

# The European Union – Turkmenistan Sustainable Energy Days

Lectures faculty members and students of the  
State Energy Institute of Turkmenistan

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## Ecodesign and energy labelling of electric appliances – prospects and challenges

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# Ecodesign and energy labelling requirements

- Ecodesign sets common EU wide minimum standards to eliminate the least performing products from the market.
- The EU legislation for energy labels and ecodesign has been estimated to bring energy savings of approximately 230 million tonnes of oil equivalent (Mtoe) by 2030.
- For consumers, this means an average saving of up to €285 per year on their household energy bills.
- Moreover, energy efficiency measures will create €66 billion in extra revenue for European companies.

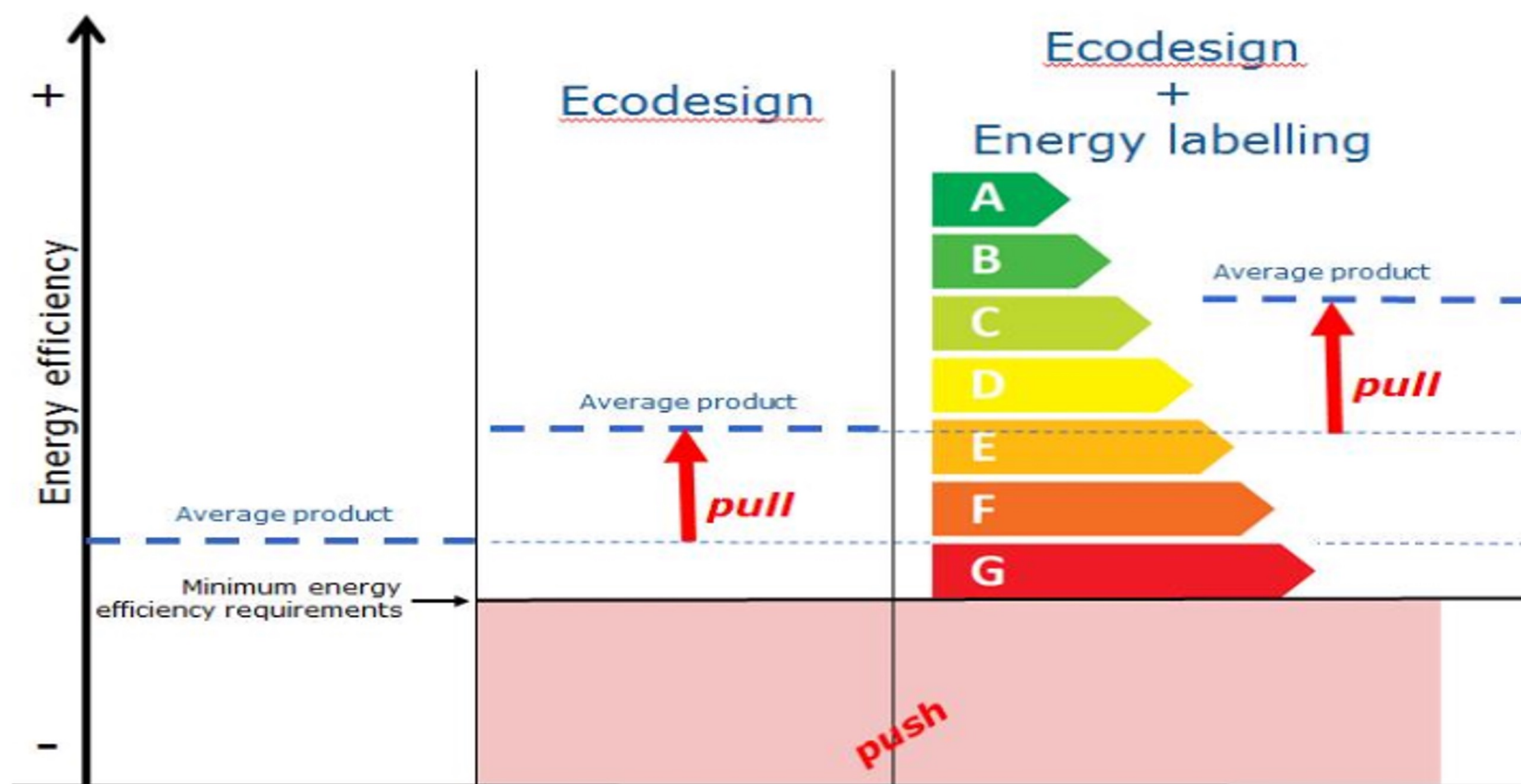


Figure 2: Effect of Ecodesign alone and when combined with Energy Labelling

# Energy labelling and ecodesign

## Energy labelling framework

Regulation (EU) 2017/1369

15 product groups

## Ecodesign requirements

Directive 2009/125/EC

31 product groups

# Energy labelling and ecodesign requirements

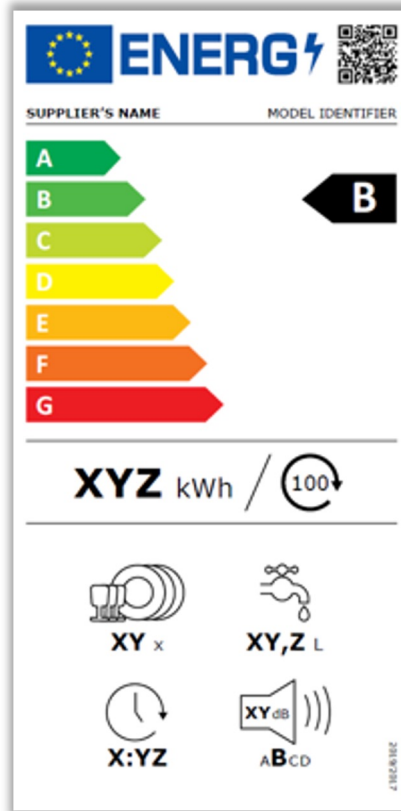
Product groups	Products	E-labelling	Ecodesign
<b>Lighting</b>	Light sources	X	X
