



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649905

LabelPackA+



**L'etichettatura di
insieme: cosa é
cambiato dalla sua
introduzione e come
diffonderne l'utilizzo**

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Solar Heat Europe

Il progetto Labelpack A+



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Project Summary

- What:
 - support the implementation of the energy labelling of heating appliances
 - boosting its impact on solar thermal products using the “package label”
- Whom:
 - those managing and issuing the label: manufacturers / distributors / installers
 - end consumers
- Why:
 - lack of information about package label is a market barrier
 - package label is a tool for differentiation and uptake of RES in H&C
- How:
 - “Label Pack A+ National Stakeholders Platform”
 - Monitoring implementation
 - European synergies



Expected impacts

- Better implementation in six important solar thermal markets (80% market)
- ST sector making best use of tool
- Consumers better informed and empowered
- Recommendations and feedbacks for EC and MS
- Pave the way for an easy replication of the initiative in other markets

Goals

- ✓ Provide guidelines, as well as standardized answers to clarify the responsibility of each actor in the supply chain and help them comply with the requirements.
- ✓ Facilitate the exchange of product fiches and a calculation tool for all actors in the supply chain in the form of an online application
- ✓ Support market surveillance activities
- ✓ Assist installers and SMEs face specific implementation challenges.
- ✓ Provide tailor-made information for end consumers



- **European Solar Thermal Industry Federation**
- **National solar thermal associations**
 - Bundesverband Solar Wirtschaft – BSW (DE)
 - Syndicat des professionnels de l'énergie solaire – ENERPLAN (FR)
 - Associazione Italiana Solare Termico – ASSOLTERM (IT)
 - Associação Portuguesa da Indústria Solar – APISOLAR (PT)
 - Solar Trade Association – STA (UK)
 - Austria Solar (AT)
- **Experts**
 - Agência para a Energia – ADENE
 - eclareon GmbH
 - DECO – Assoc. Portuguesa Defesa do Consumidor
 - Legambiente ONLUS - Legambiente
- **Other partners**
 - Solar Keymark Network



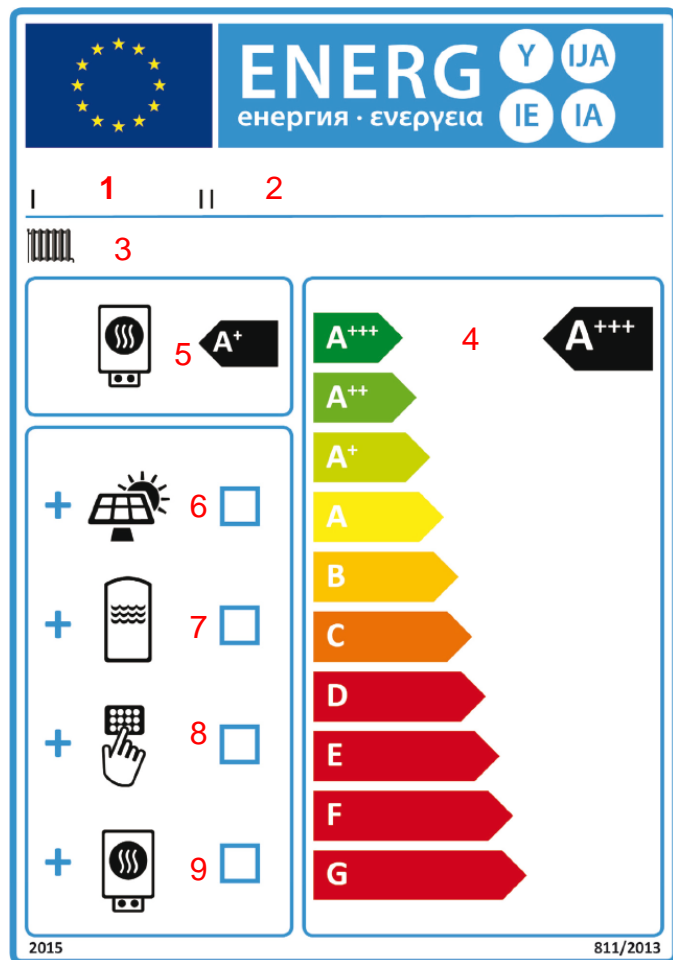
Co-funded by the Intelligent Energy Europe
Programme of the European Union

L'etichetta d'insieme: che cosa è?



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Package label



(e.g.: space heating system)

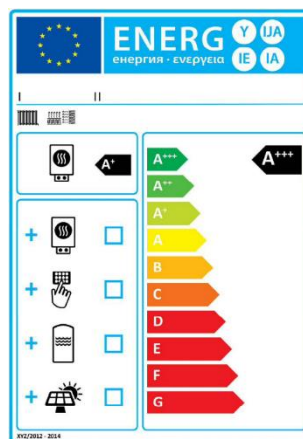
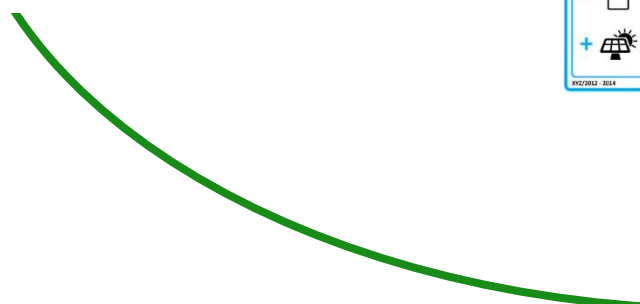
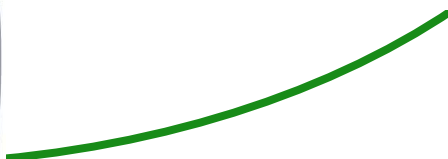
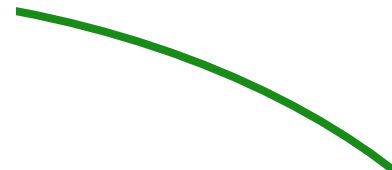
Information on the label

