

Installed stock of heating systems and European heating label



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European Heating Industry**

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EHI brings together manufacturers of heating systems in Europe



125 000
people employed
directly by the industry

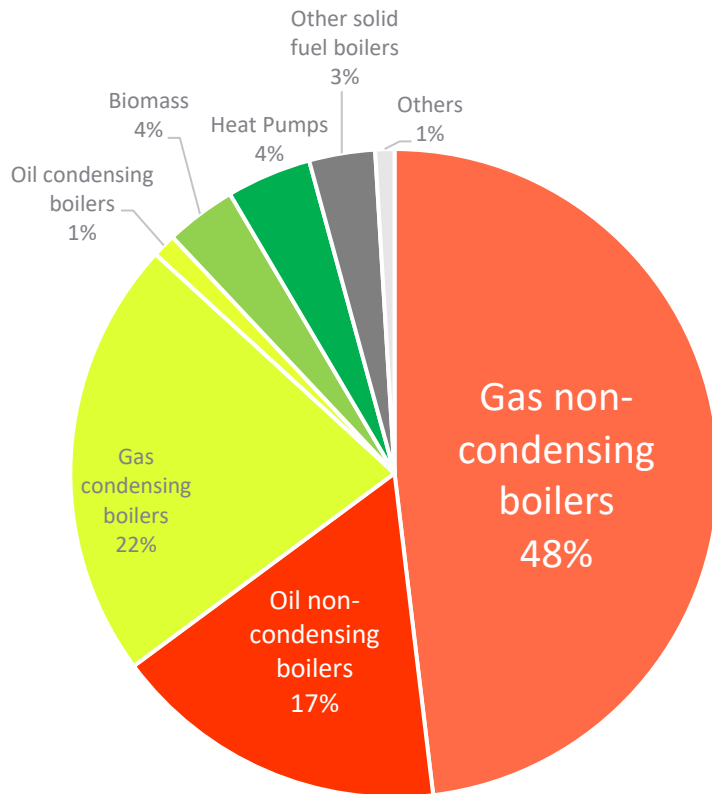
1 billion €
yearly investments in RDI

28.5 billion €
turnover / year



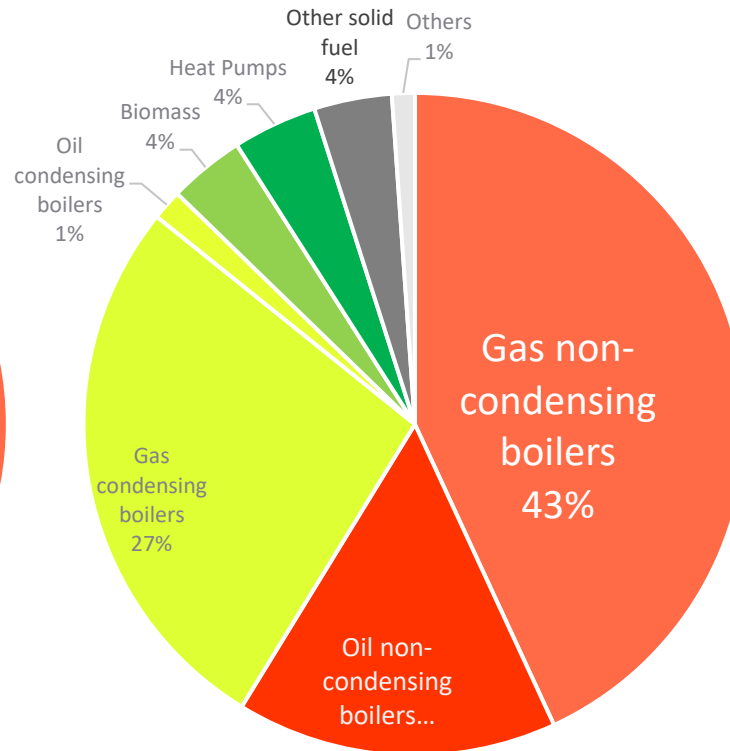
Our members represent 90% of EU market for
heat & hot water generation, covering a wide
range of technologies

