier Bjarke Hansen Peter Nielsen, Charlotta Castenfors Laursen)
 - **Finland: Tukes/Finnish Safety and Chemicals Agency;** Sami Karisola (earlier Teemu Hartikainen, Seppo Niemi, Marika Keskinen)
 - **Finland: Energiavirasto/Energy authority:** Kaisa-Reeta Koskinen
 - **Iceland: Mannvirkjastofnun/Iceland Construction Authority** Margrét Ósk Óskarsdóttir, Jóhann Ólafsson (earlier Birgir Ágústsson, Mannvirkjastofnun and even earlier Guðrún Lárusdóttir, Neytendastofa)
- Norway: Norges Vassdrags- og Elektrisitetsdirektorat/Norwegian Water Resources and Energy Directorate;** Kirsti Hind Fagerlund, Jun Elin Wik Toutain, Ingvill Nilsen Sjøvold, Ragnhild Wist, Tore Dyrendahl, Ane Solem Knutsen, William W Rode (earlier Knut N. Knutsen, Bernt Saugen Erlend Sandnes)
- **Sweden: Energimyndigheten/Swedish Energy Agency;** Lovisa Blomqvist (project leader), Kadre Pari, Emma Olsson (earlier Lina Kinning, Nils Ahlén, Emma Hagman Rang, Karolina Petersson)



Energiavirasto



products

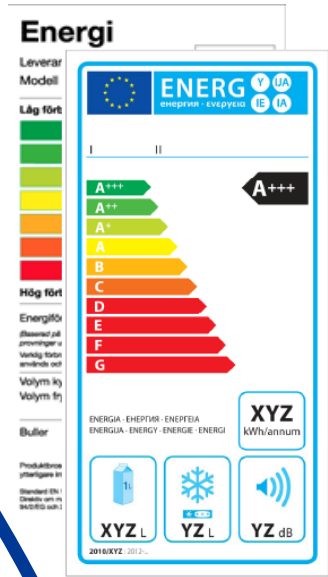
2.

Labelling

Domestic appliances → ErP
Energy related products

1

Ecodesign
EuP → ErP
Energy related products



3.

Procurement
Research, Innovation
Zero Energy Appliances

Ecodesign takes away the worst performing products and energy labelling gives consumers the possibility to request the best products

4. Energy consumption

5. Resource efficiency

Ecodesign and Energy Labelling

Process in EU for each produkt



Furnaces industrial
ovens
UPS

Waste water and other
pumps
etc

From WP 2012-2014

Windows
Water related products (inc. taps)

Steam boilers (< 50MW)
Electric cables
Smart appliances & meters

Conditional:

Insulation material
Power generating equipment

WP 2015-2017 On-going

Central Heating & cooling
Prof. Dish&clothewashers
Furnaces industrial ovens
Compressors

New for vote 2018:

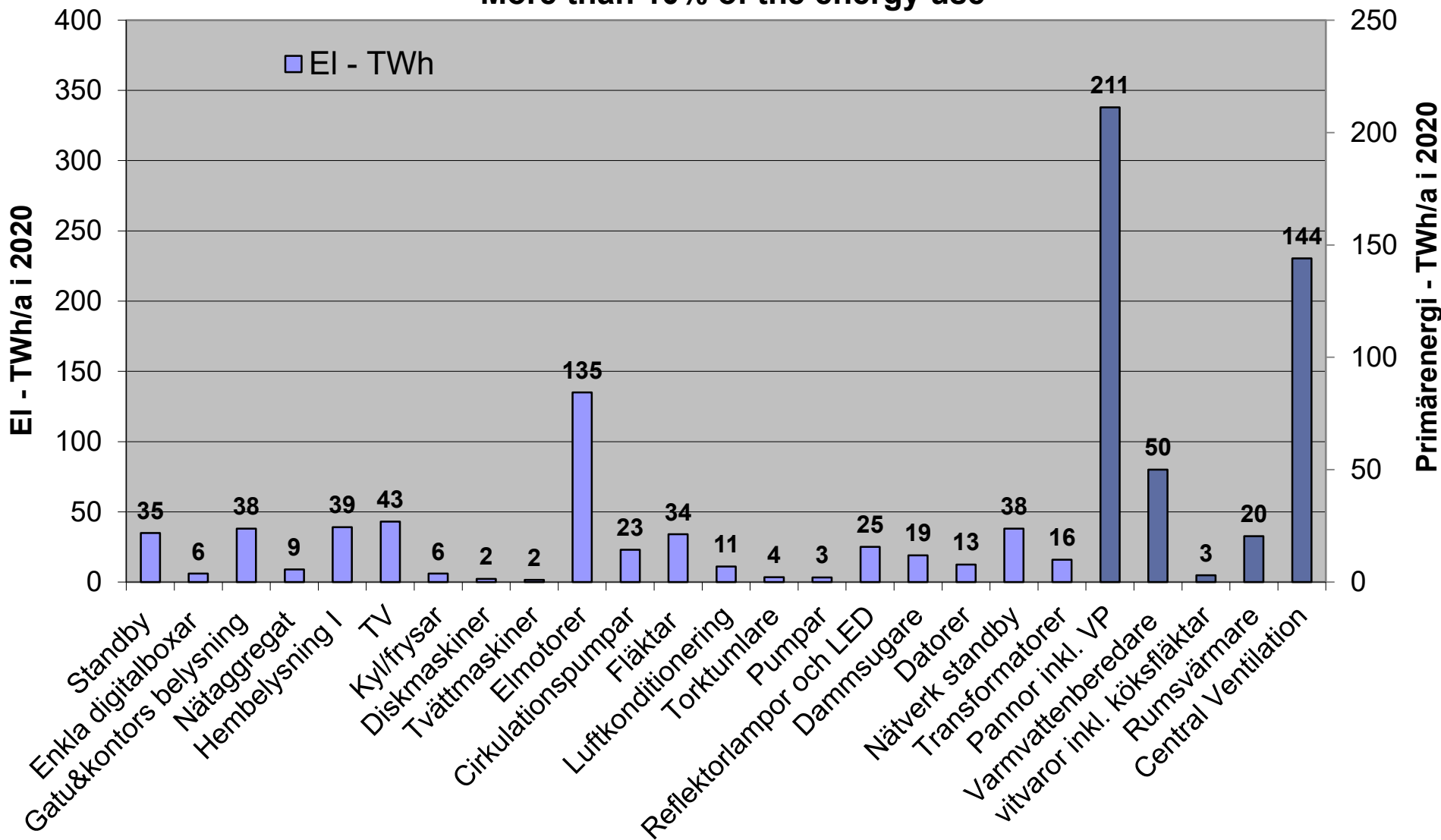
Servers, data storage mm
Vending machines
Commercial refrigeration

Revision votes in 2018:

Transformers
Lighting
Washing machines
Dishwashers
Refrigeration household
TV & displays
EPS
Motors + VSD
Fans

Simple settop boxes
Stand-by
Lighting
EPS
Motors
Refrigerators & freezers
TV
Circulators
Fans
Washing machines
Dishwashers
Air conditioners
Pumps
Reflector lamps + LED
Vacuum cleaners
Computers
Network standby
Tumble driers
Space heaters (gas/oil/el)
Dedicated water heaters
Ovens, hobs, range hoods
Transformers
Central ventilation
Solid fuel boilers
Room heaters
Professional refrigeration

Ecodesign and energy labelling, savings in 2020 in EU27
- Decided regulations
Ca 500 TWh/year electricity + ca 400 TWh/year primal energy
More than 10% of the energy use



Nordsyn Strategy

Nordsyn contribute to **multiply the outcome of market surveillance** costs of each country, by securing better cooperation among authorities (i.e. by sharing market control plans, test results, results of documents' control).

It has also made market surveillance actions more preventive through the development of **hands-on material**, such as information sheets and guidelines.

Nordsyn also gives the **possibility to explore difficult areas** as market surveillance of business to business products, heat pump regulation in Nordic climate etc



Nordic testing cooperation 2011

In 2011 the work began to build a close cooperation on the market control of ecodesign and energy labelling to retain a system for coordination and communication of market surveillance plans, test results and experiences from market surveillance in the Nordic countries.

