



The Greek experience

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MeetMED EE in Appliances Questionnaire-Greece 2017

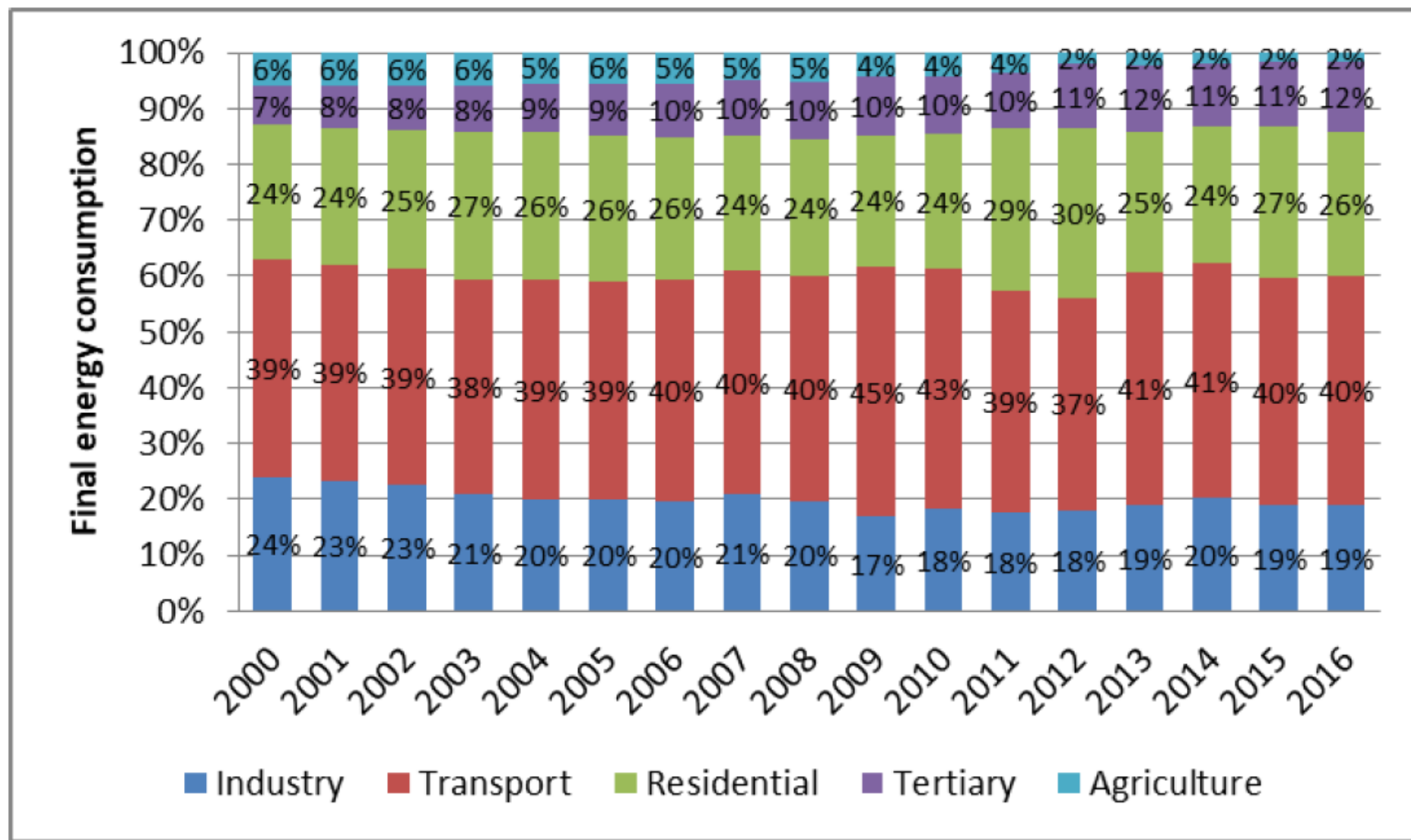
- Greece population 10.77 million inhabitants (est.2017)
- 6,454,636 dwellings/ 4,389,152 permanently occupied dwellings
- Total electricity consumption in Greece: 53,969 GWh/year
- Residential sector electricity consumption: 19,628 GWh/year (36% of total electricity)
- Average Electricity Consumption : 3 MWh/year
- Share of appliances in residential electricity consumption: 63%