Installed stock of heaters in the EU 27 across the years



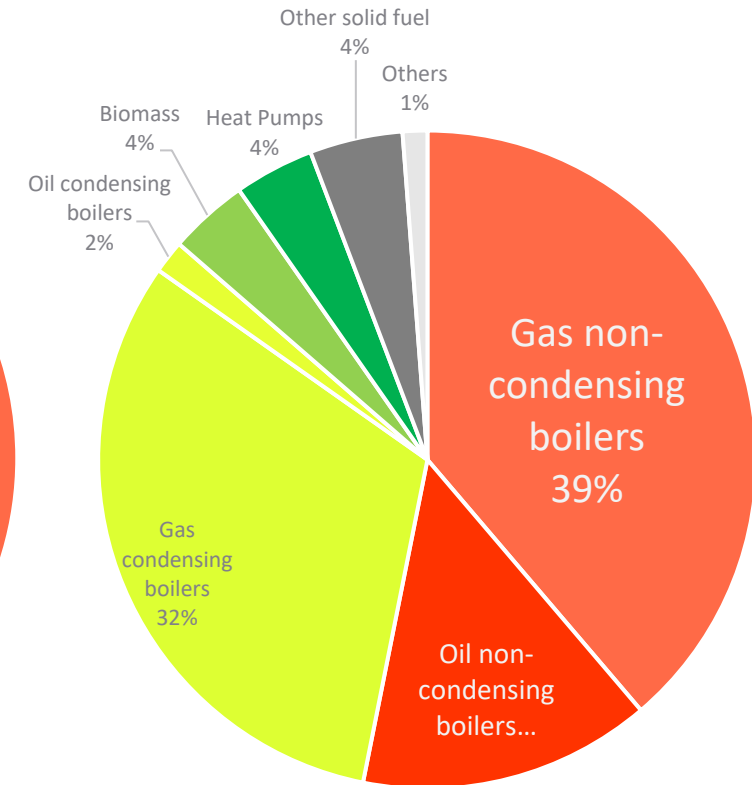
Year 2015

101,5 Mio space heaters
69 % inefficient, > 70 mio



Year 2017

103,4 mio space heaters
63 % inefficient, > 65 mio



Year 2019

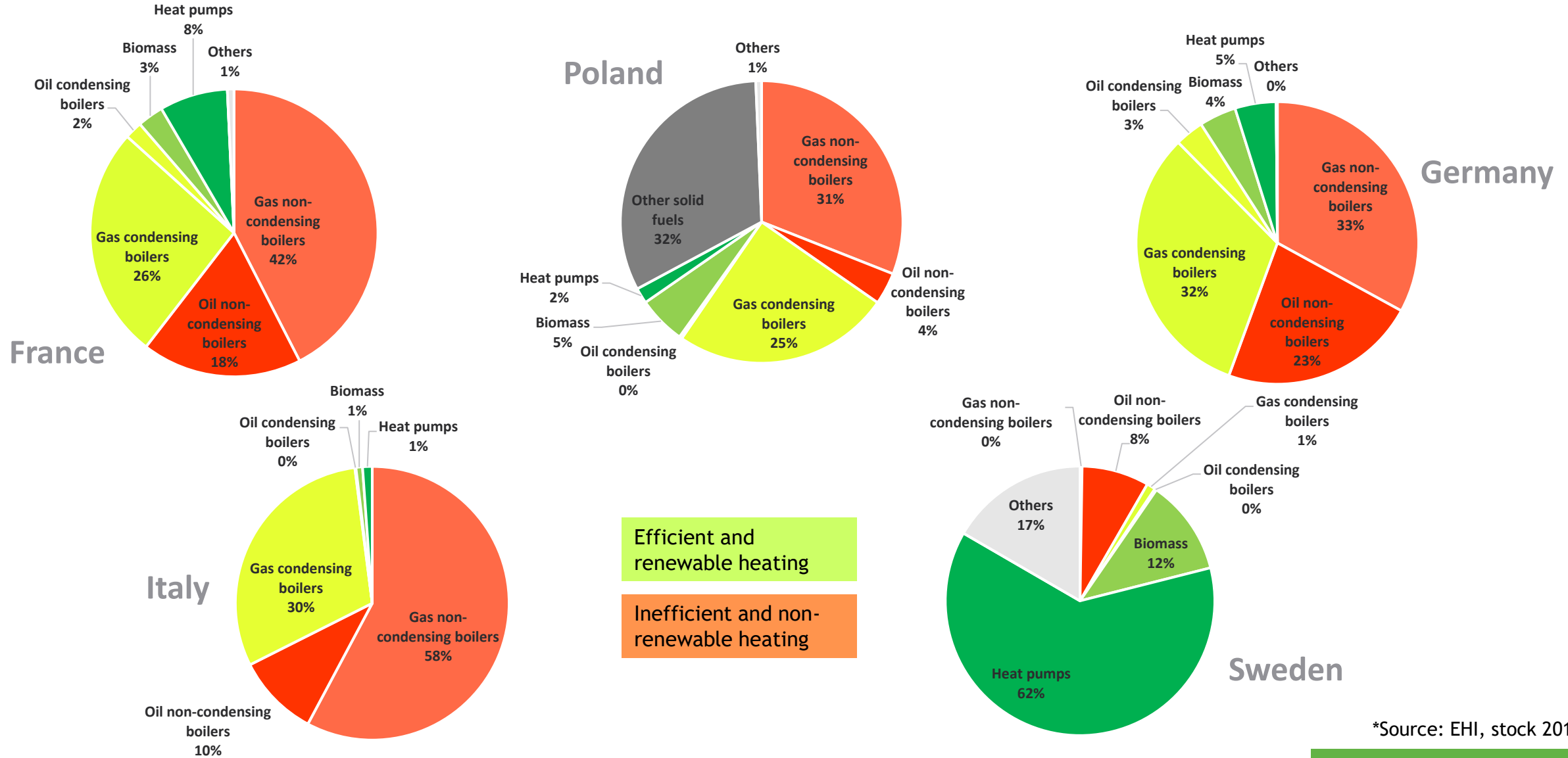
105,7 mio space heaters
58% old & inefficient, > 61 million