<b>Heaters</b>	Local space heaters	X	X
	Space and water heaters	X	X
	Solid fuel boilers	X	X
	Air heating and cooling products		X
<b>Refrigeration</b>	Refrigerators and freezers	X	X
	Professional refrigerators	X	X
	Refrigerators with direct sales function	X	X
<b>Vacuum cleaners</b>	Vacuum cleaner		X
<b>Washing machines and driers</b>	Washing machines and washer-dryers	X	X
	Tumble driers	X	X
<b>Air conditioners and fans</b>	Air conditioners and comfort fans	X	X
	Industrial fans		X
	Ventilation units	X	X
	Air heating and cooling products		X
<b>Off mode, standby and networked standby</b>	Off mode, standby and network standby		X

# Energy labelling and ecodesign requirements

Product groups	Products	E-labelling	Ecodesign
<b>Electronic displays and TV boxes</b>	Electronic displays including televisions	x	x
	Set-top boxes		x
<b>Kitchen appliances</b>	Cooking appliances	x	x
	Dishwashers	x	x
<b>Pumps</b>	Water pumps		x
	Circulators		x
<b>Transformers and converters</b>	Power transformers		x
	External power supplies		x
<b>Computers and servers, imaging equipment, game consoles</b>	Computers and small servers		x
	Servers and data storage products		x
	Imaging equipment		x
	Game consoles		x
<b>Electric motors and welding equipment</b>	Electric motors		x
	Welding equipment		x
<b>Tyres</b>	Tyres	x	