Energy consumption/month/household by type of energy

(all dwellings/permanently occupied households)

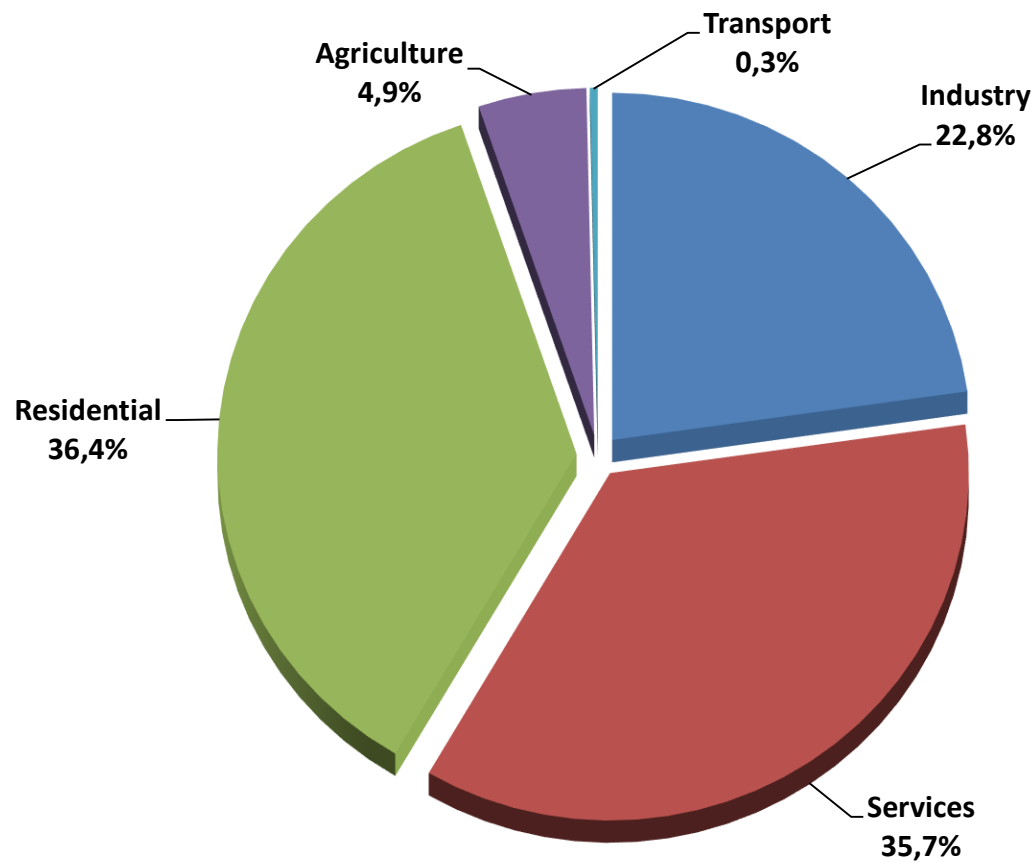
- Natural Gas: 63.3 m³/ 87.3 m³
- Electricity : 252 kWh / 373 kWh
- LPG: 0.50 m³/ 0.74 m³
- Diesel Oil: 0.015 m³/ 0.022 m³
- Wood (including charcoal) : 0.010 toe/0.014 toe
- RES and district heat: 0.004 toe/0.006 toe