1. Manufacturer
2. Number of model
3. Function (heat / hot water)
4. Efficiency class (for entire combination)
5. Efficiency primary boiler
6. Solar energy system
7. Storage tank
8. Temperature control
9. Additional heating system

The package label is provided by the dealer or installer



LabelPack⁺



L'etichetta d'insieme: che cosa è cambiato dalla sua introduzione



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Timetable

2015

- Energy Labelling Phase 1
- 26. Sept. 2015 Labels from A+++ to G
- Prohibition of introducing new fuel boiler space heaters systems to market worse than B, electric boilers worse than F

2017

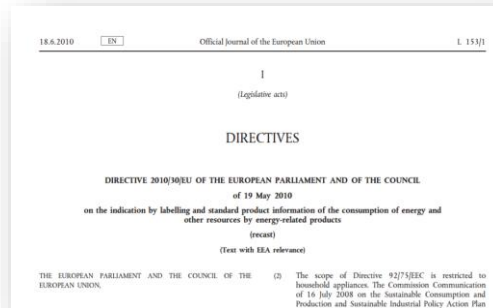
- Energy Labelling Phase 2
- Integration of Biomass boilers
- Heightening of labeling requirements from A+++ to D

2018

- Review of the regulations
- Increased requirements for nitrogen oxides levels

Main Documents

Directives (ELD – EDD)



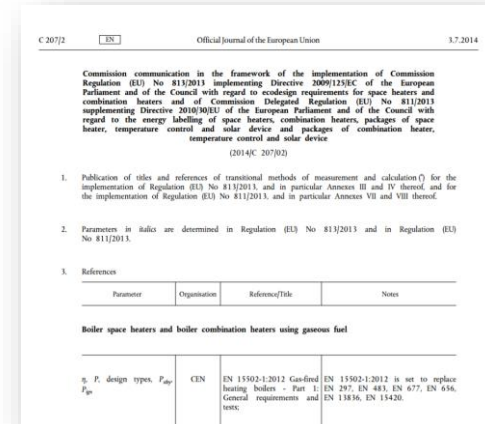
Regulations (Lot1 &2)



Implementing Guidelines

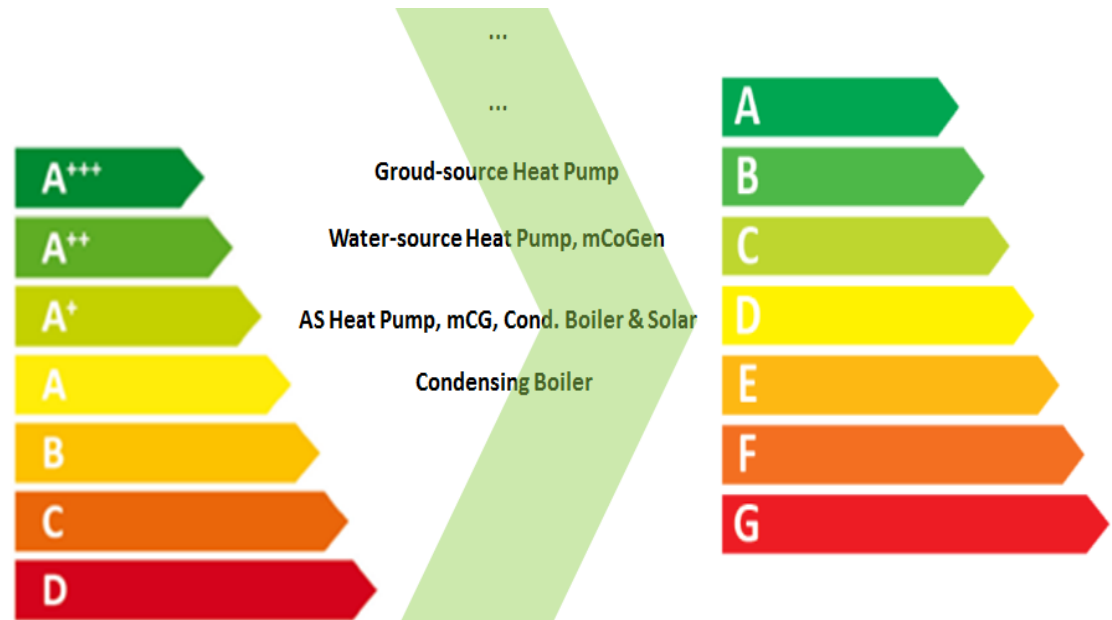


Transitional methods



Rescaling

- Fixed deadlines are established for the first rescaling of all labelled products
- Once all A+ labels have disappeared from the market, further rescaling will be triggered by a surplus in the top classes, namely 30 % in class A or 50% in class A+B.
- At the time of rescaling the top class is to be left empty (top two for lots with fast technological development), aiming for a ten-year validity period of the label.
- Space and water heaters will be implemented later: between 2026 and 2030!



