





Parallel Session 4: Policy support (POLICY + PRODUCTS)

25 April 2024

POLICY BACKGROUND





Energy efficiency of products: Ecodesign & energy labelling

 Ecodesign (ED): sets minimum efficiency requirements for <u>energy-related</u> <u>products</u> ("any good that has an impact on energy consumption during use")

 First rules date from 1992

Current Legal basis: Directive 2009/125/EC, based on article 114 TFEU (internal market harmonisation)

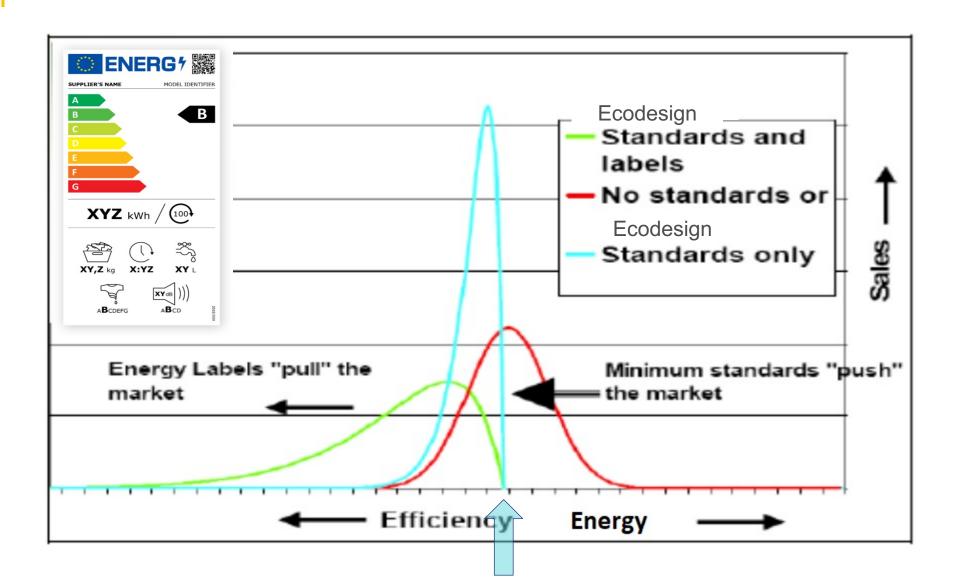
 Energy labelling (EL): provides information on energy efficiency and other key performance criteria enabling potential buyers to make informed choices.
 First labels date from 1979

Current Legal basis: Regulation (EU) 2017/1369, based on article 194 TFEU (energy)





Ecodesign & Energy Labelling: Combining market *push* **and** *pull*



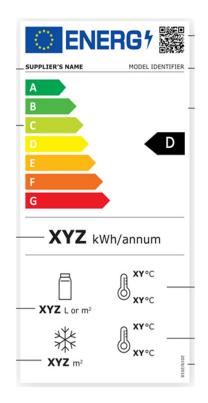


Why do we do this? Need for action greater than ever

- ➤ Climate change & Green deal (Dec 2019): EU carbon neutral by 2050
- ➤ Circular economy & CEAP (Mar 2020)
- > Current crisis and war in Ukraine:

EU Energy security and energy prices

- > Empowering consumers
- > Ecodesign and energy labelling are key instruments.
- ➤ 30 Mar 2022 Commission adopted:
 - ☐ Ecodesign and energy labelling Working Plan 2022-24
 - ☐ Proposal for a new 'Ecodesign for Sustainable Products' Regulation





49 Measures in place

Note: Check our web page for more up-to-date info

https://ec.europa.eu/info/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/energy-label-and-ecodesign en

30 Ecodesign regulations

1275/2008	Electric power consumption standby and off mode (repealed with effect from 9 May 2025)
107/2009	Simple set-top boxes (repealed with effect from 9 May 2025)
641/2009	Circulators
327/2011	Industrial fans *
206/2012	Air-conditioning products and comfort fans
547/2012	Water pumps
932/2012	Household tumble driers *
666/2013	Vacuum cleaners
813/2013	Space heaters
814/2013	Water heaters & storage tanks
66/2014	Domestic ovens, hobs and range hoods
548/2014	Power transformers
1253/2014	Ventilation units
2015/1095	Professional refrigeration
2015/1185	Solid fuel local space heaters
2015/1188	Local space heaters*
2015/1189	Solid fuel boilers
2016/2281	Air heating and cooling products, process chillers
2019/424	Servers and data storage products
2019/1781	Electric motors
2019/1782	External power supplies
2019/1784	Welding equipment
2019/2019	Household refrigerating appliances
2019/2020	Light sources
2019/2021	Electronic displays (televisions)
2019/2022	Household dishwashers
2019/2023	Household washing machines
2019/2024	Commercial fridges
2023/1670	Mobile phones, cordless phones and tablets (20 June 2025)
2023/826	Off mode, standby mode, and networked standby (9 May 2025)