*Source:
National Energy Balance
2017,
ODYSSEE database*

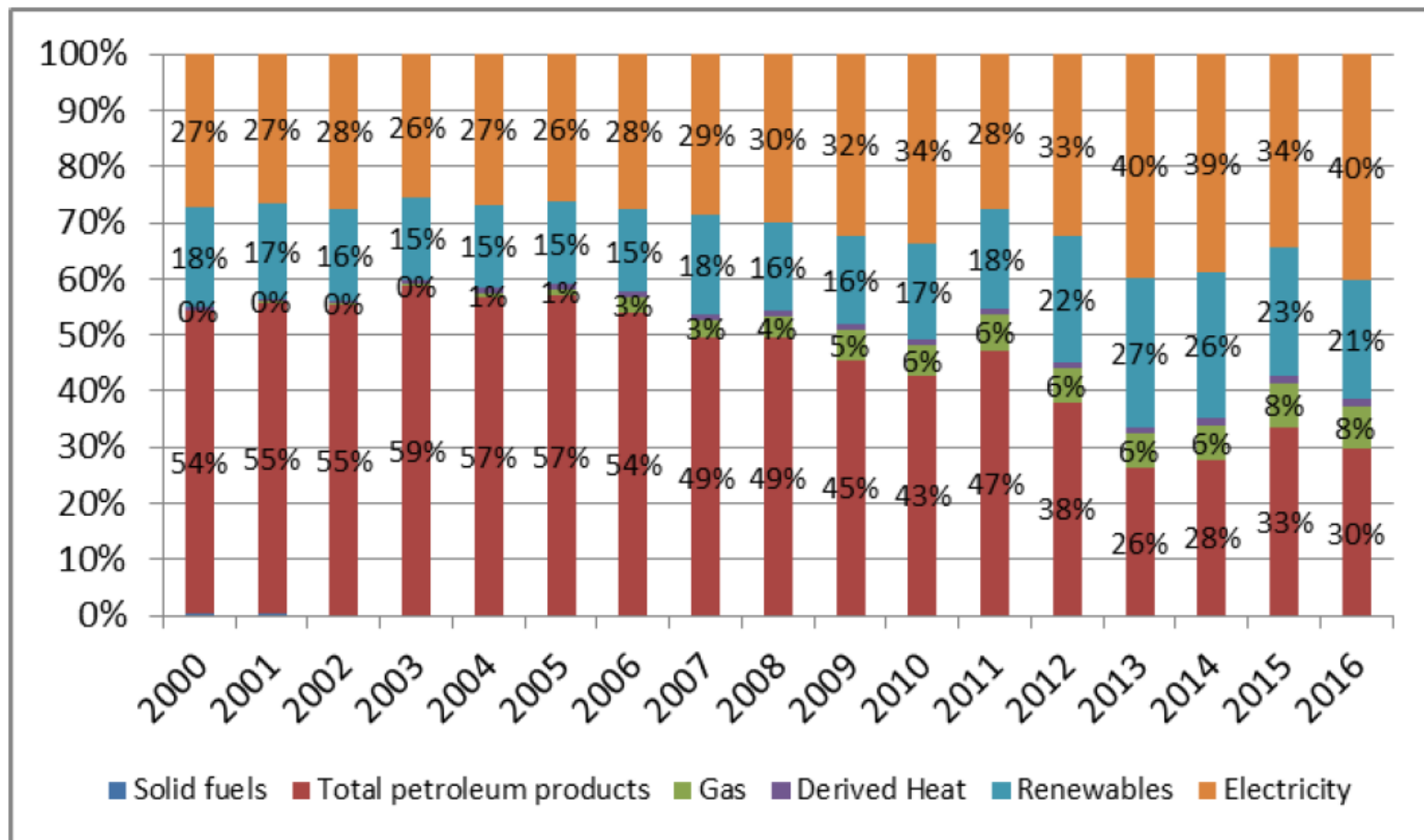


Source: ODYSSEE

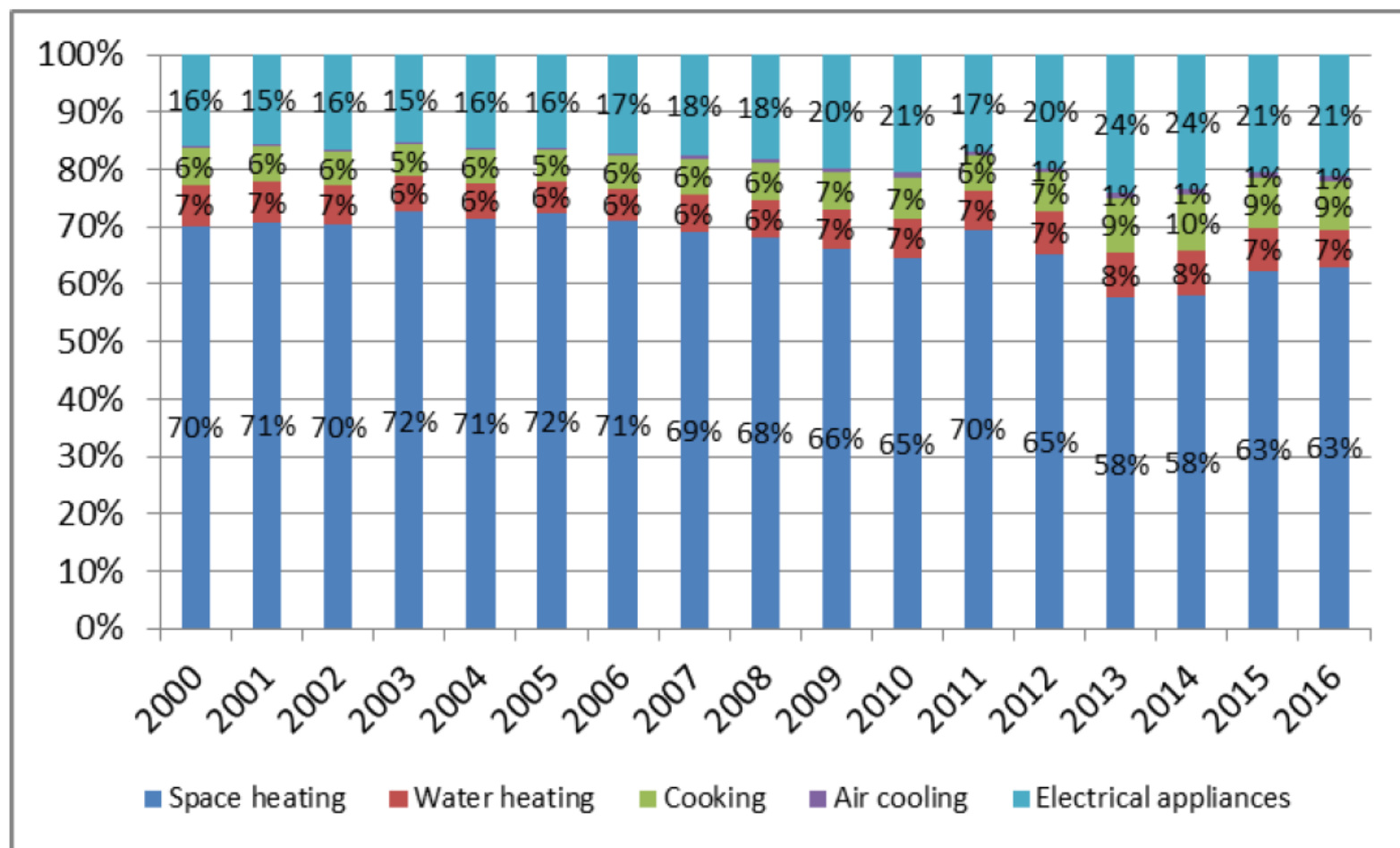
In 2017- Residential sector 27%



Source: National Energy Balance-2017



Source: ODYSSEE



Source: ODYSSEE

Energy consumption/household by end use

Typical Appliances End Use Residential- 2017	Type of appliance (typical-most common)	Energy Consumption (kWh/year)
Space Heating	-Central boiler -Electric Heater (mostly auxiliary)	4,701 605
Space Cooling	Split Type Air Conditioners	123
Lighting	Various light sources	145 (est.)
Domestic Hot Water	Electric Water Heater	618
Refrigerator/Freezer	<i>No distinction per appliance at the moment</i>	1,922
Dryer		
Washing machines		
Other		

