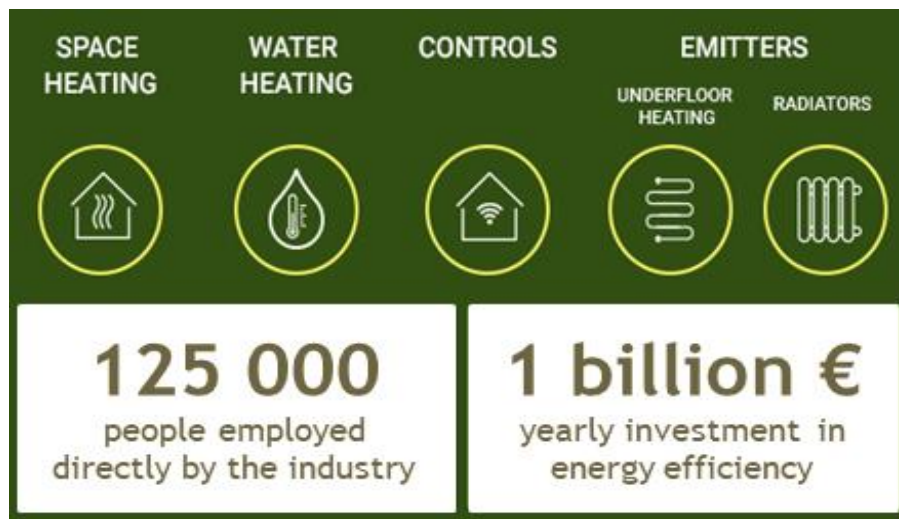


EHI brings together manufacturers of heating systems in Europe



Can we decarbonise buildings by 2050?

► Ambitious goal!

Why? Because buildings represent



41% of final energy consumption

36% of CO2 emissions

Of Europe

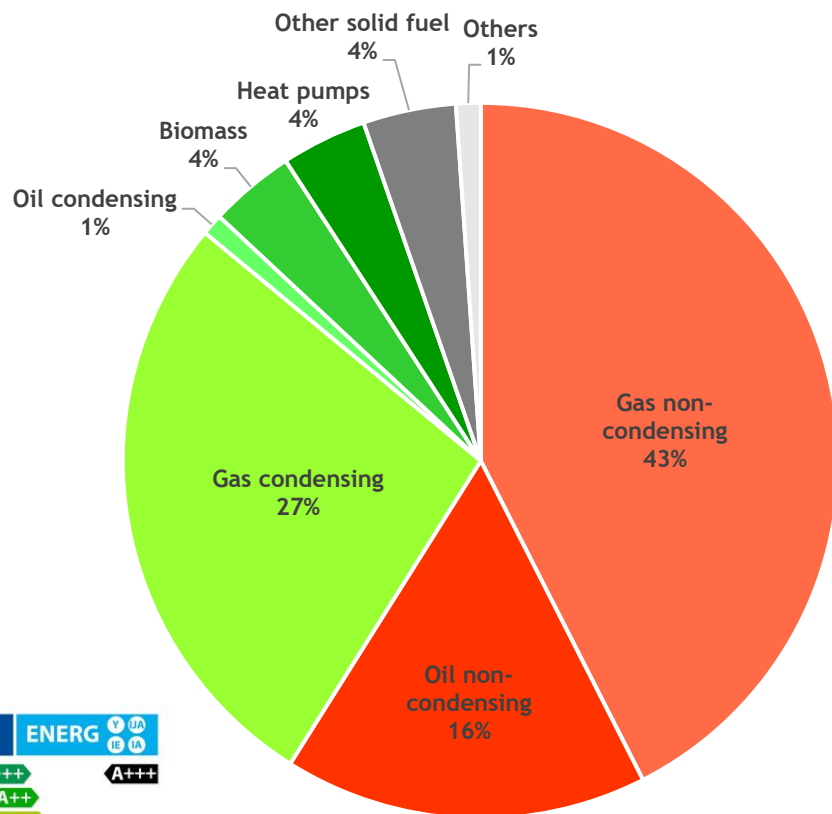


Over **80%** of this energy is used to heat buildings and produce hot water

What is the challenge for heating?

