



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING



Pathway to a Competitive European
Fuel Cell micro-CHP Market

**ENERGIZE YOUR Home -
with Advanced Fuel Cell
Technology**

**Efficient, Clean,
Affordable**

PACE Webinar 2020

28. October 2020

www.pace-energy.eu

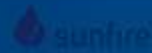


ENERGIZE YOUR HOME

with Advanced Fuel Cell Technology

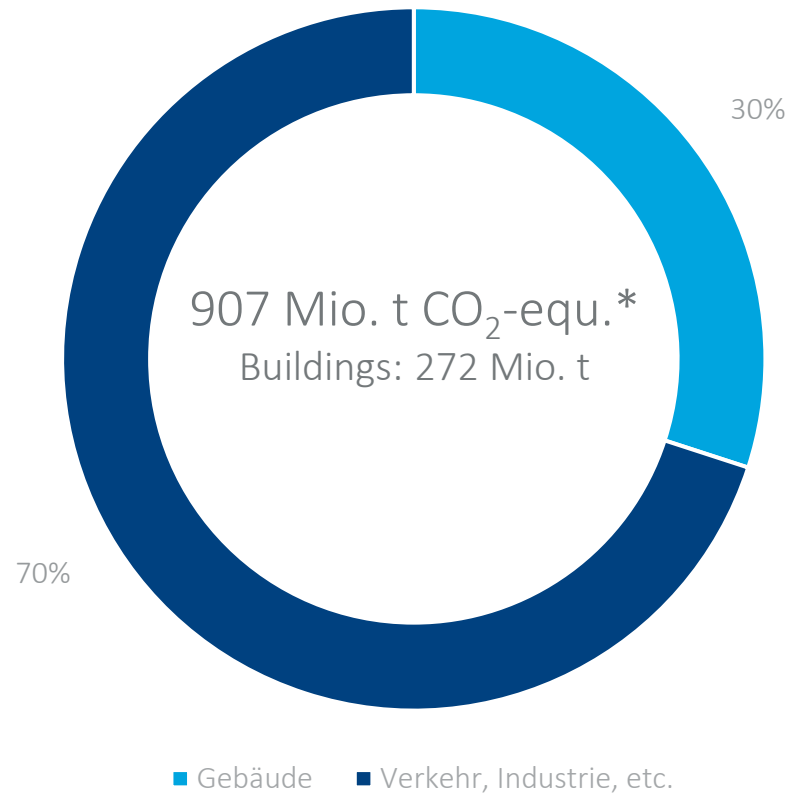