Source: ODYSSEE database; no available data for Non-Residential “Offices”

- ODYSSEE-MURE HORIZON 2020 project (with the participation of CRES in ODYSSEE database update at national level. Database on energy efficiency indicators and energy consumption by end-use and their underlying drivers in industry, transport and buildings. (Yearly survey)

Energy consumption for household appliances (especially electric) was based mainly in energy data from pilot surveys in the framework of European projects (e.g EURECO, REMODECE, EnergyHUB etc.) and national surveys. The database will be updated with the scope to provide reliable energy data for household appliances.

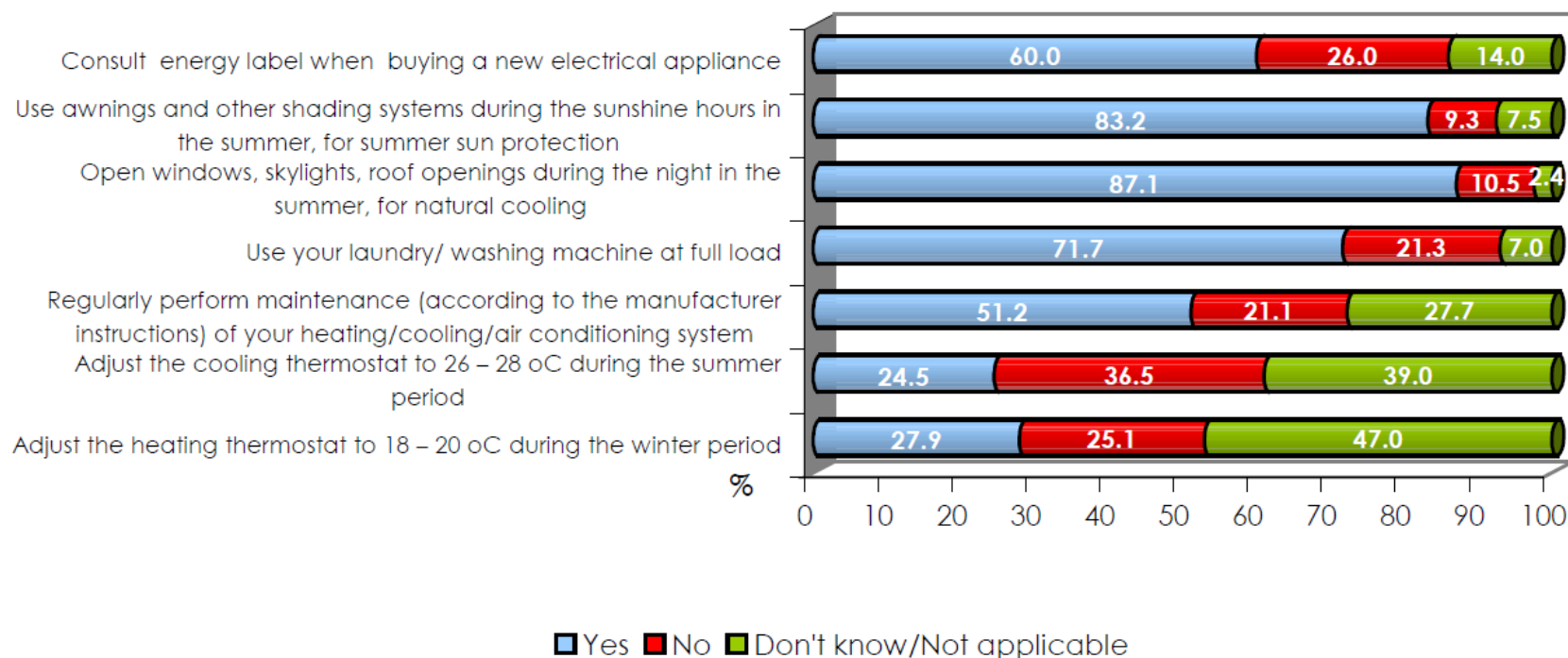
- Hellenic Statistical Authority (ELSTAT)- Survey for energy consumption in households (last survey 2011-2012 aprox. every 10 years).