- ▶ Over 64% of heaters in Europe are **old and inefficient**

Total EU 27 - 2017



Over **66 million** appliances in classes C, D or lower

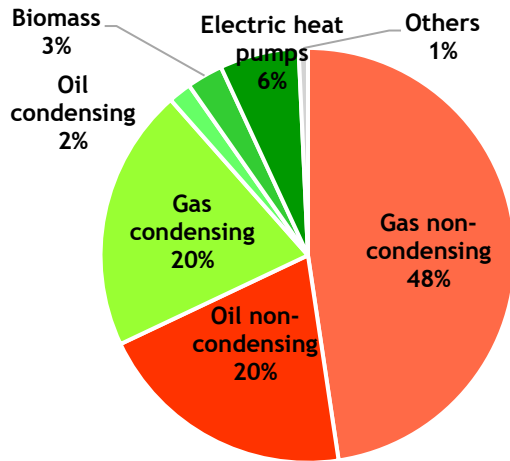
And this the macro picture

At national level there are **many differences**

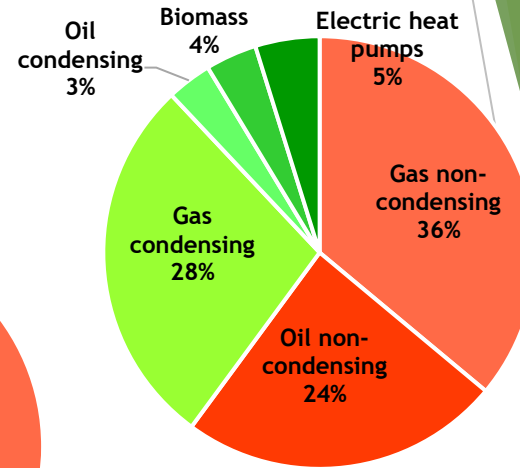


Please note: colours based on the EU energy label for new heaters.

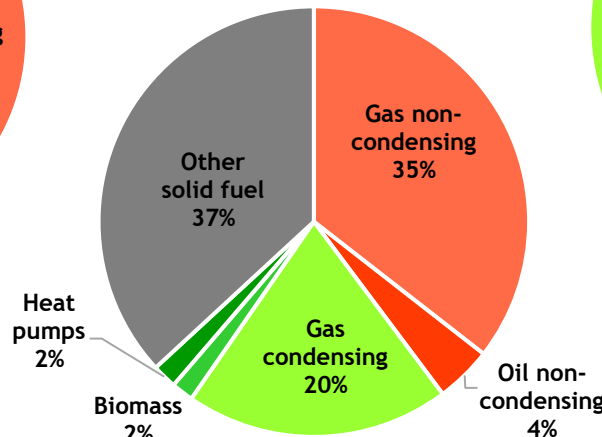
Different installed stock of heaters in Europe...