In 2011 “Nordic Testing of Energy Products”

Two market surveillance tests, by testing 11 refrigerators and 11 ballasts, to verify whether they comply with ecodesign and energy labelling requirements. Four products (two refrigerators and two ballasts) did not meet the requirements.



2012: 11 barriers identified

1. Transposition of legislation
2. Publication of test results
3. Sanctions
4. Test laboratories
5. How much market surveillance/financial differences
6. Buy or borrow products for test
7. Who pays for the test
8. Budget procedures
9. Language
10. Commercial codes
11. Use of databases



Nordsyn 2013-2015

1. Strategic Nordic products (2014)
2. Working methods (2013)
3. Barriers (2013-2015)
4. Workshop/conference (2013-2015)
5. Information material (2013)
6. Challenges for market control (2015)
7. Effects of market control (2013-2014)
8. Cooperation with customs (2013-2014)
9. How small counties work with ecodesign and energy labelling (2013-2014)
10. Secretariat: coordination, information and practical exchange (2013-2015)

Nordsyn 2016-2017



Projects Nordsyn 2016-2017

1. Challenges

- 1.1 **Ventiation pilot**
- 1.2 Product study **prof refrig**
- 1.3 Legal issues
- 1.4 Joint test
- 1.5 **Heat pump** study ASHP air-to-air in humid cold climate

2. Effects

3. **Windows**

4. Information

- 4.1 **Film online** labelling
- 4.2 Heat pump list prospect
- 4.3 Checklist doc control heat pumps

Nordsyn ongoing 2018

- **Heat pump study:** air-to-water heat pumps in humid cold climate
- **Energy labelling campaign:**
 - Film on the product database + guideline
 - FAQ on rescaling + overview information ppt
- **Nordcrawl 2:** – application for market surveillance and policy input
- **Windows:** based on the performed WSP study the group discuss possible input to Commission



Material

- **37 guidelines** for producers on technical documentation (for products like air-conditioning, TV, circulators, lamps, washing machines, motors etc)
- **6 fact sheets** for producers (heat pumps, boilers, water heaters)
- **Film** on online labelling
- Exercise and summary on joint document control + **checklist** doc control heat pumps
- Guidelines for market surveillance in stores and on internet

NORDSYN February 2014

Necessary content of Technical Documentation Electric motors

Electric motors are covered by eco-design requirements according to Regulation (EC) No 6402009 and Regulation (EU) No 4/2014. The requirements only apply to electric motors as described in Article 1 and 2 of Regulation (EC) No 6402009. From July 27th 2014 Article 1 in Regulation (EC) No 6402009 is replaced by Article 1 in Regulation (EU) No 4/2014. The documentation shall be produced before the electric motor is placed on the market. The technical documentation shall be sufficient to enable assessment of the conformity of the motor with the eco-design requirement. In this respect it is important that test reports are included in the technical documentation.

Technical documentation for electric motors	
Demands	How to comply
Name and address of supplier	Company name and complete address.
General description	Description of the model so that it is easily identified (model name and number, motor output power etc.)
List of applied standards	Applied measurement standards (harmonised standards and/or other standards).
Identification and signature of the person empowered to bind the supplier	Name and signature of the person responsible for the motor.
Information about efficiency, motor characteristics and other relevant aspects	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

Issued by: ENERGY

NORDSYN September 2013

Guide to manufacturers or importers on the necessary content of technical documentation Are you a manufacturer or an importer of energy-related products?

As manufacturer or importer you are obliged to document that your products comply with the requirements laid down in the EU Regulations on eco-design and energy labelling. The purpose of this guide is to assist you in documenting the compliance of your products.

Legal requirements
Energy related products can often regulated by energy labelling requirements or eco-design requirements or in some cases both. In table 1 or page 2 you will find a list of the products that today are covered by eco-design and/or energy labelling requirement.

Before you place an energy related product on the EU market, you shall produce a technical documentation showing that your product complies with the regulations.