# Energy labelling requirements

## Energy label

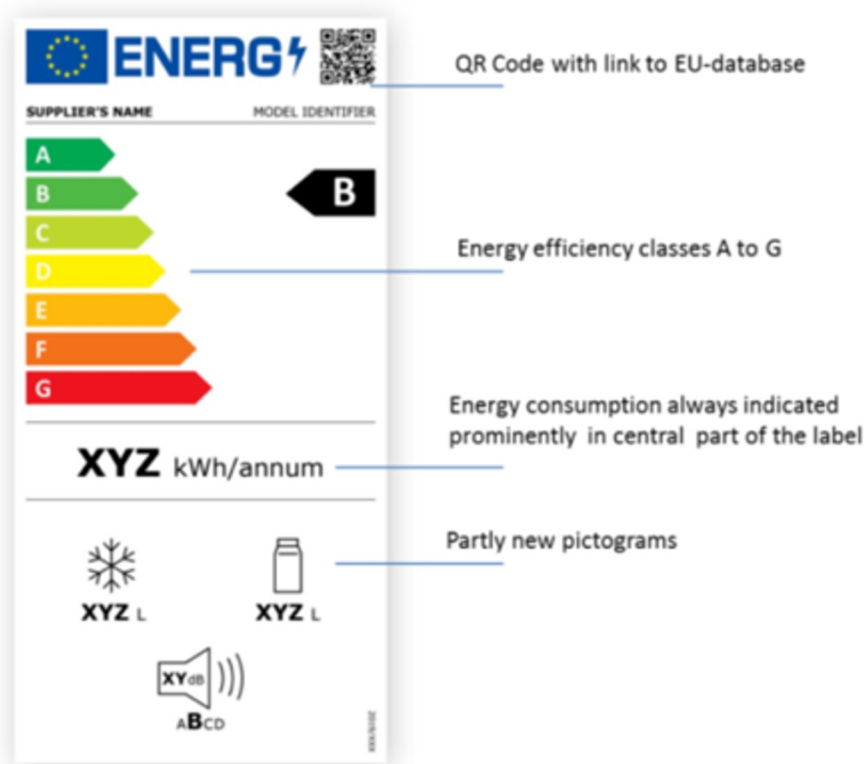


## Product information sheet

Product Information Sheet Commission Delegated Regulation (EU) 2019 /2017				
SUPPLIER'S NAME OR TRADEMARK: BRAND NAME				
MODEL IDENTIFIER: ABC12345				
GENERAL PRODUCT PARAMETERS:				
PARAMETER	VALUE	PARAMETER	VALUE	VALUE
RATED CAPACITY (P)	14	DIMENSIONS IN CM	HEIGHT	85
			WIDTH	59
			DEPTH	60
EEL	40	ENERGY EFFICIENCY CLASS	C	
CLEANING PERFORMANCE INDEX	1.5	DRYING PERFORMANCE	1.2	
ENERGY CONSUMPTION IN kWh (PER CYCLE), BASED ON THE ECO PROGRAMME USING COLD WATER FILL. ACTUAL ENERGY CONSUMPTION WILL DEPEND ON HOW THE APPLIANCE IS USED.	0.75	WATER CONSUMPTION IN LITRES (PER CYCLE), BASED ON THE ECO PROGRAMME. ACTUAL WATER CONSUMPTION WILL DEPEND ON HOW THE APPLIANCE IS USED AND ON THE HARDNESS OF THE WATER.	13	
PROGRAMME DURATION (min)	3:42	TYPE	FREE-STANDING	
AIRBORNE ACOUSTICAL NOISE EMISSIONS (dB(A) RE 1 pW)	44	AIRBORNE ACOUSTICAL NOISE EMISSION CLASS	B	
OFF MODE (W)	0	STANDBY MODE (W)	0.5	
DELAY START (W) (IF APPLICABLE)	1	NETWORKED STANDBY (W) (IF APPLICABLE)	2	
MINIMUM DURATION OF THE GUARANTEE OFFERED BY THE SUPPLIER: 24 MONTHS				
ADDITIONAL INFORMATION				
WEBLINK TO THE SUPPLIER'S WEBSITE, WHERE THE INFORMATION IN POINT 6 OF ANNEX II TO COMMISSION REGULATION (EU) 2019 / 2022 IS FOUND: <a href="https://www.brandname.eu/">https://www.brandname.eu/</a>				

Clearly regulated –  
**what,**  
**how,**  
**where**  
to present in shops  
and e-commerce

# Rescaling of energy labels



The first four product categories covered by the new energy label as of 1 March 2021 are

- i) fridges and freezers, including wine storage fridges,
- ii) dishwashers,
- iii) washing machines and washer-dryers, and
- iv) television sets and other external monitors, such as computer displays,