17 Energy labelling Regulations

626/2011	Air conditioners
392/2012	Household tumble driers *
811/2013	Space heaters
812/2013	Water heaters & storage tanks
65/2014	Domestic ovens, hobs and range hoods
1254/2014	Residential ventilation units
2015/1094	Professional refrigeration
2015/1186	Local space heaters
2015/1187	Solid fuel boilers
2019/2013	Electronic displays (televisions)
2019/2014	Household washing machines
2019/2015	Light sources
2019/2016	Household refrigerating appliances
2019/2017	Household dishwashers
2019/2018	Commercial fridges
2020/740	Tyres labelling
2023/1669	Mobile phones, cordless phones and tablets (20 June 2025)

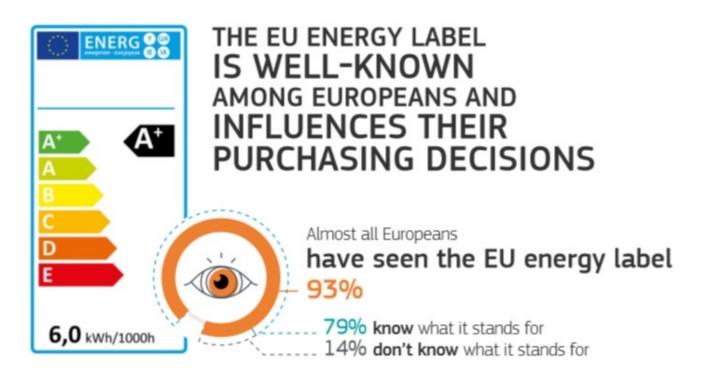
2 Voluntary agreements

COM (2013) 23	Imaging equipment
COM (2015) 178	Game consoles

^{*} Revision process well advanced



Energy Label: almost unparalleled success in terms of link with citizens







Source: Eurobarometer 2019

What are the benefits?

Sources:Ecodesign Impact Accounting Overview Report 2023 https://europa.eu/!3cfvJd

ANNUAL SAVINGS IN THE ECO SCENARIO (WITH MEASURES) COMPARED TO THE BAU SCENARIO (WITHOUT MEASURES) FOR YEARS 2020, 2022 AND 2030. EU27 TOTALS IN ABSOLUTE VALUES IN THE INDICATED UNIT, AND RELATIVE SAVINGS VS BAU IN %

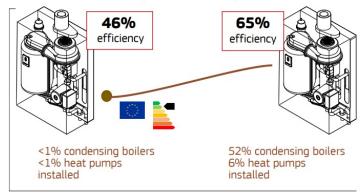
		2020		2022		2030	
	unit	Saving vs. BAU	Saving vs. BAU (%)	Saving vs. BAU	Saving vs. BAU (%)	Saving vs. BAU	Saving vs. BAU (%)
Primary Energy	TWh	1038		1072		1418*	
(PEF 2.5 in 2020; PEF 2.1 in 2022; PEF 1.9 in 2030)	PJ	3736	10%	3859	12%	5107	18%
PEF 1.3 III 2030/	Mtoe	89		92		122	
Electricity	TWh	334		390		527	
	PJ	1203	12%	1403	14%	1897	18%
	Mtoe	29		34		45	
Final Fuel	TWh	202		253		417	17%
(non-electric final energy)	PJ	728	7%	913	9%	1501	
	Mtoe	17		22		36	
Final Energy	TWh	531	9%	636		927	17%
(excl. energy sector)	PJ	1911		2288	11%	3339	
	Mtoe	46		55		80	
Energy-related GHG emissions	Mt CO ₂ eq	121	9%	135	11%	139	17%
NO _x emissions	kt SO₂ eq	83	33%	98	41%	128	64%
CO emissions	k ton	143	7%	244	12%	504	32%
OGC emissions	k ton	10	7%	14	11%	22	30%
PM emissions	k ton	10	6%	18	11%	39	34%
Drinking water (washing)	M m ³	1507	52%	1618	55%	1885	61%
Paper (printing)	M ton	0.23	15%	0.20	15%	0.15	15%
Filler wire/electrode (welding)	k ton	0	0%	16	1%	82	5%
Acquisition costs	€bn	-25	-5%	-29	-6%	-16**	-3%
Energy costs	€bn	74	12%	111	13%	157	19%
Consumable costs	€bn	7	19%	7	20%	9	25%
Total user expense	€bn	56	5%	89	6%	150	10%
Business revenues	€bn	22	4%	26	5%	16**	3%
Associated jobs	thousands	323	5%	380	5%	172**	2%