Technical documentation
The technical documentation must be sufficient to show evidence that declared values and other information given for the product are correct and that minimum requirements from the eco-design regulations are met. The documents must be supplied within 10 days after receiving the request from the authorities.

Documentation requirements
The requirements for the specific product category are described in each product regulation. The number of parameters to be documented varies from product category to product category.

You will find a detailed description of the necessary content of the technical documentation for each of the individual product categories by clicking the name of the category in the table on the next page.

Please note that values declared on an energy label or in the product fiche must be documented without use of any additions or tolerances to actual test results.

The tolerances mentioned in the verification procedure of the regulations are not to be used by the manufacturer to obtain a more favourable declaration of a product.

The term "supplier" is used in the energy labelling and eco-design regulations. A manufacturer and/or an authorized representative is act on the label, which can be responsible in the eco-design requirements.

European Economic Area (EEA), the 28 Member States of the EU and European Free Trade Association (EFTA) countries: Iceland, Norway, Switzerland.

The website: http://ec.europa.eu/energy_efficiency and the [ENERGY](http://ec.europa.eu/energy_efficiency) logo are the reference to energy related product information of the implementation of energy and other measures to energy related products.

See annex IV of Directive 2009/125/EC of the European Parliament and of the Council of 22 October 2009 establishing a framework for the setting of eco-design requirements for energy related products (framework Directive on eco-design).

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1 of 2 **14**



Deeper studies:

- **Effects** of market surveillance
- **Strategic Nordic products - heat pumps**
- **Survey SME**; knowledge in heat pump industry etc
- **Challenges**; market surveillance of complex products, systems, business-to-business products etc. Focus on transformers, ventilation units, professional refrigeration.

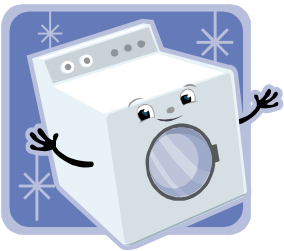
Smaller studies:

- Barriers for cooperation
- Cooperation with customs
- How small countries deal with ecodesign and energy labelling
- Strategic Nordic products - windows



Effects of market surveillance

This study aim to calculate the achieved benefits of market surveillance carried out 2011-2013 and to estimate potential energy loss due to non-compliant products on the Nordic market



The results indicate:

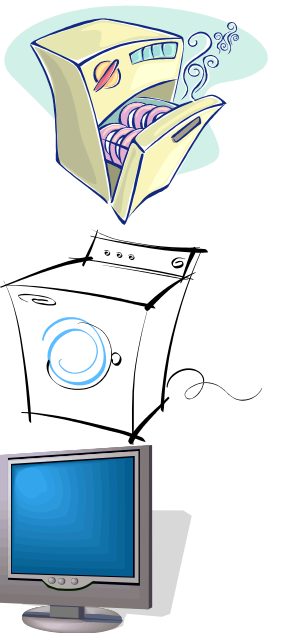
-A prevented energy loss worth **28 million Euro** for a market surveillance cost of around 2 million Euro in the Nordic countries – i.e. a return on investment (ROI) of 13.

-An overall rate of **6,3% non-compliance** at a typical level of **35 kWh/y** for the dominant non-compliant appliances, with a wide spread from 1,6 to 700 kWh/y in non-compliance.

-Saved electricity of **168 GWh** in full lifespan can be achieved from sales of one year if all Nordic countries share and act on all tests.

-The average total cost per appliance tested in lab was around 5000 Euro, but this varies widely for products.

-Individual Nordic countries can save a lot on market surveillance expenses when results from other Nordic countries are shared and subsequently increase market surveillance efficiency.