Source: EHI.
Colours based on
the energy label for
new heaters.

Replacement too slow (4%/year) → at least 6% needed for 2030

Diversity of the installed stock of heaters in EU Member States



*Source: EHI, stock 2019

Some of the challenges to a faster replacement rate:



1. **Low consumer awareness** of energy efficiency & their appliance;
2. **Capacity/capability** e.g.: lack of installers to handle a 'renovation wave'; installers' skills update;
3. **Financial** e.g.: upfront investments & energy prices for end-users.
4. **Poor energy performance** of buildings: most built before 1960s, when no EPB standards.

Focus on consumer awareness



Recent CenterData study on purchase decisions on heating appliances (Oct 2021, 5 EU countries: DE, FR, IT, BG, PL)

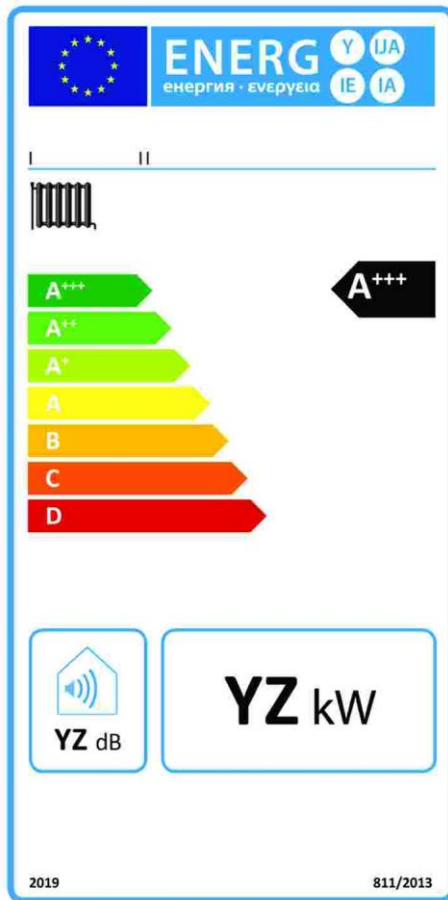
- **Energy Label** is perceived as more informative rather than being used as a comparison tool;
- **Installers** seem to play an important role in increasing understanding of the label;
- **Specifics of building** determines choice of an appliances versus another;
- Only 8% of recent buyers replaced a boiler with e.g. a heat pump;
- With costs, energy performance is the most important aspect for consumers, but shows limited switching to more efficient technologies.



HARP was conceived as a tool to raise consumer AND installers awareness about the efficiency of heating systems installed.

