

**EHI**  
**Market partner to reach the goals of the Kyoto protocol**  
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**Abstract:**

As EHI and its members see the real necessity to protect the environment by developing environmentally friendly products since a long time, the EHI members have all necessary products in their sales programs which will support to reach the goals of the Kyoto protocol. These products are not offered in all countries at the moment, but this will be only a minor logistical problem. But to have the products developed and on the market, this means not that these products will be bought by the consumer. There have to be also some accompanied incentives for the market by the national governments e.g. tax reductions, national programs etc.

Industry had been not successful in many cases but will not stop to ask for such market instruments.

Therefore EHI will request at any time – also today – that environmental protection is the task of all market partners – but also the task of the Member States to create a positive frame work.

## **1. Organisation and structure**

The association of the European Heating Industry, EHI ([www.aehi.be](http://www.aehi.be)) was founded in its current composition on 1<sup>st</sup> July 2002. This was the second step for the founding of this new association: in March 2002 the former CEB, Association of the European Burner Manufacturer and the EBA, European Boiler Manufacturers had been merged. As it was - and of cause - it is still the aim that this association should represent the whole heating industry, AFECI, as the association of the manufacturers of instantaneous warm water gas heaters and wall-hung gas heating boilers, should be integrated into this common association. This aim had been reached two years later, mainly because all manufacturers saw the advantages of a common and strong association. Speaking with one voice in the direction of the EC-Commission, industry will have the possibility to influence the upcoming regulations in Europe.

It has to be underlined very clearly that the merger is also the consequence of the difficult market situation but will continue the process which had started in the early 50<sup>th</sup> of the last century: to develop environmental friendly products for heating purposes, hot water preparation, steam generation or industrial application.