Data on energy consumption by end use in the residential sector, as well as on quantities and type of fuels used. Additionally, data were recorded concerning the energy consumption habits of household members, type and number of devices and systems used, and also concerning the penetration of energy EE technologies.

No distinction yet for energy consumption per type of electric appliance, only for lighting

EE measures and practices for appliances only at energy consumer behavior- No EE consumption data –ELSTAT survey

Graph 13. Behavioral practices towards efficient use of energy



- Air condition energy consumption 1% of total electricity or 2,6% of electricity of the residential sector.
- No available data for average number of a/c appliances in each household. In 2012, around 60% of households had air conditioning units mainly for air cooling and auxiliary space heating
- Vast majority → split type units used for an average period of 2-4 months during summer months. No program for measuring energy consumption of old a/c
- The average of old a/c_s COP is less than 3 and the average lifetime over 10 years
- The current market of Air-conditioners sold in Greece is in line since 2015 with EU Regulation 517/2014 which indicates the allowed type of refrigerants and the transition phase of the EU F-gases market
- The majority of the existing air-conditioners used in households in Greece has refrigerants with GWP>750
- Scrapping of air conditioners in in line with the transposition of EU Directives and Regulations into National Law. Implemented from certified private scrapping companies
- National programme in 2009, public funding of 35% up to 500€ for the withdrawal of an old and purchase of new EE air conditioner

<ul style="list-style-type: none">• Technical requirements• Legal Framework• Implementation	<p>Ecodesign Directive implemented: Directive 2005/32/EC (PD 32/2010) repealed by Directive 2009/125/EC (PD 7/2011).</p> <p>MEPS were initially introduced by Ecodesign, for boilers with Directive 92/42/EEC (PD 335/1993) and for household electric refrigerators, freezers and combinations thereof, with Directive 96/57/EC (PD178/1998). Other domestic appliances from 2010 with 20 more EU regulations per type of appliance</p>
<ul style="list-style-type: none">• Institutional set-up	<p>Ministry of Development & Investments / Directorate for quality policy / Unit for the Surveillance of Quality Structures & Infrastructure</p> <p>Responsibility among other for the National Quality System, and the respective procedures for market monitoring, surveillance, enforcement.</p>
<ul style="list-style-type: none">• Enforcement procedures• Monitoring & Evaluation procedures	<p>Regulation (EC) 765/2008- Law 4072/2012- setting out the requirements for accreditation and market surveillance</p>

Refrigerating appliances	Regulation (EC) No 643/2009
Washing machines	Regulation (EU) No 1015/2010
Tumble driers	Regulation (EU) No 932/2012
Dishwashers	Regulation (EU) No 1016/2010
Televisions	Regulation (EC) No 642/2009
Air conditioners	Regulation (EU) No 206/2012
Domestic ovens, hobs and range hoods	Regulation (EU) No 66/2014
Electrical lamps and luminaires	Regulation (EC) No 2015/1428 and Regulation (EU) No 1194/2012
Vacuum cleaners	Regulation (EU) No 666/2013
Space heaters, combination heaters	Regulations (EU) No 813/2013
Water heaters, hot water storage tanks	Regulations (EU) No 814/2013
Local space heaters	Regulations (EU) 2015/1188
Solid fuel local space heaters	Regulations (EU) 2015/1185
Professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers	Regulation (EU) 2015/1095
Ventilation units	Regulation (EU) No 1253/2014
Solid fuel boilers	Regulations (EU) 2015/1189