Product database

- Set up from January 2019
- Restricted part:
 - aiming at enabling market surveillance authorities of member states to enforce labelling requirements
 - make sure that efficiency calculations correspond to those declared
- Public database
 - focus on user friendliness and practical purposes
- Consultation
 - Discussion with stakeholders ongoing
 - Studies and internal COM work

Regulations

Regulations		
	Energy Labelling Directive 2010/30/EU	Ecodesign Directive 2009/125/EC
Lot 1	811/2013 space heaters, combination heaters, packages of space heater; temperature control and solar device and packages of combination heater; temperature control and solar device	813/2013 space heaters and combination heaters
Lot 2	812/2013 water heaters, hot water storage tanks and packages of water heater and solar device	814/2013 water heaters and hot water storage tanks

Commission Delegated Regulation (delegated act):

- Proposed by EC
- Can be vetoed by EP or Council
- Consultation with MS and stakeholders

Review Study

- Review study of ecodesign and energy labelling
 - space heating boilers and combination heaters
 - water heaters and tanks
- Water heaters and tanks
 - [Register for Updates](#)
 - [Register for Meetings](#)
- Space heating boilers and combination heaters
 - [Register for Updates](#)
 - [Register for Meetings](#)

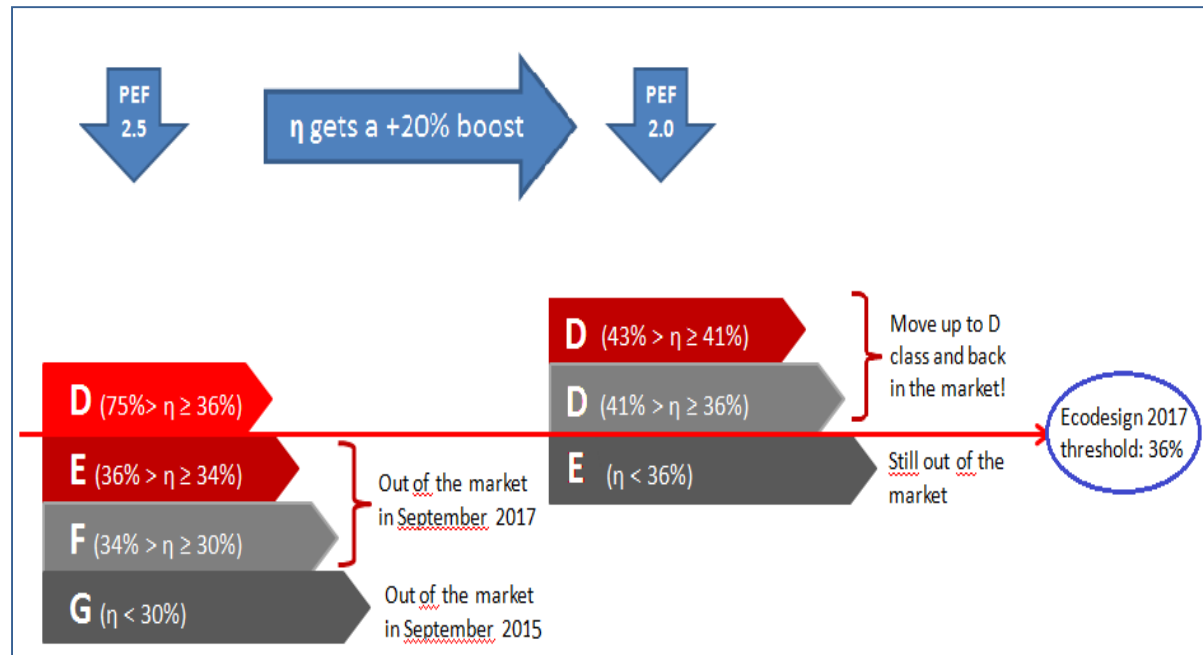
Date	Action
June 2017	Launch of study
July 2017	Launch of study website
January 2018	Stakeholder meeting 1
September 2018	Draft final report (Task 1 – 6 or 7)
November 2018	Stakeholder meeting 2
January 2019	Final report (Task 1 – 7)



- Assessment of:
 - The appropriateness of setting ecodesign requirements for greenhouse gas emissions related to refrigerants, carbon monoxide and hydrocarbons;
 - The appropriateness of setting stricter ecodesign requirements for emissions of nitrogen oxides;
 - The appropriateness of setting requirements for products working on gaseous and liquid fuels from biomass;
 - The validity of the primary energy factor (PEF);
 - The appropriateness of 3rd party certification;
 - Significant changes in market shares of various types of appliances;
 - The appropriateness of the package labels and fiches.

Conversion coefficient value

- Primary Energy Factor (PEF), applied in:
 - Energy Efficiency Directive
 - Energy Performance of Buildings Directive
 - Though Member States can define their own values
- PEF = CC in Lot 1 & Lot 2
 - Currently: 2.5
 - Proposal: 2.0
- Open question:
 - How will the new PEF value be applied in the Lot1 & Lot 2 review?
 - With or without update on the thresholds



Third party certification

- Issues:
 - Poor market surveillance
 - Water and space heaters
 - Need to ensure fair competition
 - Industry proposing mechanisms to ensure fairness in the market
 - Additional procedures/requirements
 - New certification requirements could imply additional costs/burden to manufacturers
 - Clarify if existing certification (ex: Solar Keymark) would be compatible



Package fiches and labels

- What can be covered under “appropriateness”
 - Procedures
 - Calculation
 - Components
 - Information supplied
 - Availability of information
 - Implementation in the market
 - Market surveillance procedures
 - Withdrawal of the package label





Interaction between LPA+ and review Lot1 & Lot 2

- Inputs from the project are likely to fit into the first stage of the review process
- Questions are not only regarding improvements on package label → also on the continuation of the package label
- Important to understand scenarios:
 - Impact of having improved package label or no-package label
 - For market, consumers, manufacturers of different products
 - Requirements connected to each scenario: what actions to take to activate scenario

***Sfide nell'attuazione
dell'etichetta d'insieme per
apparecchi di riscaldamento
ambienti e per la produzione di
acqua calda sanitaria***