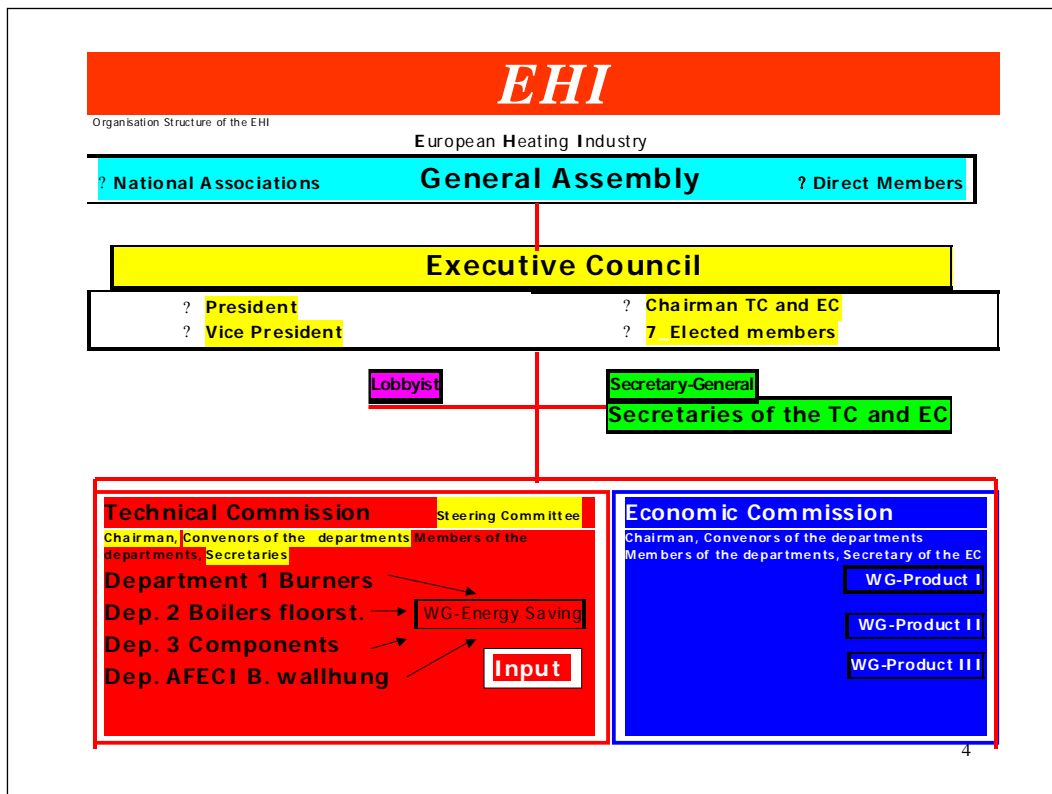


Figure 1: Organisation sheet EHI

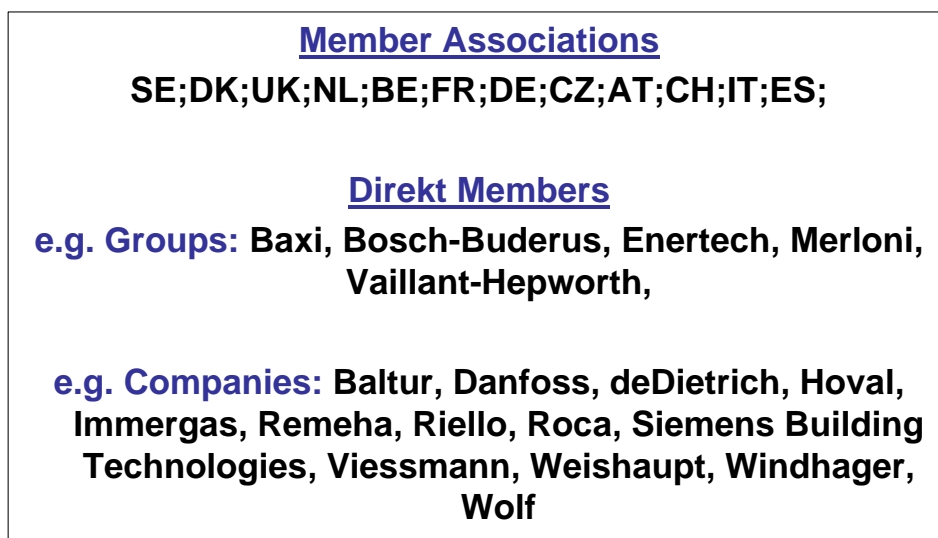


Figure 2: Members

• <b><u>Executive Council</u></b>		
– President:	Crivelli	(Siemens L&S)
– Vice-President:	Gray	(Baxi)
– Chairman TC:	Heeb	(Hoval)
– Chairman EC:	Troester	(deDietrich)
• <b><u>Members:</u></b>		
– Weishaupt	(Weishaupt)	
– Dr. Riello	(Riello)	
– Lövgren	(Bentone)	
– Whitwell	(Vaillant/Hepworth)	
– Dr. Schulte	(Buderus)	
– Huttelmaier	(Bosch Thermotechnik)	
– Prof. Burger	(Viessmann)	
– Fedeli	(Merloni)	
– Secretary:	SG: van Eyken, EC: Lücke; TC Linke	

Figure 3: Executive Council

The structure of the organisation of the association is classical. The highest ranking organ is the **General Assembly**. The General Assembly is composed of representatives of the national organisations of 12 European countries and representatives of the direct members. As EHI is a manufacturer's organisation, the direct members have the main influence on the technical and political targets. Actually the direct members are doing the main jobs by sending out their specialist to the various meetings for standardization, preparation of directive, etc.. With the common know how brought together the work items can be solved. The representatives of the national associations have the target to bring in and of cause transfer the information from and to smaller national manufacturers which are not able to fulfil the basic requirements for an European Company, as stated in the statutes of EHI. There it is required a direct member must have at least one production site in one of the European member states as well as operating organisations within four states.

The second level of EHI-organs is the **Executive Council**, which is just compound with representatives of the direct members. As advising persons the secretary general, the secretary of the Technical and the secretary of the Economic Commission are attending the meetings. Next to this organ, a external lobbying consulting company had been installed starting on 1<sup>st</sup> June 2003.

The **Economic Commission** of EHI is responsible for all economic affairs e. g. market situation and statistics as well as the commercial influence of the EC-Directives and of exhibitions.

The **Technical Commission** of EHI is responsible for all technical subjects and will prepare solutions for the transferral into the directives and the standardization. It is divided into four departments where each department is responsible for the relevant targets concerning their products including the used fuels. As energy saving is and will be also for future one of the

main targets of the association, an overall working group has been installed, where all relevant energy saving targets are discussed as results of the working-out processes of EC-directives, national regulations and European standardization.