28.10.2020

Aron Guttowski / Sunfire

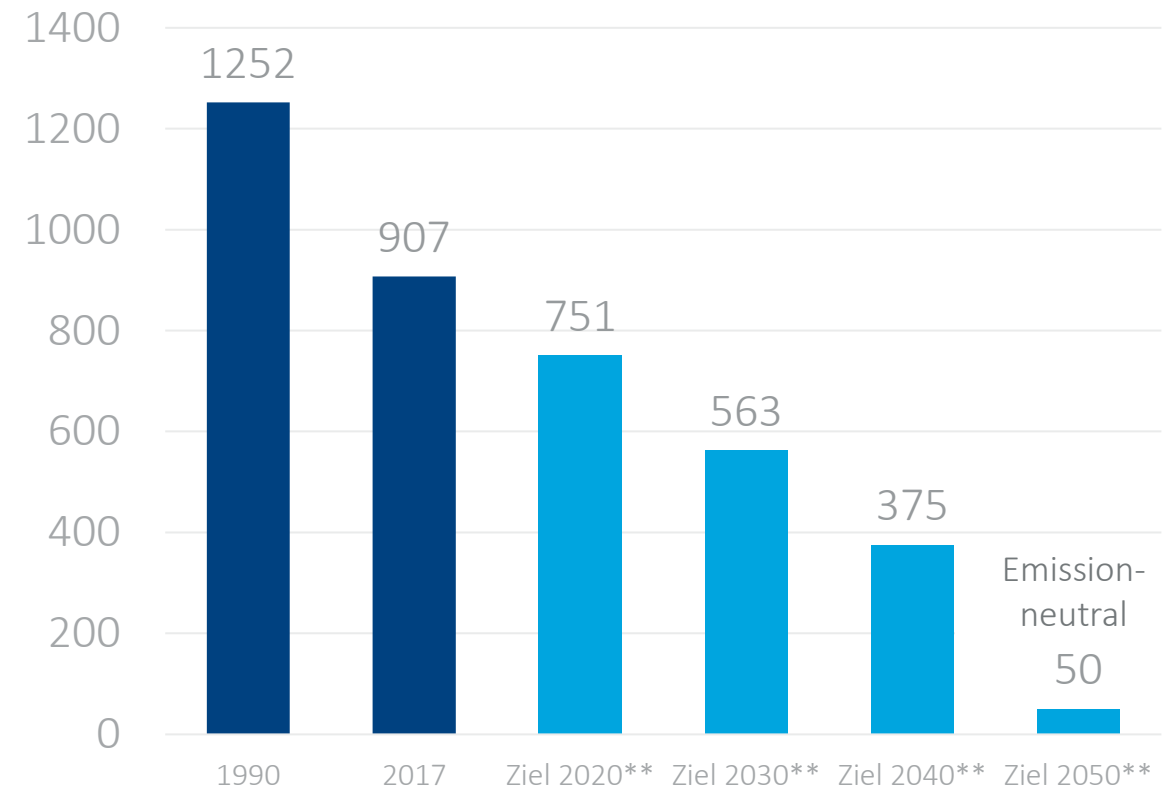


EMISSION - GERMANY

Emission by sector



Development of Emission since 1990 and targets towards 2050 in Mio. t CO₂-equ. (Germany)



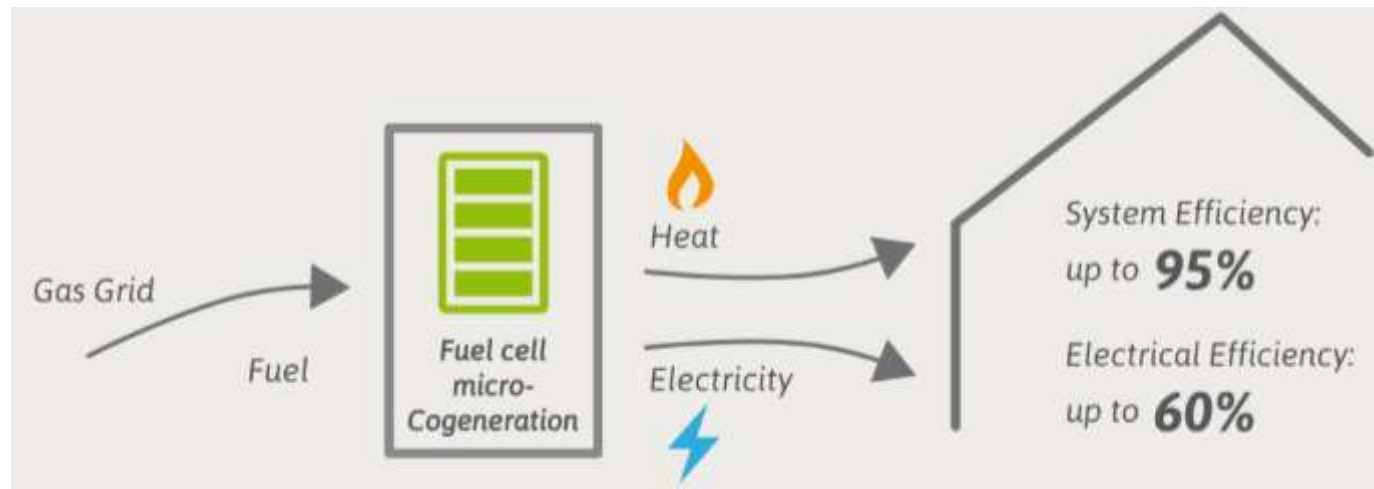
* im Jahr 2017 ** Ziele 2020 bis 2050: Energiekonzept der Bundesregierung (2010) Quelle: Umweltbundesamt

BENEFITS OF FUEL CELL TECHNOLOGY?