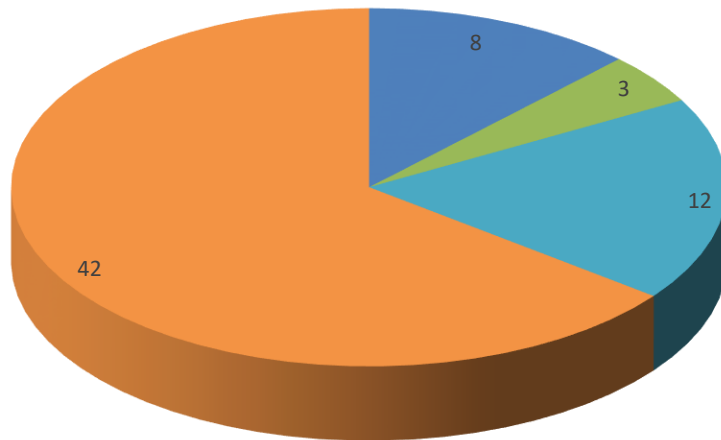
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Surveys

- Assessment of the implementation of package label
 - Clear problems with implementation in different countries
 - Data needed: two reference countries: Germany and Portugal
 - Add also information on the implementation of the product label
 - Germany
 - BSW survey: Private sector (installers, manufacturers); public entities (local, federal), NGOs (Industry Association/chamber; Consumer protection): 81 valid responses out of 108
 - Co2-online survey: 132 valid responses
 - Portugal
 - DECO: Online questionnaire to consumers: 210 valid responses
 - DECO: Inspection of 50 stores and 13 online shops

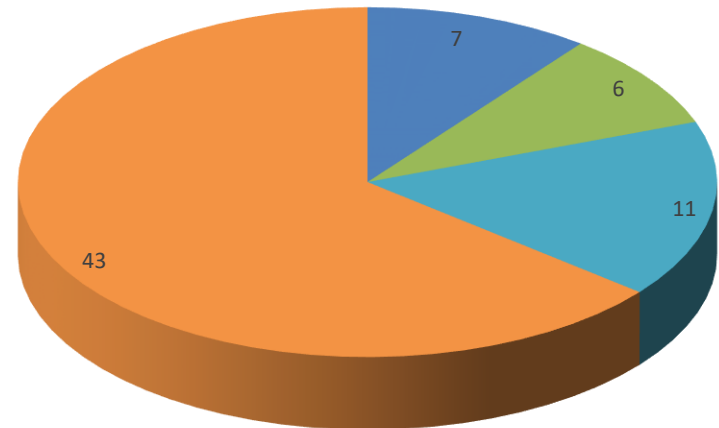
BSW-Solar Survey

In connection with the introduction of the EU energy efficiency label: Please estimate the number of inquiries from professionals before September 26, 2015



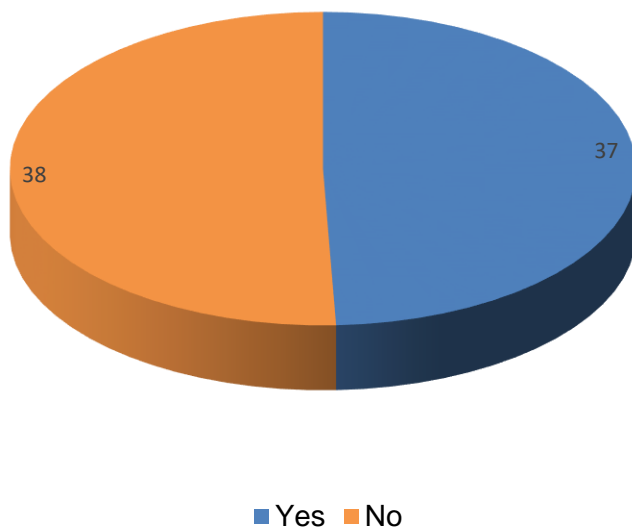
■ Very high (> 500) ■ High (100-500)
■ Medium (50-100) ■ Low (< 50)

In connection with the introduction of the EU energy efficiency label: Please estimate the number of inquiries from professionals after September 26, 2015

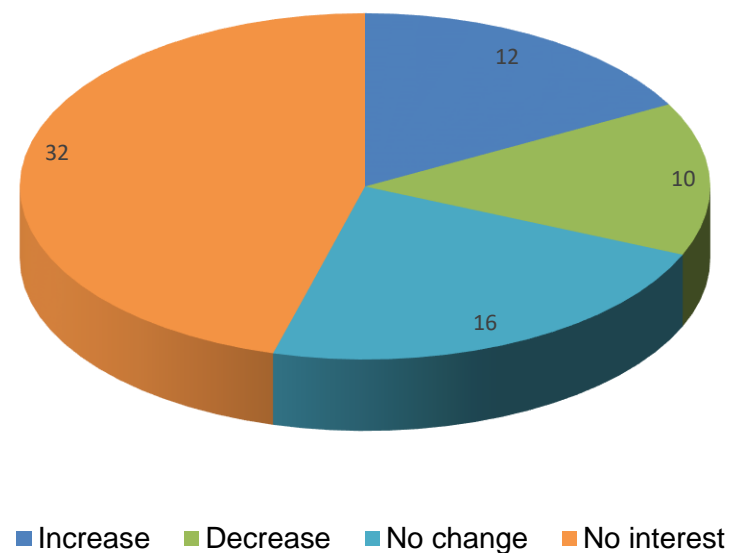


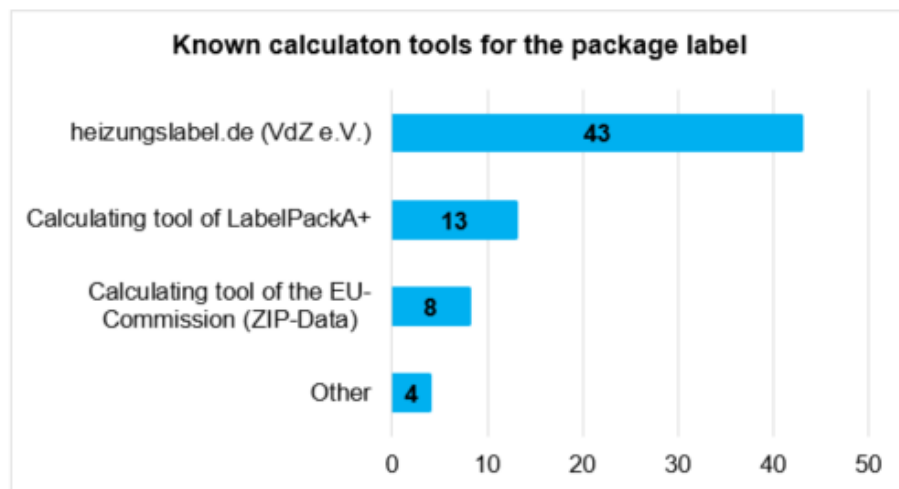
■ Very high (> 500) ■ High (100-500)
■ Medium (50-100) ■ Low (< 50)