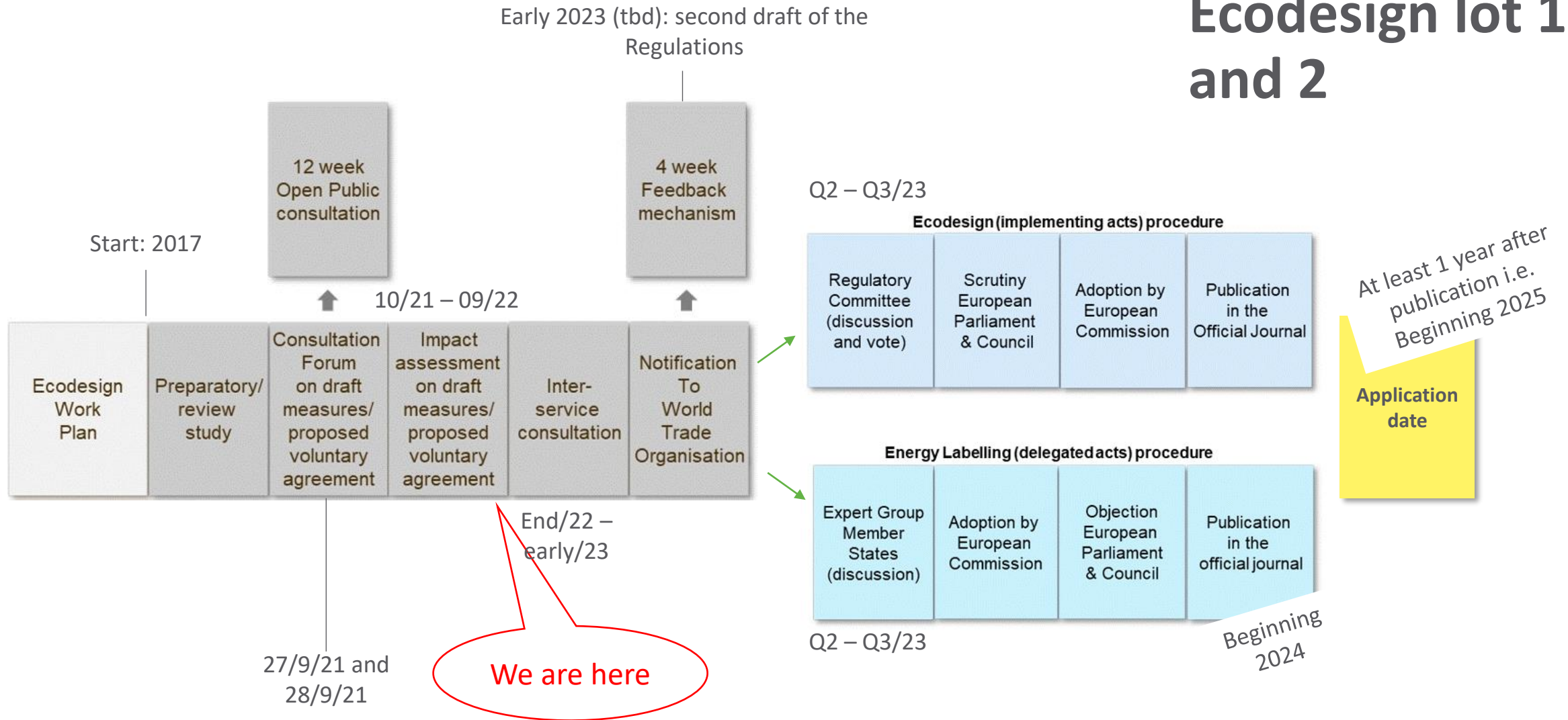
Knowledge is power: knowing the efficiency of your (old) heating system is the first step to improve it.

The European Heating Energy Label



- Commission delegated Regulation N°811/2013
- Mandatory label for new space & water heaters placed on the market from 26 September 2015.
- 26/09/2015: energy classes range from A++ (most efficient) to G (least efficient).
- 26/09/2019: energy classes from A+++ to D.
- Ongoing revision

Ecodesign lot 1 and 2



Various options to decarbonise buildings. Different buildings = different heating solutions & energy carriers



Electric heat pump

Higher Electrification



Hybrid

Higher Electrification
Green gas/ H2 compatible



Condensing boiler

Green gas/ H2 compatible



Thermally driven heat pump

Green gas/ H2 compatible



Solar thermal

Solar Energy



Biomass boiler

Bioenergy



Efficient hot water storage

Higher Electrification



Micro CHP

Green gas/ H2 compatible



Fuel cell

Green gas/ H2 compatible



Smart temperature control

Smartness & Comfort



Radiators

Comfort



Surface heating and cooling

Comfort

Thank you for your attention!



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 **HARP**
Heating Appliances Retrofit Planning