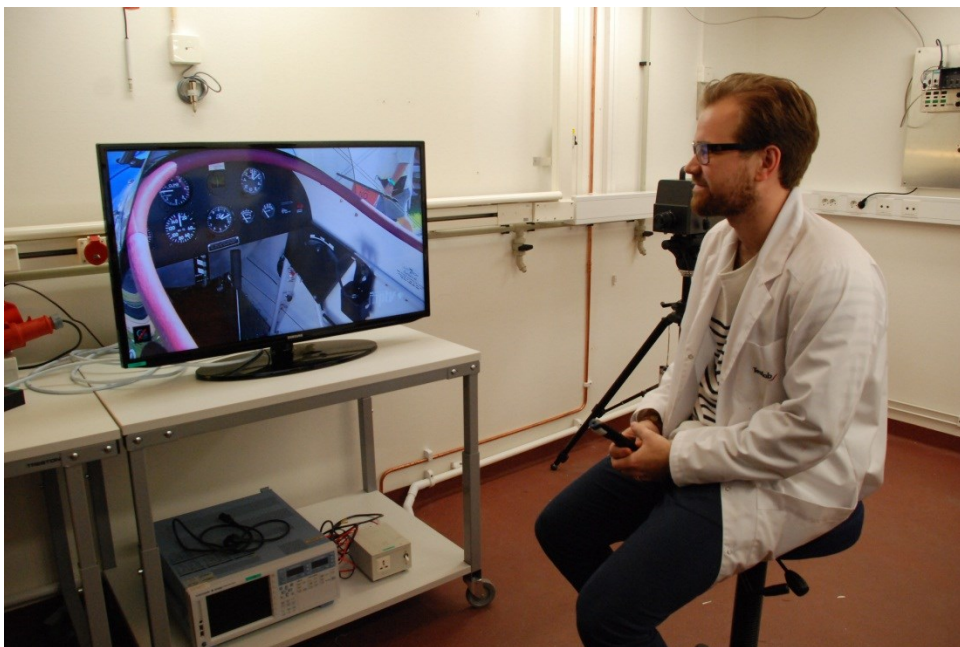




Good outcome


Cooperation on daily basis, discussion of interpretation of legislation, questions from industry, Commission input etc

Sharing and discussion of test results and results of documentation and webb inspections, planning of market control etc



Further possibilities:

- **Both policy and market surveillance**
- **Resource efficiency:** reparability, recyclability etc. are hard and costly to measure and robust methods are still to be established.
- **Market surveillance of complex products,** systems, built-in or b2b products etc are very complex and costly fields.
- Nordsyn offers the possibility to explore these difficult areas and **can be duplicated** in other areas.

A silhouette of a wind turbine stands against a vibrant sunset sky, transitioning from orange at the horizon to a deep blue at the top. The turbine is positioned on the right side of the frame. In the foreground, there are dark silhouettes of trees and a body of water reflecting the sky's colors. A white rectangular box is overlaid on the upper half of the image, containing text.

Nordsyn provides significant benefits to Nordic MSAs, producers and consumers, it promotes green growth and energy efficiency and increases Nordic influence in the EU



Thank you!



norden

Nordic Council of Ministers



THE NORDIC REGION
– leading in green growth

More information: <http://www.norden.org/nordsyn>

Nordsyn contact: lovisa.blomqvist@energimyndigheten.se



Strategic Nordic Products

Heat pumps - strategically important in the Nordic countries due to Nordic industry and climate sensitive

- Overview report in 2014 on legislations, national schemes, recommendations on further actions that could be carried out by Nordic authorities.
- Survey SEM in 2014 to examine knowledge and needs around manufacturers, importers, retailers etc of heat pumps, boilers, water heaters, space heaters, air conditioning, resulting in more condensed information requested in native languages as well as English.
- Document control on heat pumps: checklist + exercise
- Phase 1 Heat pump study: air-to-air heat pumps in humid cold climate – *to Commission*
- Phase 2 Heat pump study: air-to-water heat pumps in humid cold climate – *ongoing*

Windows

- Study conducted by WSP, but further discussion before input to Commission



Barriers

- Discussion based on the Barrier report (2012)
- Joint input from Nordsyn to the evaluation of the ecodesign and energy labelling directive sent Nov 2013
and another input in preparation to be sent in 2015
- Workshop on Sanctions 26 Nov 2013 and workshop on Preventive market surveillance 21 May 2014
- Small study on Identical products
- Further work with still problematic barriers
- Trying to ease the sharing of test results, economic differences, different policies etc

