



Future of gas appliances

2030 road map

marcogaz
TECHNICAL ASSOCIATION
OF THE EUROPEAN NATURAL GAS INDUSTRY

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A 2030 road map to define which gas appliances will be the most appropriate regarding EU targets

Scope

Uses : space heating, water heating, cooling, industrial process and power production

Cooking and mobility are excluded

Markets : domestic, commercial, industrial sector



Gas advantages to be part of energy transition

Developed networks providing high storage capacity

Reactive and immediately available energy

Competitive and cost-effective

Able to balance intermittent renewables

Least carbon-intensive of the fossil fuels

Is becoming increasingly renewable and decarbonized



Achieve EU climate goals in a resilient, efficient and affordable way

3 pillars



Energy Efficiency

- ✓ Efficient generation
- ✓ Retrofitting
- ✓ Low consumption new buildings
- ✓ Sobriety



Renewable Gas

- ✓ Renewable methane and Hydrogen
- ✓ Balanced energy mix
- ✓ Security of supply



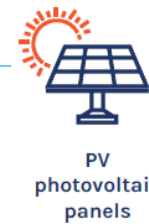
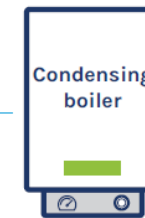
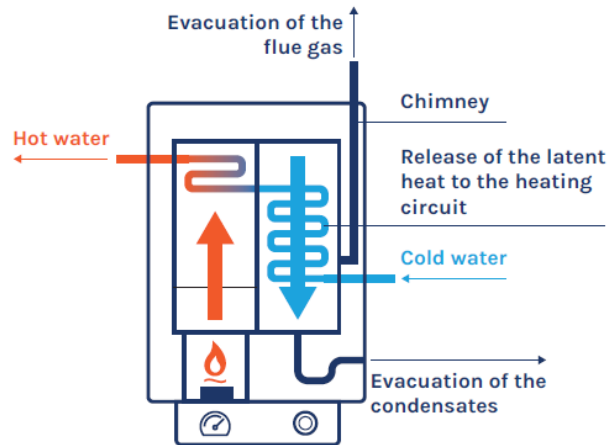
Smart Energy Systems

- ✓ Decentralization
- ✓ Local and circular economy and communities
- ✓ Digitalization

Gas appliances can rely on mature technologies

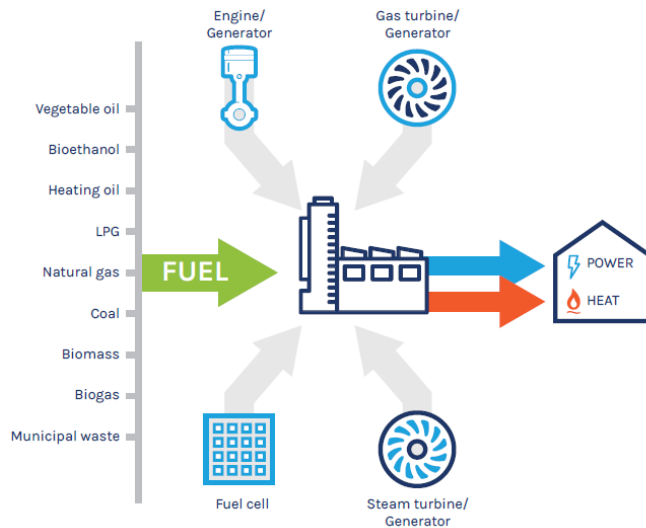
CONDENSING BOILER CAN BE COUPLED WITH ONE OF MORE SOLUTIONS