Ecodesign & Energy Labelling – examples

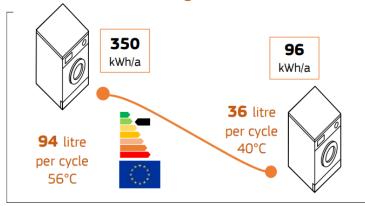
Hydronic central space heaters < 400 kW

(excl. solid fuel)



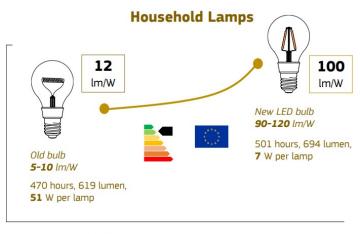
1990 2020

Washing Machine



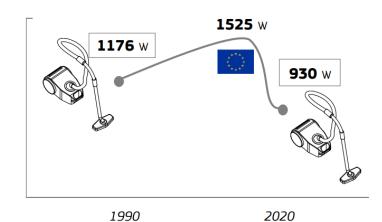
1990

2020



1990 2020

Vacuum Cleaner





Measurement/calculation methods

Test methods for ecodesign and energy labelling are described in « harmonised standards » published by European Standardization Organizations CEN/CENELEC and ETSI

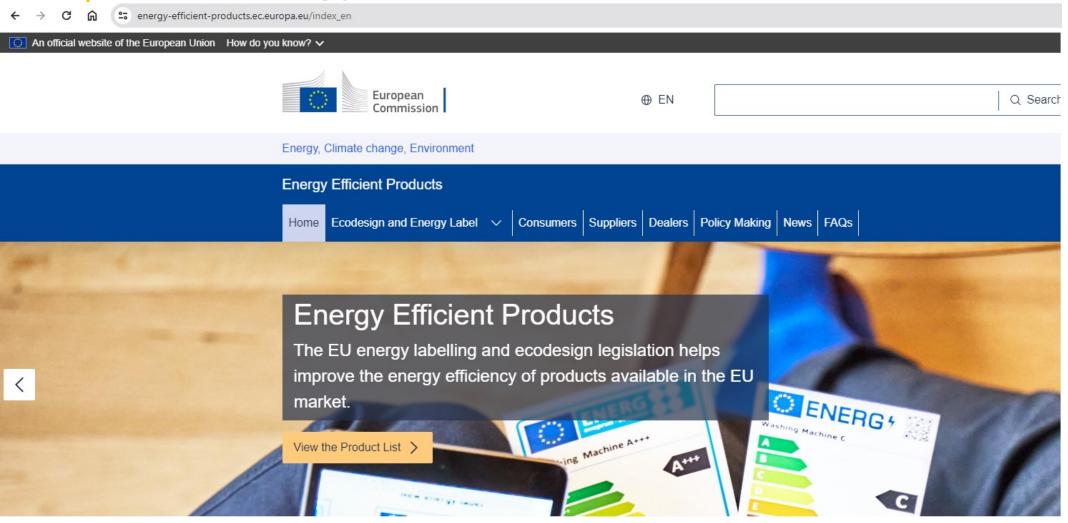
« Standardised » vs « Real life »

Standardised	Real life
Methods must be reliable accurate reproducible	Great variability of consumer behaviour in real life
=> Testing must take places in standardised conditions	Difficult to assess what is a « real life » behaviour
=> Some hypothesis must be made about standard consumer behavour	

=> Need to get practical insights on how appliances are utilised by consumers and their actual energy use



Take a look at our new Energy-efficient Products Portal!



A one-stopshop of information on energy efficient products targeted at different stakeholders



Thank you for your attention!

Ronald Piers de Raveschoot

Tel: +32(0)2 29 65182

Email: ronald.piers-de-raveschoot@ec.europa.eu

General queries: ENER-ECODESIGN@ec.europa.eu

Website: https://energy-efficient-products.ec.europa.eu/index_en