**2. Market situation**

As described in the various slides for the main products, the market in Europe had been in the past and will be for the future not very easy. The only product group having an increasing number of sales are the wall hung-mounted boilers - gas and now starting also oil -, often in conjunction with solar panels. Floor standing boilers and forced draught burner sales are continuously decreasing since several years; especially with the fuel "oil". Besides the general economic situation on the heating market the strong emission limits in some of the EU-countries will influence the market performance negatively. In 1999 the total value of the European heating market have an amount of nearly 5 Billion € Germany, the United Kingdom, France and Italy are the main countries whereby it can be noted that the German market produces double of the value compared to the three other countries.

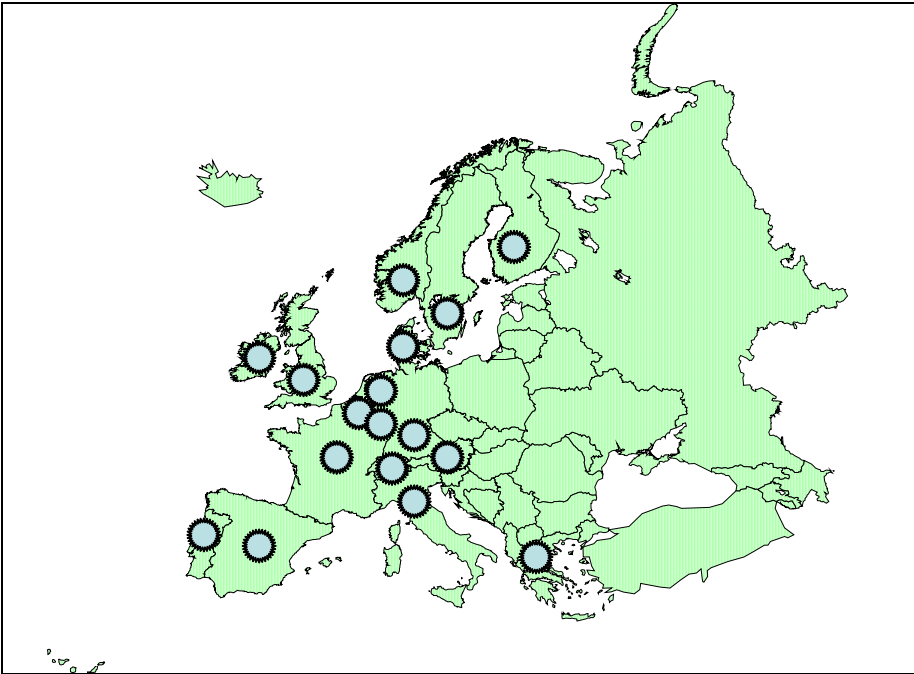


Figure 4: West European heating market

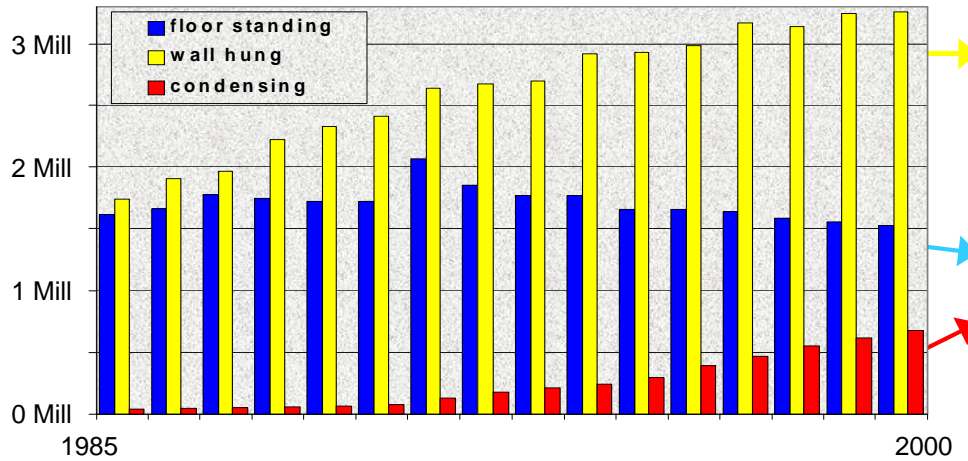


Figure 5: European trend in SALES of BOILERS 1985-2000

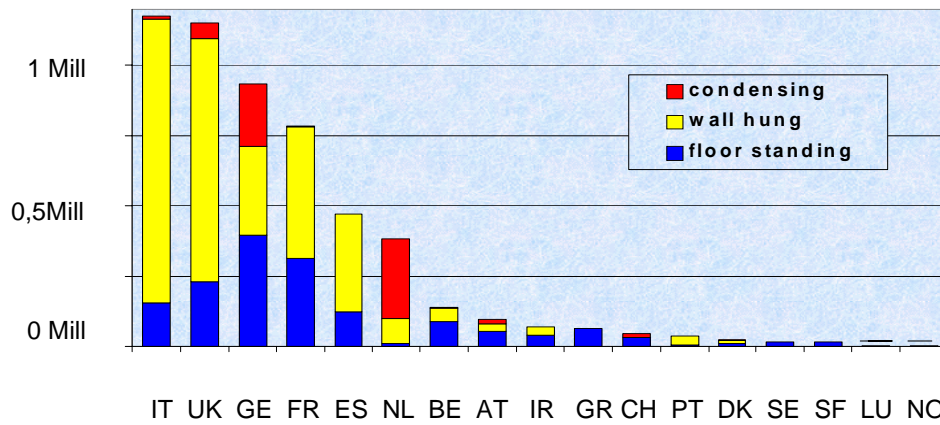


Figure 6: BOILER SALES per country 1999 (17 countries)

**VOLUME**

- 3.200.000 wall hung standard b.
  - 600.000 wall hung condensing b.
  - 1.500.000 floor standing boilers
    - 1.000.000 oil/gas
    - 500.000 atmospheric
  - 1.400.000 jet burners
- all the boilers can be equipped with regulators and water heating systems*

**VALUE**

- 600 € ==> 1.920 M€
  - 1000 € ==> 600 M€
  - 1500 € ==> 2.250 M€
  - 500 € ==> 200 M€
- 2.520 M€
- 2.450 M€
- 
- 4.970 M€**
- with average prices per type of products and equipments*

Figure 7: Sales volume of the European heating market 1999

An other important point to mention is the fact that in Europe nearly three quarters of the market volume are produced by the 10 leading manufacturers. Nearly 50 % of the volume is supplied in the German market.

Furthermore the concentrating process of the manufacturers in the heating market will go on.

### 3. Technical targets

As described the Technical Commission is divided into four product departments. These departments are responsible for their products as well as for the relevant matters about the fuel used by these products. E. g. Department 1 “Burners” is responsible for forced draught burners using oil and gas. Especially oil has created many problems in the past. It must be stated, that the thermal stability or the storage stability has been developed as parameters which has to be investigated. Usually in case of problems the user will