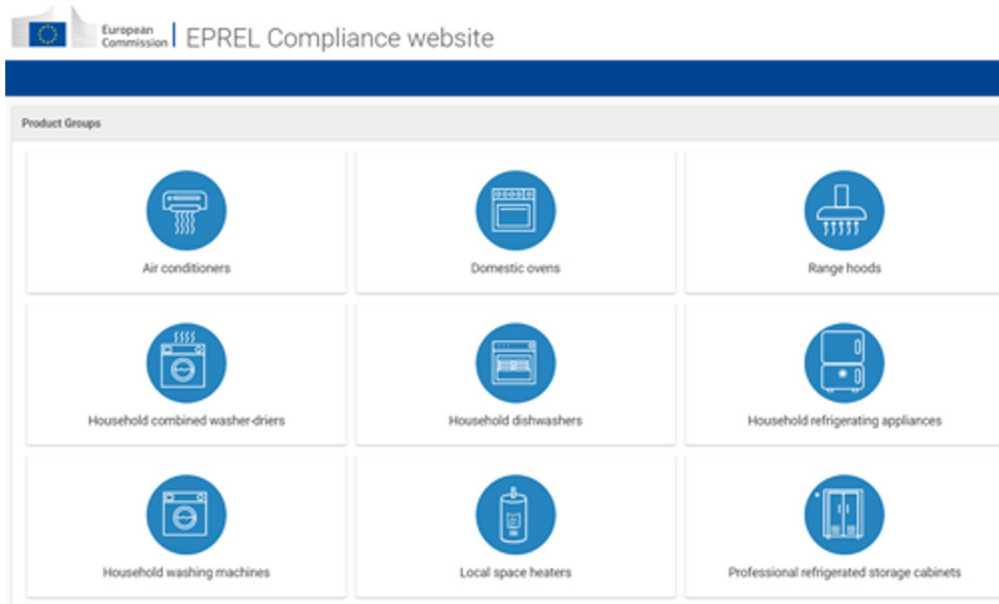
From 1 September 2021, the new labels also applies to light bulbs and lamps with fixed light sources.

The energy label framework regulation foresees that the next group of products to be addressed will be

- i) tumble driers,
- ii) local space heaters,
- iii) air conditioners,
- iv) cooking appliances,
- v) ventilation units
- vi) professional refrigerator units,
- vii) space and water heaters, and
- viii) solid fuel boilers.