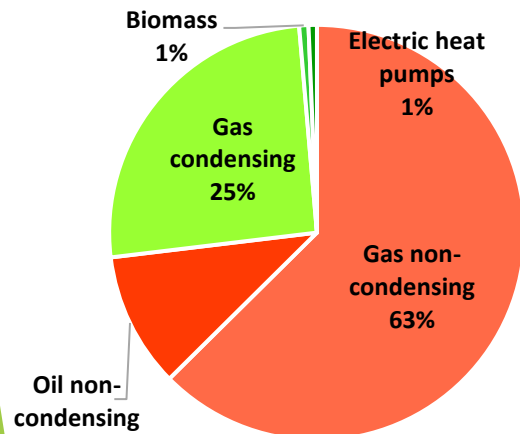
France



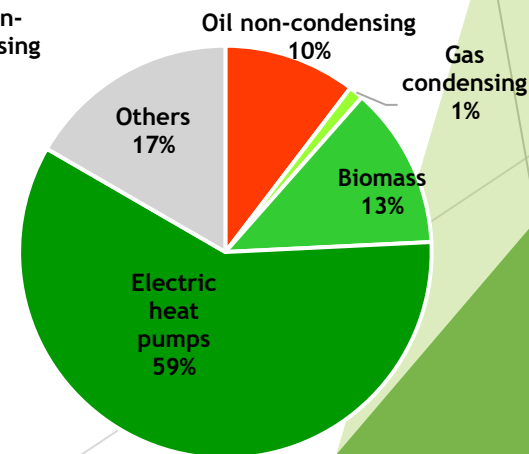
Germany



Poland



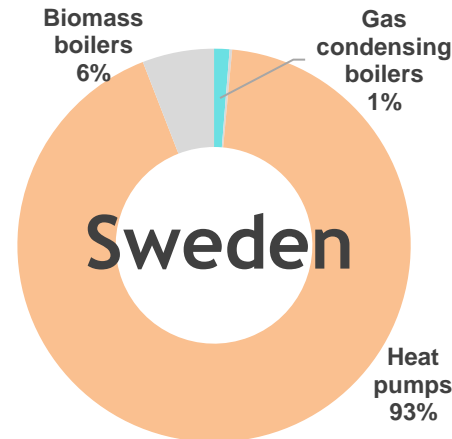
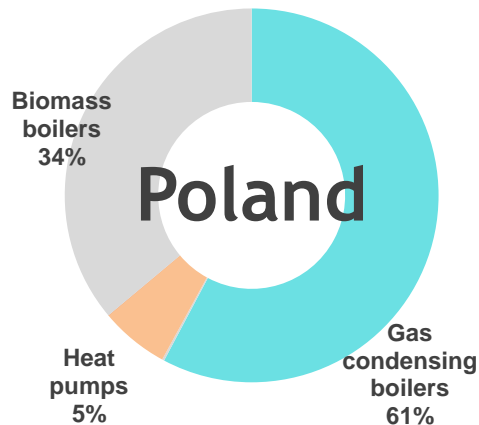
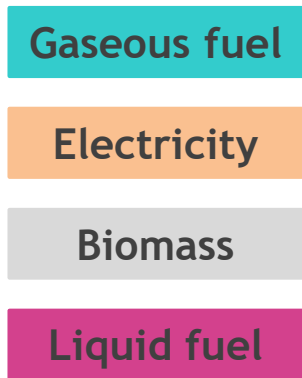
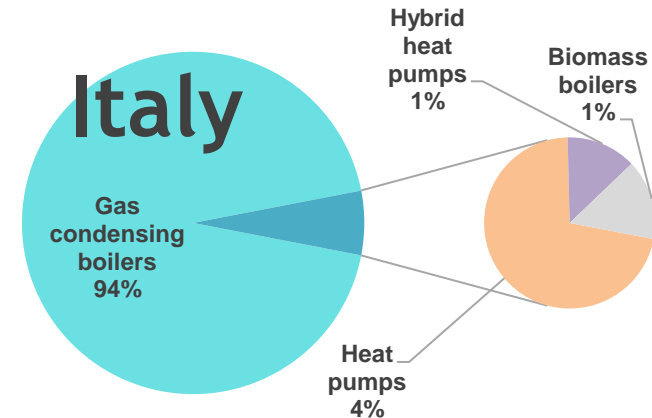
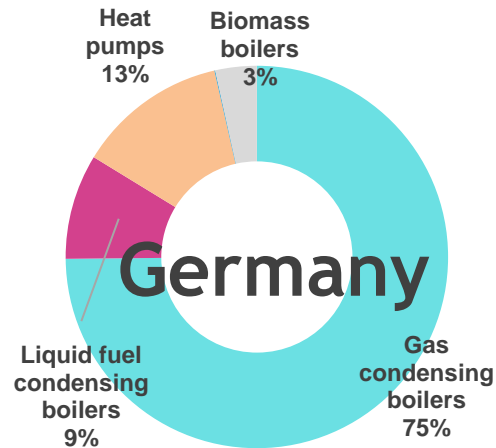
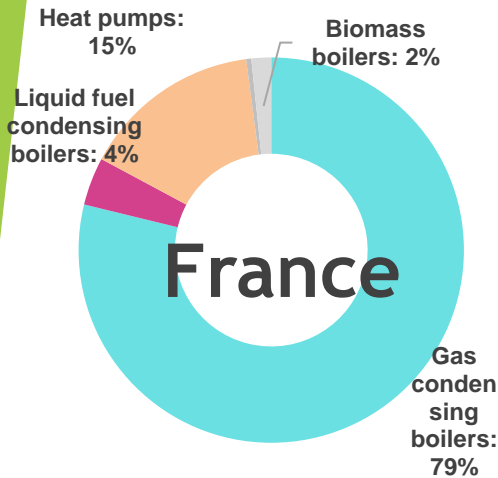
Italy



Sweden

Please note: colours based on the EU energy label for new heaters.

... different characteristics of the heating market in Europe



Source: EHI 2018

Hence: different solutions are needed

What are the solutions?

- ▶ Renovation Wave: **replace old and inefficient** heating equipment with new and efficient technologies
- ▶ You have probably heard their names



- ▶ And these are just some examples!
- ▶ Accelerating the replacement of old and inefficient appliances from 4 to 5% = **40% CO2 cuts by 2030!**

To achieve full decarbonisation for EU buildings we also need

- ▶ Better insulation
- ▶ Very important: **decarbonise energy carriers** used for heating!
This means:
Green electricity
Green gases
 - ▶ This is where **biogas** comes to play, as well as hydrogen

Efficient heating systems can already run on 100% renewable biomethane

- ▶ **Use of existing infrastructure** - gas distribution systems are designed to bring energy to Europe's buildings.
- ▶ Modern heating systems: **no adaptation** required
- ▶ Important: use **efficient heating appliances** - efficiency is key to achieve decarbonisation!

How do we get there?

Some relevant policies

- ▶ Accelerate replacement of **old and inefficient heating** installations e.g. **scrappage schemes**
- ▶ Favour production of **renewable and decarbonised gases** and use them for heating
 - ▶ EU-wide targets for decarbonised and renewable gases
 - ▶ Support installation of heating technologies working with these gases
 - ▶ Develop technical rules for the interaction between these gases and heaters
- ▶ Enable and promote **digital heating** systems. E.g. hybrid heat pumps can switch from electricity to gas depending on renewables availability.



**We can
decarbonise
Europe's
buildings by
2050!**