get in contact with the burner manufacturer or its service organisation. But the problems in running are caused not by the burner and its construction: in many cases the fuel is the released point. Filters and nozzles are blocked by the fall-out of the fuel due to the storage or thermal treatment inside the burner construction. But the burner manufacturers have solved together with their partners from the mineral oil industry some of these problems, by having investigated and improved various parameters of the fuel or the necessary additives. These parameters have been fixed in the fuel oil standards together with their relevant test requirements. Though this information is only relevant for Germany, Austria and in some cases for Switzerland a common European standard for heating oil has not been prepared yet. As there is a great direct influence on the emission levels of the appliances the used fuel has also an important influence on the fulfilment of the national emission limits. More and more in the European countries the national governments will install emission requirements as a result of emission and energy saving programs.

Together with the association EUROFUEL ([www.euro-fuel.net](http://www.euro-fuel.net)) a project will be launched to harmonise the key parameters for heating oil as well as for the usage of bio fuel oil (FAME – fatty acid methyl ester). Since 3 years EHI is partner of the EC-supported project “Bioflam” in which a special designed heating appliance for the combustion of FAME will be developed.

As Marcogaz – the technical association of the European Natural Gas Industry ([www.Marcogaz.org](http://www.Marcogaz.org)) acts as the counterpart on the gas side EHI will also cooperate closely with this organisation. The technical solutions for the future gas utilisation will be discussed soon.

The European heating market is decreasing especially for fuel oil burners. Therefore the international standardisation of burners and control units is one of the main targets for the Technical Commission within the ISO/TC (Technical Committee) 109 “Forced Draught Burners”. Draft standards had been prepared by the EHI, but the Committee has not be re-awakened from it’s over 20 years lasting “deep sleep”. The main problem for the moment is to find enough members to support the work. For the control units the work within ISO/TC 161 “Controls” started three years ago and is running together with the support of various US-

groups very well. This support would also be very helpful for the work within ISO/TC109 for forced draught burners.