SCHEMATIC ILLUSTRATION OF A GAS CONDENSING BOILER



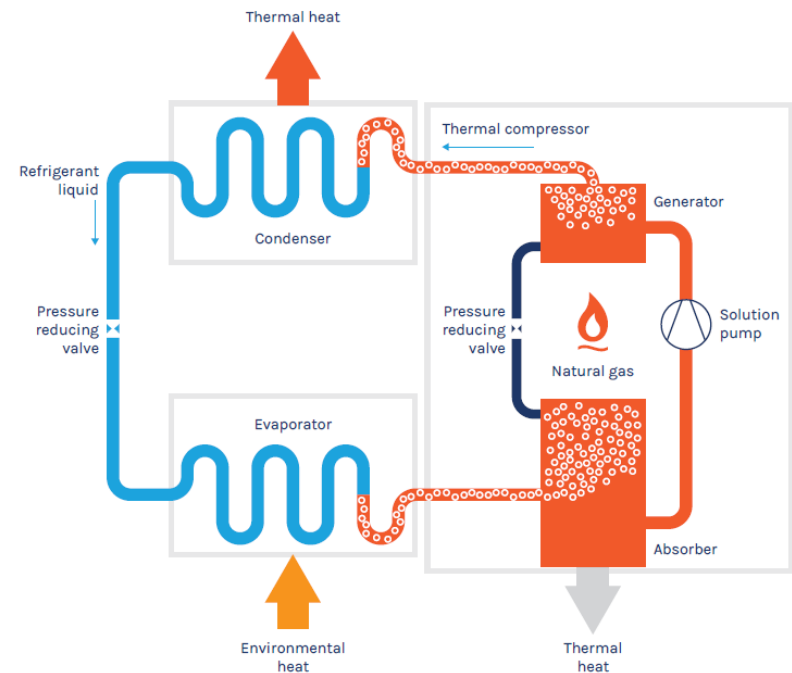
And new ones are coming

THE COGENERATION PRINCIPLE

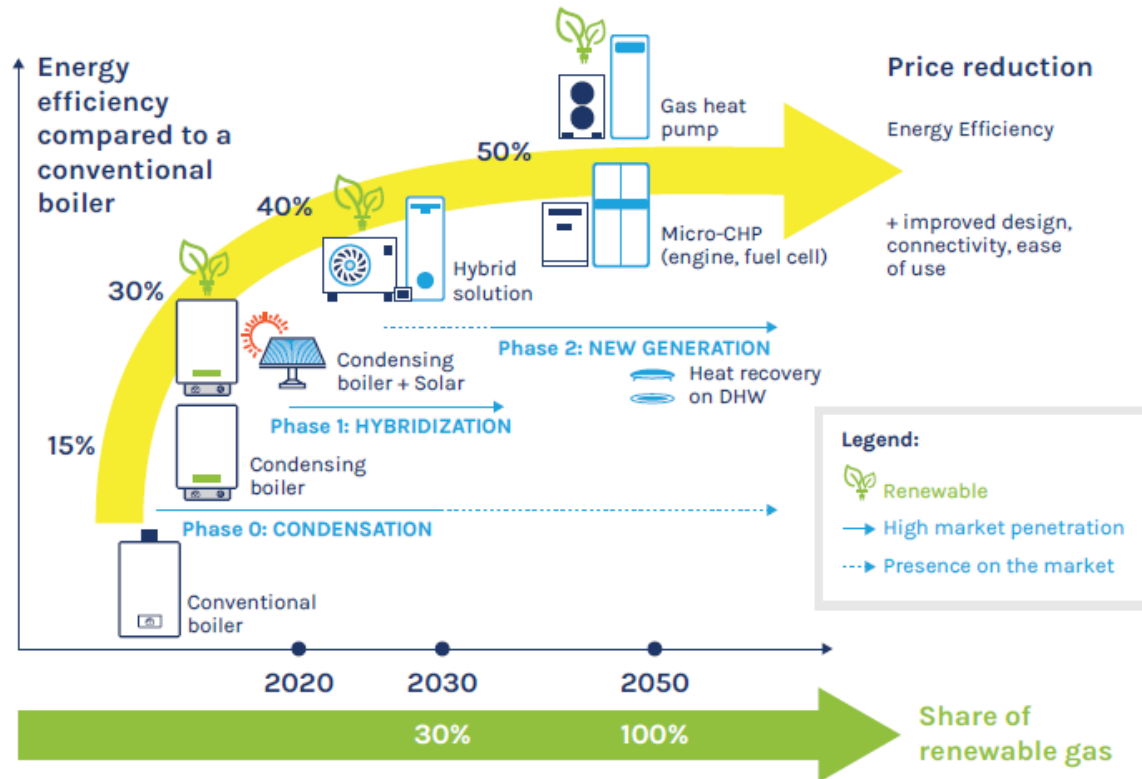


*CHP also runs on waste heat, geothermal, CSP (concentrated solar power) and nuclear energy sources.

GAS HEAT PUMP



Residential road map



- **Condensing boiler stays a very efficient technology, mature and robust**
- **Energy mix is entering buildings : solar coupling, hybridization, waste heat recovery**
- **CHP and Gas Heat Pumps markets to be developed by 2030**



Thank you !

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