Did your organization receive any requests for support from professionals in the heating sector?

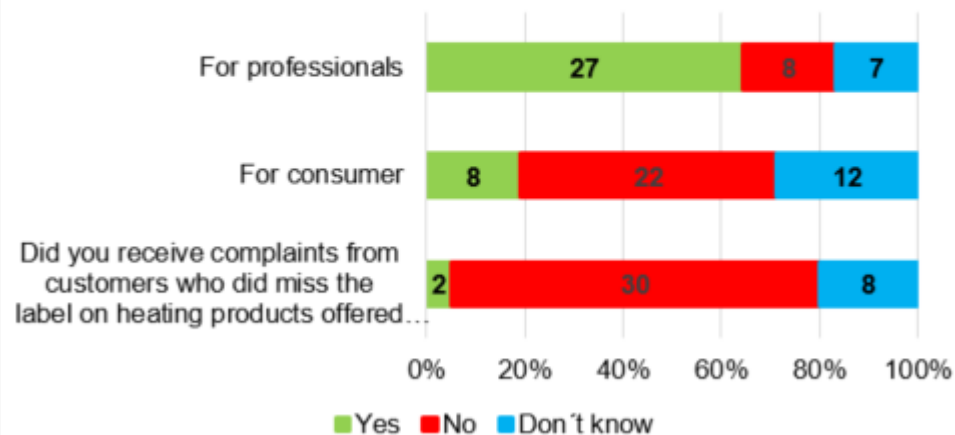


Did the interest in the EU energy efficiency label increase or decrease since September 26, 2015

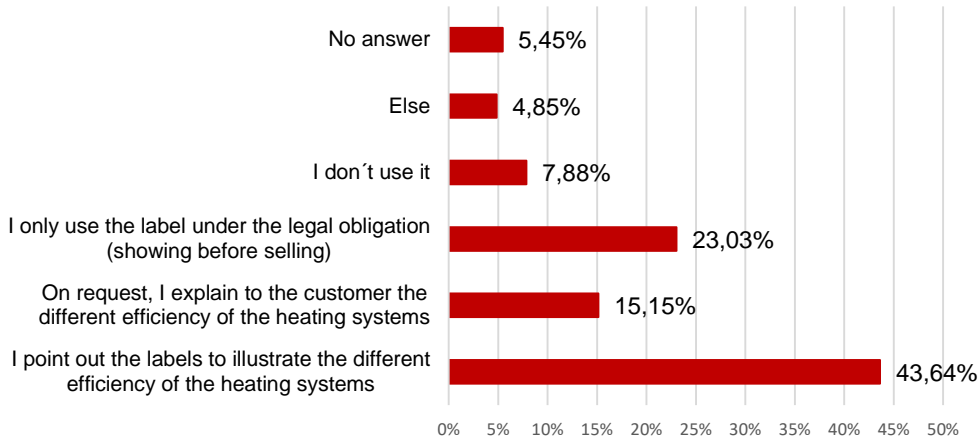




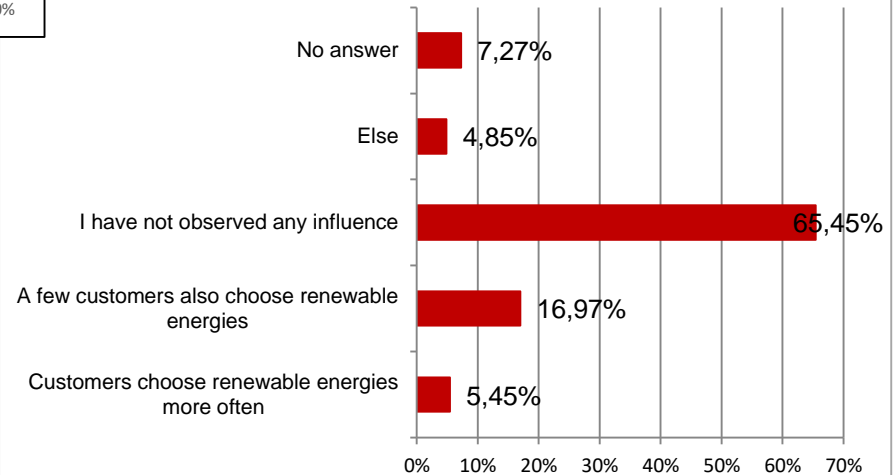
Are the information that are provided by private companies and other organizations easy to understand and useful for the following target groups?



Do you discuss the new label in your customer meetings?

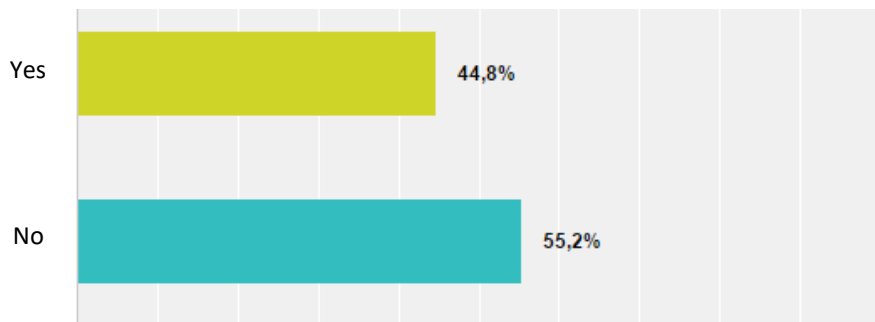


Which influence does the new package label have on your customers when selecting a new heating system?