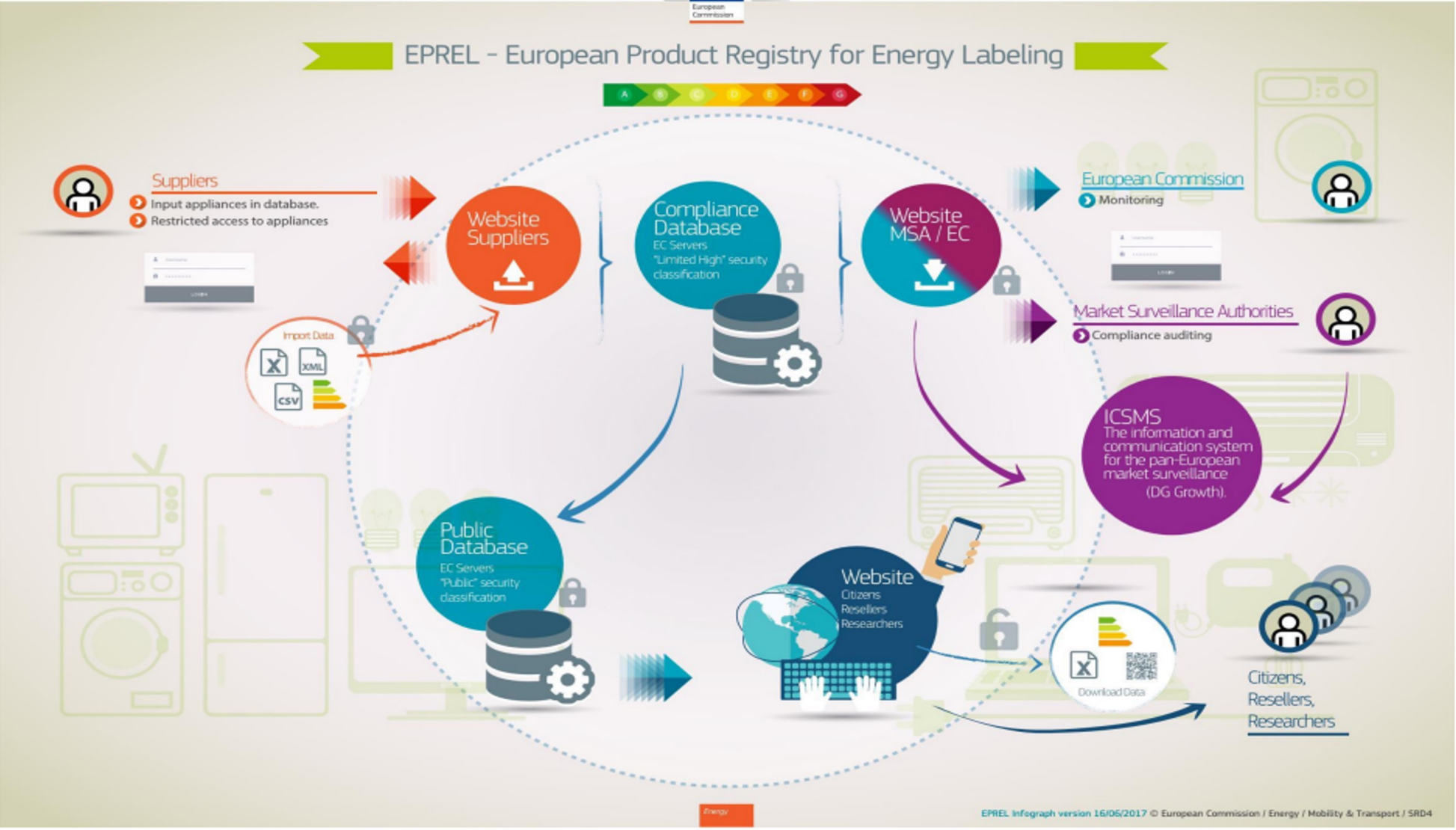
# EPREL database



The European Product Database for Energy Labelling (EPREL) has been set up in EU, to provide important energy efficiency information to consumers. It will also enhance market surveillance activities and enforcement.



# EPREL - European Product Registry for Energy Labeling



Energy

EPREL Infograph version 16/06/2017 © European Commission / Energy / Mobility & Transport / SRD4

# Eco-design requirements

establishes a framework for ecodesign requirements for energy-related products;

contributes to sustainable development by increasing energy efficiency and the level of protection of the environment, while at the same time increasing the security of the energy supply;

supports industrial competitiveness and innovation by promoting better environmental performance of products throughout the internal market.

# Product specific directives

The ecodesign requirements for individual product groups are created under the EU's ecodesign directive.

The EU legislation on ecodesign is applicable on 31 of the product groups.

As an alternative, industry sectors may also sign voluntary agreements to reduce the energy consumption of their products.

The Commission formally recognizes such agreements and monitors their implementation.

# Product specific directives

On 1 October 2019, [10 measures were adopted](#) by the Commission for the product categories listed below:

- washing machines and washer-driers
- dishwashers
- electronic displays
- household refrigerators
- light sources
- refrigerators with a direct sales function
- external power supplies
- electric motors
- power transformers
- welding equipment

8 of these measures revise existing requirements, whereas refrigerators with a direct sales function and welding equipment are regulated for the first time.

# New provisions in the revised regulations

An important change is the inclusion of elements to further enhance the reparability and recyclability of appliances.

Several of the new measures include requirements, such as:

- making spare parts more easily replaceable,
- ensuring that key parts and repair and maintenance information are available for end users and professional repairers as appropriate, for a minimum duration of 7-10 years depending on the product.

The [changed ecodesign rules](#) for washing machines, dishwashers, fridges and freezers, and electronic displays took effect on 1 March 2021.

# New Regulation proposal

On 30 March 2022, the Commission proposed a new ***Ecodesign for Sustainable Products Regulation*** for more environmentally sustainable and circular products.

It was published together with the ***Ecodesign and energy labelling working plan 2022-2024***.