All members of EHI have products in their sales program with are on the latest advanced technology stage in the various areas. But the market will not accept this offer none restrictively. High tech-products are of cause more expensive as low tech-products. But the EHI-members have since the beginning of the 50<sup>th</sup> of the last century invested a huge amount in safe and environmental friendly products. They had accompanied personally or via the former associations the standardisation process intensively. The EHI-members had pushed resp. will also push in future the various standards to get a common agreement e.g. for NOx-emission levels, efficiency levels, etc.

As a heating appliance is only one part of a heating system the goals of the Kyoto protocol can only be reached by taking into account the whole installation for the heating system and the hot water preparation. EHI therefore not only take care of the product standards, also the so called system standards - e.g. CEN/ TC 89 for the building side or CEN/TC 228 for the heating system side – and the hot water production – CEN/TC 57, CEN/TC 109 and CEN/TC 164 – are on the target list of EHI. Furthermore in close dialog with the responsible departments in the EC-Commission the general framework is discussed how to save energy, how to reduce emissions, etc.

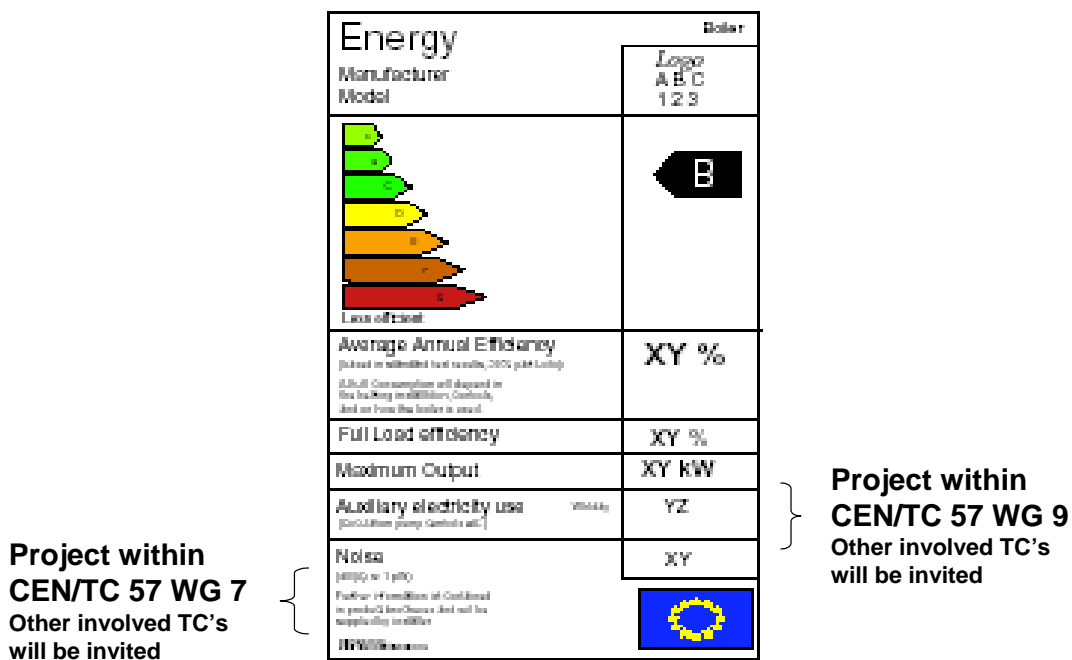


Figure 8: Proposal of a labelling fiche

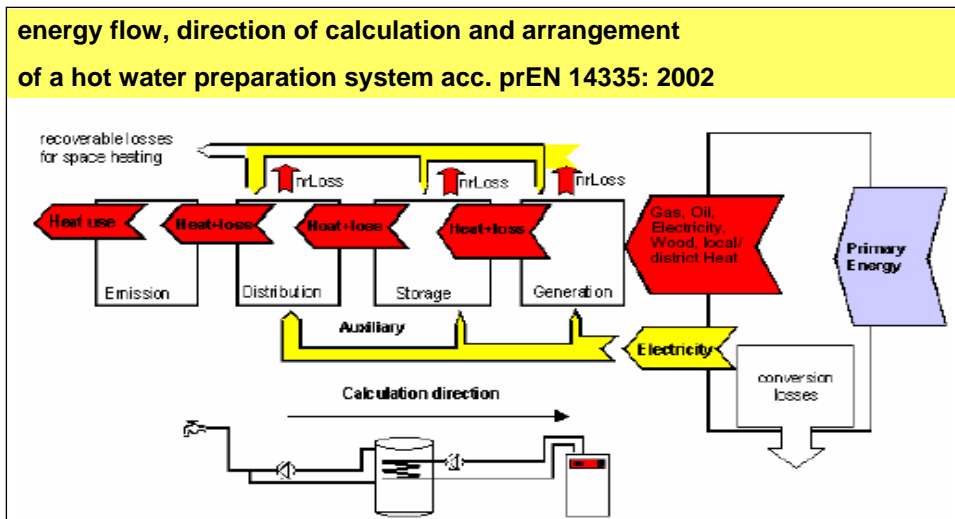


Figure 9: Energy flow, direction of calculation and arrangement of a hot water preparation system acc. prEN 14335: 2002

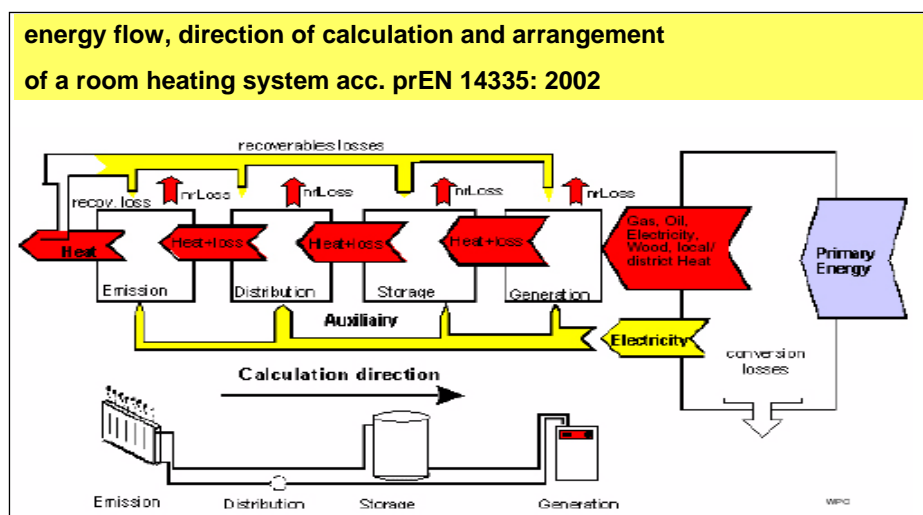


Figure 10: Energy flow, direction of calculation and arrangement of a room heating system acc. prEN 14335: 2002

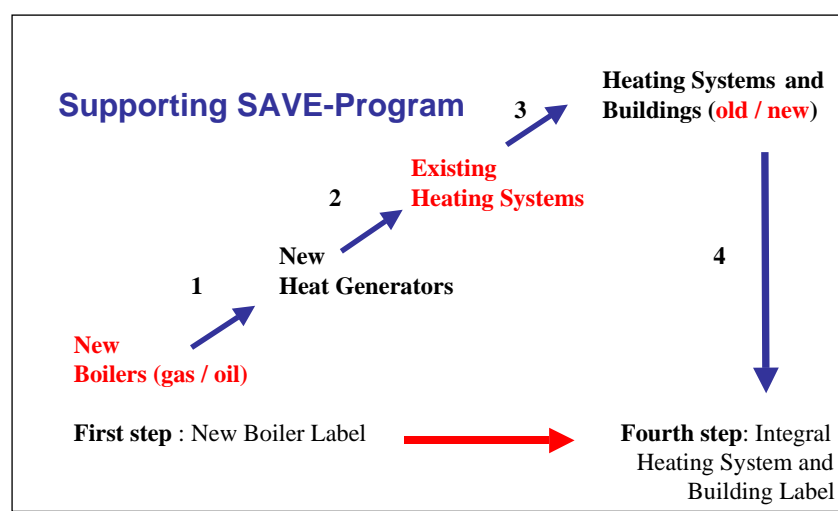




Figure 11: Step by step labeling: starting with the single product to reach the labeling of the integral heating system.