Commission plans to adopt a set of 11 ecodesign regulations, covering the 6 product groups with the new labels (dishwashers, washing machines and washer-driers, refrigerators, lamps, electronic displays and commercial fridges) and 5 additional product groups for which no label is foreseen (electric motors, external power supplies, power transformers, servers and data storage products and welding equipment)

<ul style="list-style-type: none">• Technical requirements• Legal Framework• Implementation	<p>Label Directive implemented: Directive 2010/30/EU (Joint Ministerial Decision 12400/1108/2011) repealed by Regulation (EU) 2017/1369.</p> <p>Labeling was initially introduced by Directive 92/75/EEC (Presidential Decree 180/1994).</p>
<ul style="list-style-type: none">• Institutional set-up	<p>Ministry of Development & Investments / Directorate for quality policy / Unit for the Surveillance of Quality Structures & Infrastructure</p> <p>Responsibility among other for the National Quality System, and the respective procedures for market monitoring, surveillance, enforcement.</p>
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Refrigerating appliances	Regulation (EU) No 1060/2010
Washing machines	Regulation (EU) No 1061/2010
Tumble driers	Regulation (EU) No 392/2012
Combined washer-driers	Directive 96/60/EC
Dishwashers	Regulation (EU) No 1059/2010
Televisions	Regulation (EU) No 1062/2010
Air conditioners	Regulation (EU) No 626/2011
Domestic ovens and range hoods	Regulation (EU) No 65/2014
Electrical lamps and luminaires	Regulation (EU) No 874/2012
Vacuum cleaners	Regulation (EU) No 665/2013
Space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device	Regulation (EU) No 811/2013
Water heaters, hot water storage tanks and packages of water heater and solar device	Regulation (EU) No 812/2013
Local space heaters	Regulation (EU) 2015/1186
Professional refrigerated storage cabinets	Regulation (EU) 2015/1094
Residential ventilation units	Regulation (EU) No 1254/2014
Solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices	Regulation (EU) 2015/1187

- All household appliances included in Directive 2010/30/EU repealed by Regulation (EU) 2017/1369 which are imported in Greece need to have an energy label.
- All household appliances included in the Ecodesign Directive which are imported in Greece need to meet the MEPS standards
- Market Surveillance, Monitoring ,Verification & Evaluation procedure for the compliance of appliances included in the Label and Ecodesign Directives is supervised by a marketing surveillance authority of Ministry of Development & Investments / Directorate for quality policy / Unit for the Surveillance of Quality Structures & Infrastructure.
- Responsibility among other for the National Quality System, and the respective procedures for market monitoring, surveillance, enforcement.
- After retail shop checks 20% where not label at all and in many cases of partly and/or incorrect energy label display were identified (ComeOnLabels project 2010-2013)
- According to the Ministry of Development& Investments in March 2013, their estimation was 60% of proper label display

- Scheduled inspections under the national market surveillance programme, as well as inspections of seasonal products
- Product sampling and laboratory testing
- Measures for non-compliant and/or hazardous products placed on the market
- Response to complaints and/or questions
- RAPEX and ICMSM notifications
- Where advisable, there is communication with consumers and economic operators
- Public announcements through press releases
- Penalties for economic operators who place non-compliant products on the market

- Since 2008, Greece has participated actively in joint market surveillance activity coordinated by the European organization PROSAFE.
- Joint activities aim to:
 - harmonize market surveillance activities with other Member States
 - ensure cooperation with market surveillance workers and inspectors from other Member States and the exchange of information
 - ensuring more effective market surveillance activity
 - applying best practices for effective market control
 - withdrawing/recalling hazardous products from the market
- Follow ADCO meeting activities

Actions & Reporting:

- Market surveillance activities are assessed at the end of each year, on a sectoral basis.
- The purpose of the assessment is to verify whether the targets set in the annual market surveillance programme have been achieved and to identify any problems and difficulties detected during the year.
- The assessment may be quantitative or qualitative, depending on the competent authority concerned.