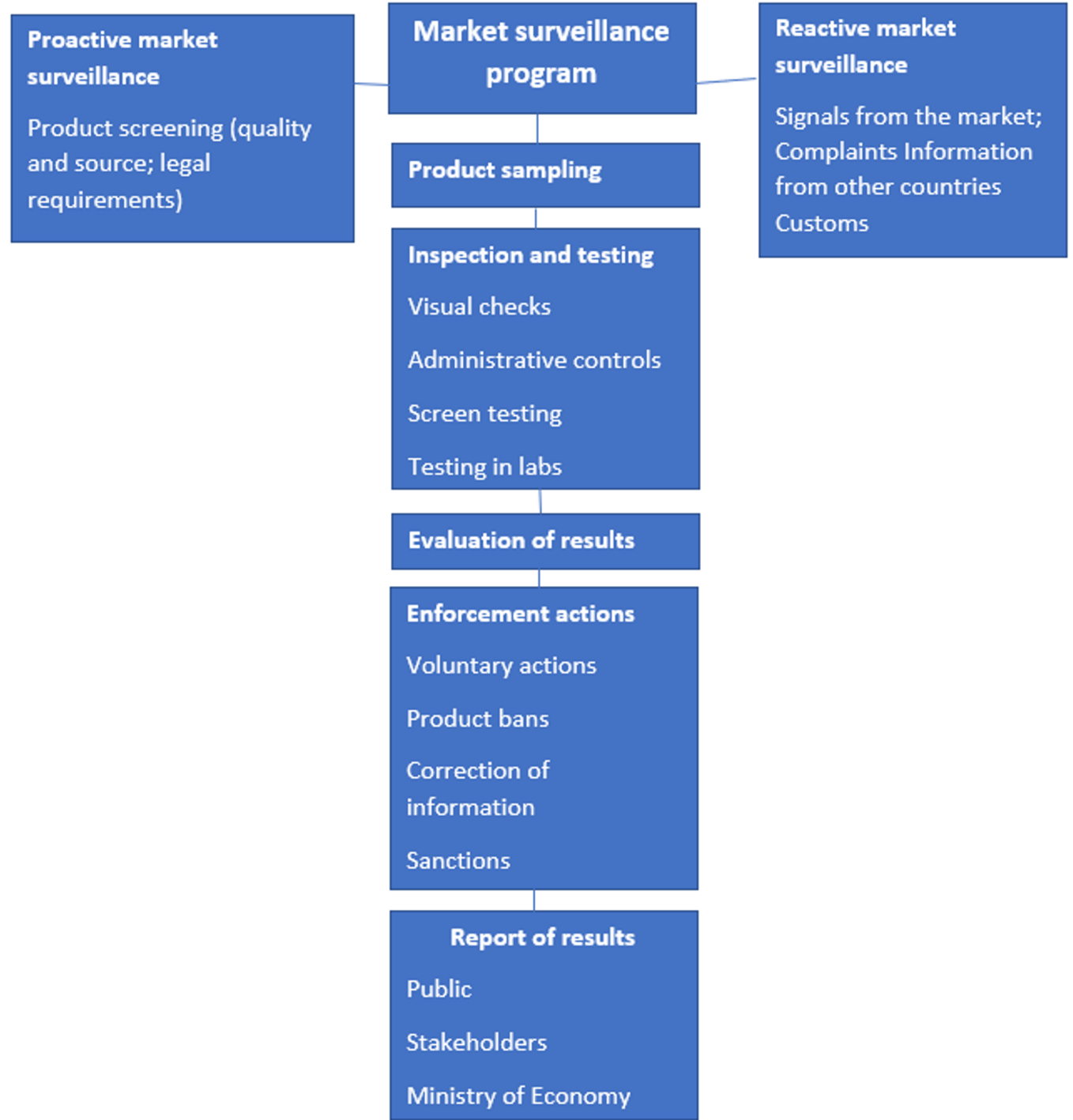
# Aim of market surveillance



- Whether information on the energy efficiency of goods is correctly indicated
  - Energy label
  - Data sheet
- Whether the product complies with the ecodesign requirements:
  - Conformity assessment;
  - Generic and specific ecodesign requirements;
  - Information to consumers.