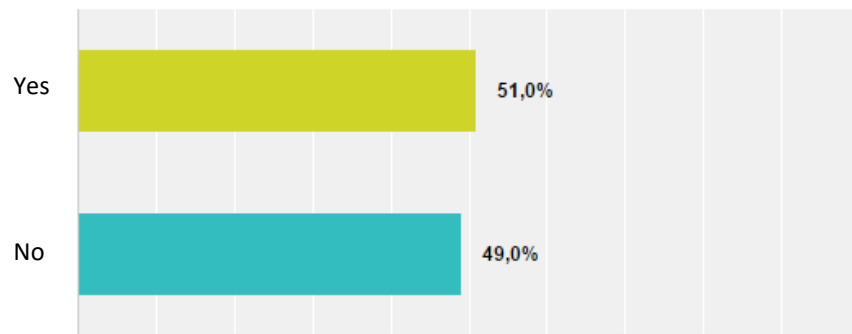


DECO: consumer survey

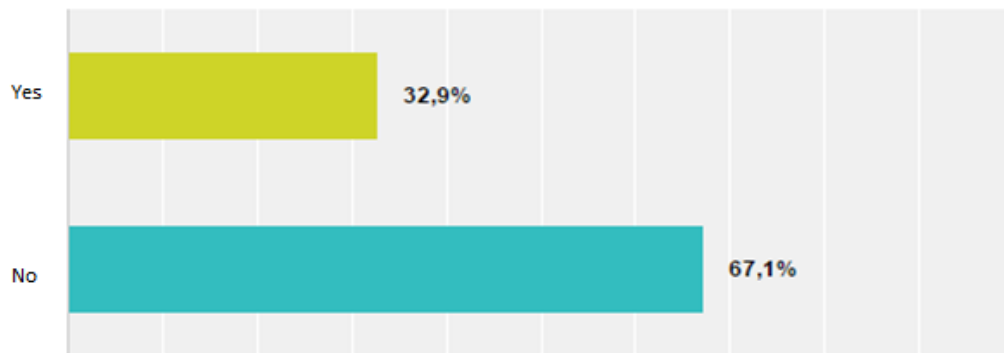
Do you already know the energy label for space heaters (ex: boilers, heat pumps)?



Do you already know the energy label for water heaters (ex: gas or electric WH)?



Do you know that besides the product label for space heaters, there is also a package label for systems combining a conventional system and a solar thermal?