- The General Secretariat for Industry is eligible to issue fines when:
 - products are available for sale without label / fiche / technical documentation / other necessary information
 - products are available for sale with fiche / other necessary information in languages other than Greek
 - data of the technical documentation do not comply with the data of the label
 - data of the label or the technical documentation are inaccurate or not true
- A max fine of 50.000,00 € can be issued.
- Repeated non-compliance of suppliers / retailers can result in doubling the respective fine and in temporary or permanent market removal of products.

- Energy labeling of appliances and minimum energy efficiency requirements is included in the NEEAP (Measure KS1). The measure started in year 2008 and aims to inform consumers about the electricity consumption and the energy efficiency rating of these appliances
- Article 7 of Joint Ministerial Decision Δ6/B/14826/17-06-2008 ‘Measures to improve energy efficiency and energy savings in the central and the general government’ (Government Gazette, Series II, No 1122, 17-06-2008) stipulates that the appliances procured by entities of the public sector must bear an energy mark and a certified energy efficiency label, and sets the minimum energy requirements for specific types of appliances.
- Ministerial Decision D6/7094/23-05-2011 ‘Framework methodology for measuring and verifying energy savings for achieving the national indicative energy savings target in end use - List of indicative eligible measures to improve energy efficiency-Energy content of fuels for end use (Government Gazette, Series II, No 918, 23-05-2011) includes the energy labeling schemes in the list of indicative eligible measures to improve energy efficiency.
- National programme in 2009, public funding of 35% up to 500€ for the withdrawal of an old and purchase of a new energy efficient air conditioner

- ComeOnLabels project (IEE,2010-2013) aiming to enhance the visibility and credibility given to the EU energy label and to improve the market for labelled products. The project focused on three main areas related to the proper functioning of the Energy Label: 1. proper information on labels, 2. proper display of the energy labels on energy using products in shops and 3. Organization of promotion activities aimed at the final customers. The information material that was produced within the Come On Labels project (e.g. posters and leaflets) was distributed in 89 municipalities across Greece. *Greek co-beneficiary partner was CRES*
- HORIZON 2020 project (LABEL2020) which will involve among others the design and implementation of an information campaign targeting all stakeholders such as consumers, retailers, manufacturers, importers, public authorities etc. *Greek co-beneficiary partner was CRES*
- Greek Regulatory Authority for Energy (RAE) implemented a national campaign programme with the slogan 'actively engaged' to raise awareness of savings and energy savings issues.
- Information material for energy saving including labeling from power companies to electricity consumers (e.g leaflet inside printed electricity bills)

- Limited public awareness of the of the labeling and ecodesign concept
- Economic crisis led consumers to have the purchase price as the main criterion for new appliances instead of the energy performance
- Lack of adequate staff and resources of public authorities for more extensive market surveillance and enforcement of the legislation
- Limited use of energy labels in many e-shops

What is needed...

- Public awareness of energy labelling and ecodesign has to be increased through information campaigns at national level.
- Training of the related professionals (employees, retailers, manufacturers, etc.) on the current legislative framework and legal requirements.
- All stakeholders (including for example e-shop retailers) must cooperate in order to produce a more energy efficient action plan.

- Through the framework of funding programmes like Interreg Med, Interreg Europe, etc., capacity building on MEPS and labeling could be strengthened at a regional level, through workshops and study visits, to facilitate exchange of knowledge and experience of local stakeholders, in terms of inter-regional co-operation. During regional workshops, training courses could take place for professionals, as well as study visits could include shop visits for monitoring the proper energy label display and the compliance with MEPS.

Contact us!



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