# Market surveillance process



# Types of controls

Brick and mortar shops

Controls of shops, warehouses, manufacture sites

E-commerce

E-commerce controls of e-commerce sites which direct sales to Latvian consumers

Import

Import controls in cooperation with Customs authority

# Online sale

## Displaying options on webpage

Brand name ABC 12345 40" Smart LED TV



Product features:  
• Smart  
• Full HD 1080p  
• LED screen



### Option 1 – Nested display

Energy label icon

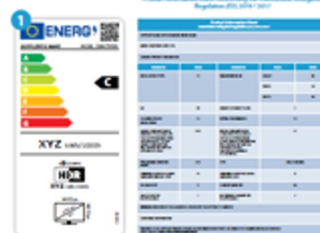
The link to the product information sheet

Brand name ABC 12345 40" Smart LED TV



€299  
Delivery 1 - 2 working days  
[Add to basket](#)

Product features:  
• Smart  
• Full HD 1080p  
• LED screen



### Option 2 – Displaying the full energy label and product information sheet

Energy label and information sheet are clearly displayed close to the price

# Inspection criteria

- 1 Available energy label and product information sheet?
- 2 Close to the price in all pages?
- 3 Displayed correctly?

## Full energy label and information sheet

Close to the price

Clearly visible and readable

The form and content is correct

## Nested display

Close to the price, correct font size and colour

Opens up to a full size on a click

Correct name 'product information sheet'

**29**  
beneficiaries

**20**  
EU MS  
+Turkey

**12**  
WP

## Six product groups

**Air  
conditioners**



**Water  
heaters**



**Lighting  
products**



LED lighting

**Household  
tumble  
dryers**



**Ventilation  
units**



**Local space  
heaters**





**Air  
conditioners**



**Household  
tumble dryers**



**Water  
heaters**



**Ventilation  
units**

- Online sale inspections
- Technical documentation evaluation (up to 10 models per group)
- 3 models of water heaters are sent for testing
- 2 air conditioners will be purchased and sent for testing during September 2021
- 3 models of ventilation units will be purchased and sent for testing till the end of 2021
- Screening for new energy labelling in e-commerce and technical documentation evaluation

# Information activities

## Web site – important platform for information in CRPC

[www.ptac.gov.lv](http://www.ptac.gov.lv)

Information on applicable requirements for economic operators (table of applicable requirements);

Guidelines on application of energy labelling requirements (retailers);

Guidelines on application of energy labelling requirements in on-line sales (e-commerce);

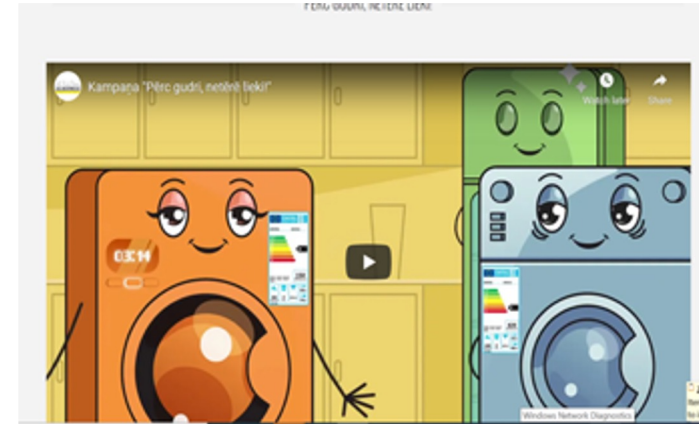
Information to consumers on ecodesign, energy labelling.

<https://percgudri.ptac.gov.lv/>

Website on energy label:

[www.label2020.eu](http://www.label2020.eu)

## Consumer information – campaign in 2020



## Equipment comparison tool

**IZVĒLIES IEKĀRTU**

 VEĻASMAŠĪNA	 LEDUSSKAPIS	 ĻĒDENS SILDĪTĀJS	 VEĻAS ZĀVĒTĀJS	 TRAIKU MAZGĀJAMA MAŠĪNA
Reaģentība: <input type="text"/> kWh	Ēģeris gada patēriņš: <input type="text"/> kWh	Izvērtēšana: <input type="text"/> EUR	Māksl. vērt. <input type="text"/> frontālais	Mēra vienība: <input type="text"/> kg
Reaģentība: <input type="text"/> kWh	Ēģeris gada patēriņš: <input type="text"/> kWh	Izvērtēšana: <input type="text"/> EUR	Māksl. vērt. <input type="text"/> frontālais	Mēra vienība: <input type="text"/> kg

**PIEVĒRĒT PRODUKTU**

# Thank you for attention!

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