DECO: inspection – product label

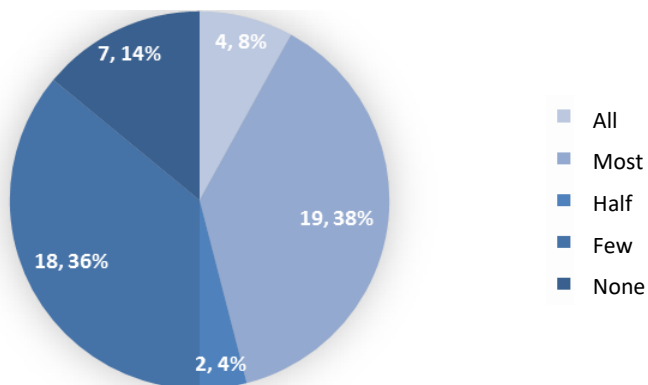
Stores



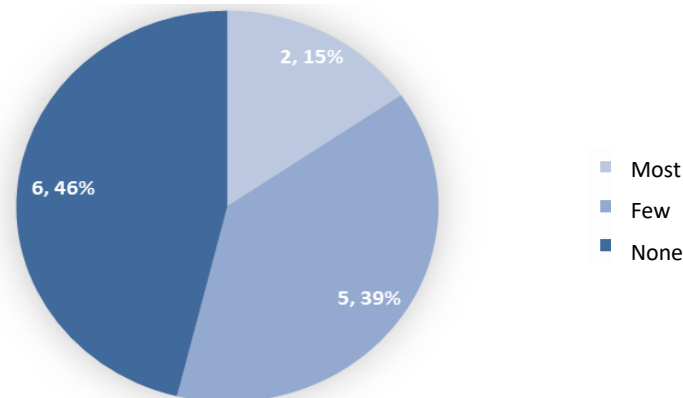
Online

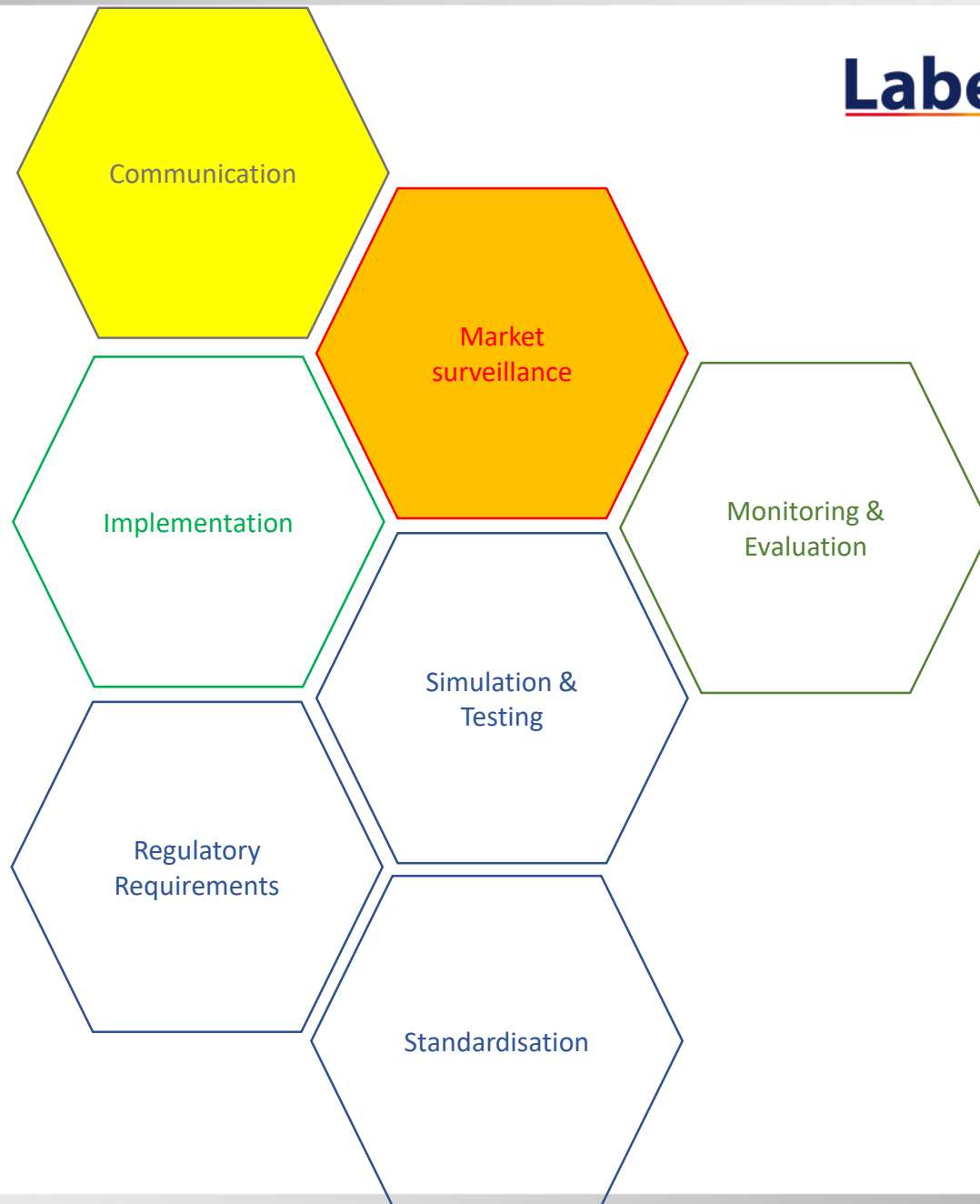


Products exhibiting the energy label - Stores

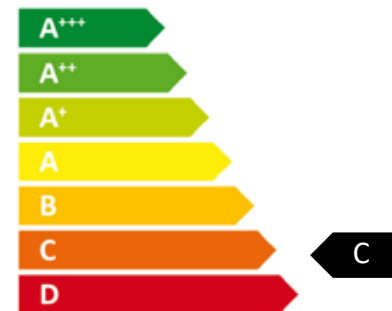
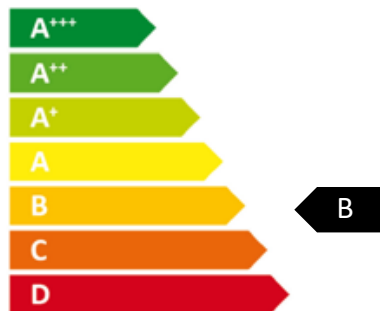
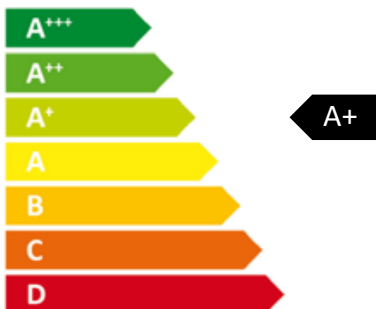


Products exhibiting the energy label - Online





Implementation efficiency



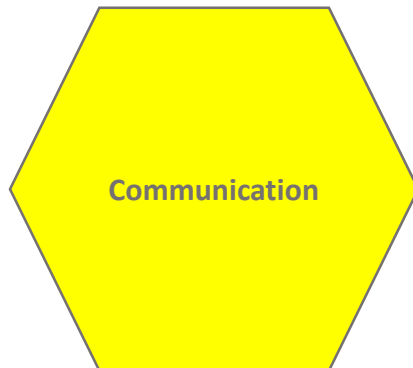
L'etichetta d'insieme: come diffonderne l'utilizzo



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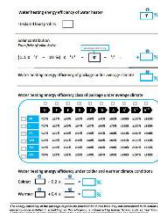
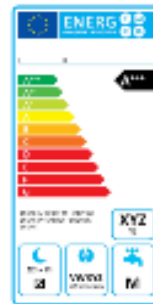


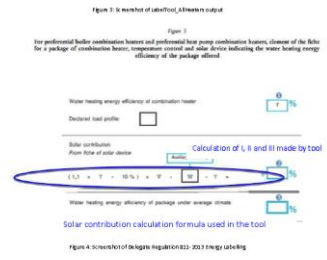
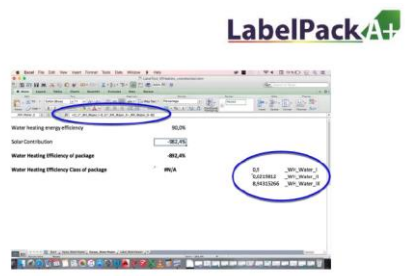
Carrot



Stick







General Information	
Dealer Name	
Model Identifier	
Preferential Heater	
Water heating energy efficiency of the preferential heater	90%
Load profile	M
Storage Tank	
Storage Tank installed?	Yes [Yes/No]
Solar Collector	
Solar Collector Installed?	Yes
Annual non-solar heat contribution (Q_{consol})	585 kWh
Auxiliary electricity consumption (Q_{aux})	46 kWh
Collector Size	4 m ²
Collector Efficiency	100%

Update and Create Label as PDF



Onde pode encontrar a Etiqueta Energética
Pode encontrá-la nos pontos de venda, aposta nos produtos e sistemas de aquecimento.

Quem é responsável pela emissão?
A etiqueta energética de produtos individuais é da responsabilidade do fabricante que deve fornecer os produtos de fábrica já com a etiqueta energética.

E sistemas mistos, constituídos por produtos de diferentes marcas?
O mercado das soluções de aquecimento já oferece soluções baseadas em sistemas solares térmicos apoiados por produtos de aquecimento convencionais. Estes sistemas mistos também têm etiqueta energética!

A eficiência e classe energética dos sistemas mistos é calculada pelo fornecedor e disponibilizada pelo mesmo ao consumidor.

Não deixe a etiqueta de sistema misto para segundo plano!
Só os sistemas mistos com recurso a sistemas solares atingem as classes energéticas mais altas. Certifique-se e exija a etiqueta.

<http://www.label-pack-a-plus.eu/>



A considerar antes de comprar
Ao escolher um sistema de aquecimento ambiente ou de produção de águas quentes tenha em conta:

- O seu perfil de consumo, dependente do número de habitantes e suas necessidades, níveis de conforto, etc. O perfil varia entre M, L, XL ou XXL, e está indicado junto ao ícone da Toma de água.
- Condições de instalação do sistema no edifício: orientação, estrutura e materiais construtivos;
- Requisitos adicionais, como licenciamento e autorização do condomínio.

A utilização de energias renováveis reduz os custos de utilização do sistema e minimiza o recurso a combustíveis fósseis! Reduza a dependência energética do seu sistema de aquecimento. **A energia do sol é gratuita. Escolha sistemas solares térmicos e ponha o sol ao seu serviço!**

Onde posso obter mais informação?

Para saber mais sobre a etiquetagem energética de produtos e sistemas de aquecimento ambiente e produção de águas quentes visite:

www.labelpackplus.eu/portugal

Esta brochura foi desenvolvida no âmbito das atividades do projeto Label Pack A+.

O projeto Label Pack A+ é um projeto desenvolvido no âmbito do Programa Horizonte 2020, promovido pela Comissão



Etiquetagem energética de produtos e sistemas de aquecimento ambiente e produção de águas quentes

Reduza a sua fatura de energia e proteja o ambiente com a nova etiqueta energética.



Calculate the label

Calculating Package Efficiency and Class

What type of package would you like to calculate?

Water Heater

Space Heater

Combination Heater

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LabelPack A+

Water heating energy efficiency of water heater (in %)

80%

Declared load profile

M

Annual non-solar heat contribution (Q_{non-sol}) (in kWh)

450

Auxiliary electricity consumption (Q_{aux}) (in kWh)

45

Storage Tank Installed?

- ☐ No
☒ Yes

Calculate

For the PDF: Please provide Identifiers for the supplier of the package and for each component

Dealer's and/or supplier's name or trademark

Model identifier of the preferential heater

Model identifier of additional component (e.g. a solar device)

Model identifier of additional component (e.g. a tank)

Model identifier of additional component (e.g. a temperature control)

Model identifier of additional component (e.g. a supplementary heater)

PDF

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Water heating energy efficiency of water heater

80.0 %

Declared load profile:

M

Solar contribution

From photo of solar device

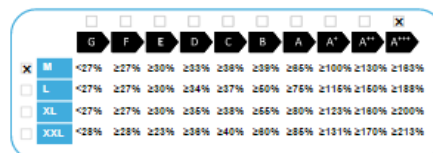
Auxiliary electricity

$(1,1 \times 80 - 10) \times 2,85 - 8,75 - 80 = +134,1 \%$

Water heating energy efficiency of package under average climate

214 %

Water heating energy efficiency class of package under average climate



Water heating energy efficiency under colder and warmer climate conditions

Colder: $214 - 0,2 \times 134,1 = 187 \%$

Warmer: $214 + 0,4 \times 134,1 = 241 \%$

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency due to its installation in a building, as the efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

Water heating energy efficiency of water heater (in %)

80%

Declared load profile

M

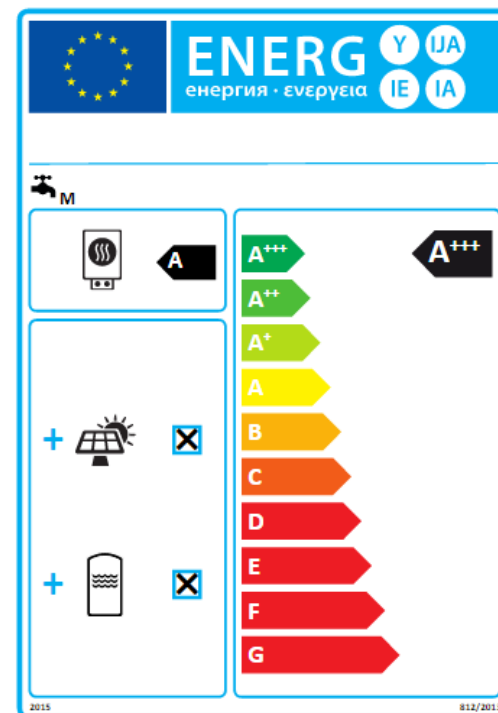
Annual non-solar heat contribution (Q_{non-sol}) (in kWh)

450

Back to start

English

Calculating Package Efficiency and Class





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LabelPackA+



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