Heat & Electricity for your home

Fuel Cell Technology generates heat & electricity where it is needed and can be used directly.

Therefore it's a highly efficient way to deliver clean energy to homes. This will enable Europe to be 100% powered by renewables in the future.



Reducing of CO₂ emissions

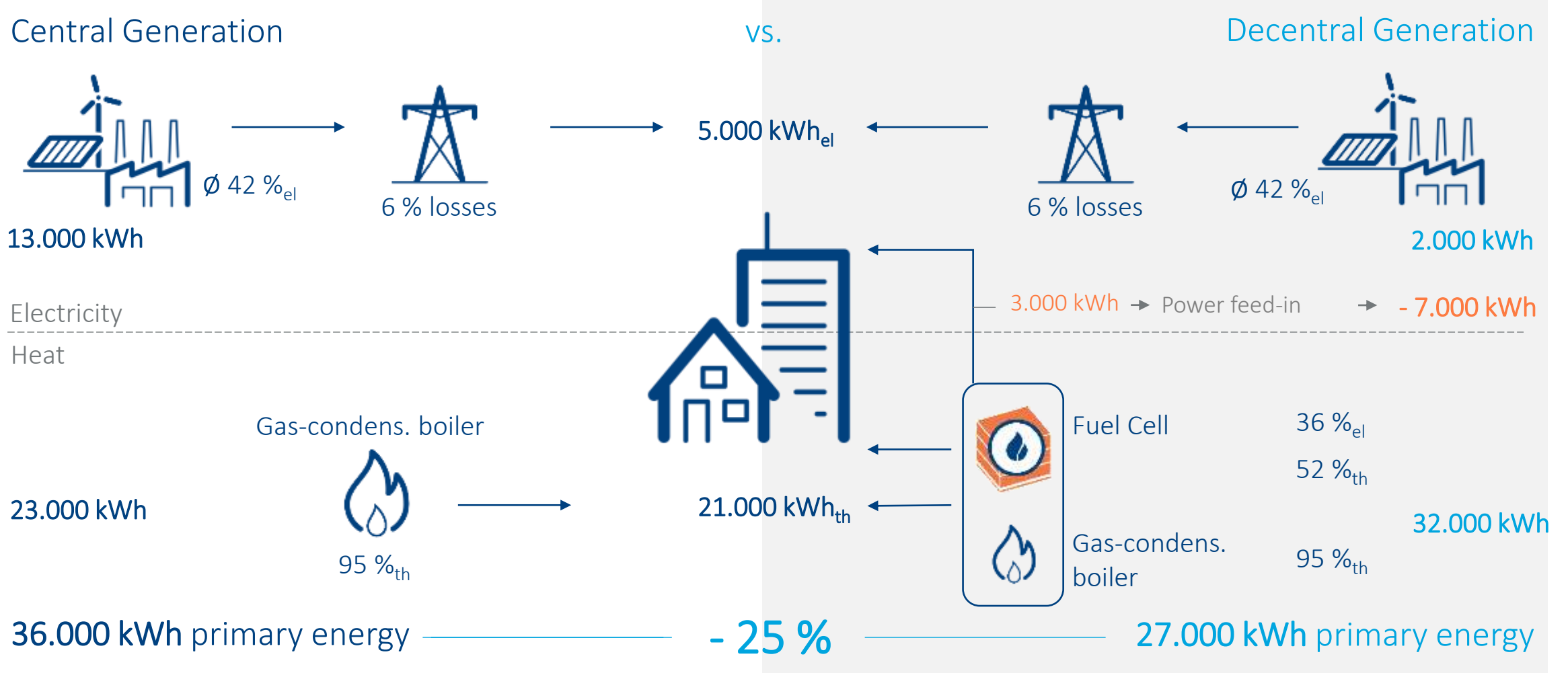
Saving primary Energy

Flexible operation with Natural-/LPG gas or pure Hydrogen

Energy generation where it is needed (no losses)

Covering increasing demand for electricity

EFFICIENCY BENEFITS OF LOCAL GENERATION



Quelle: Roland Berger Strategy Consultants, Advancing Europe's energy systems: Stationary fuel cells in distributed generation, Publications Office of the European Union, 2015 – A study for FCH JU

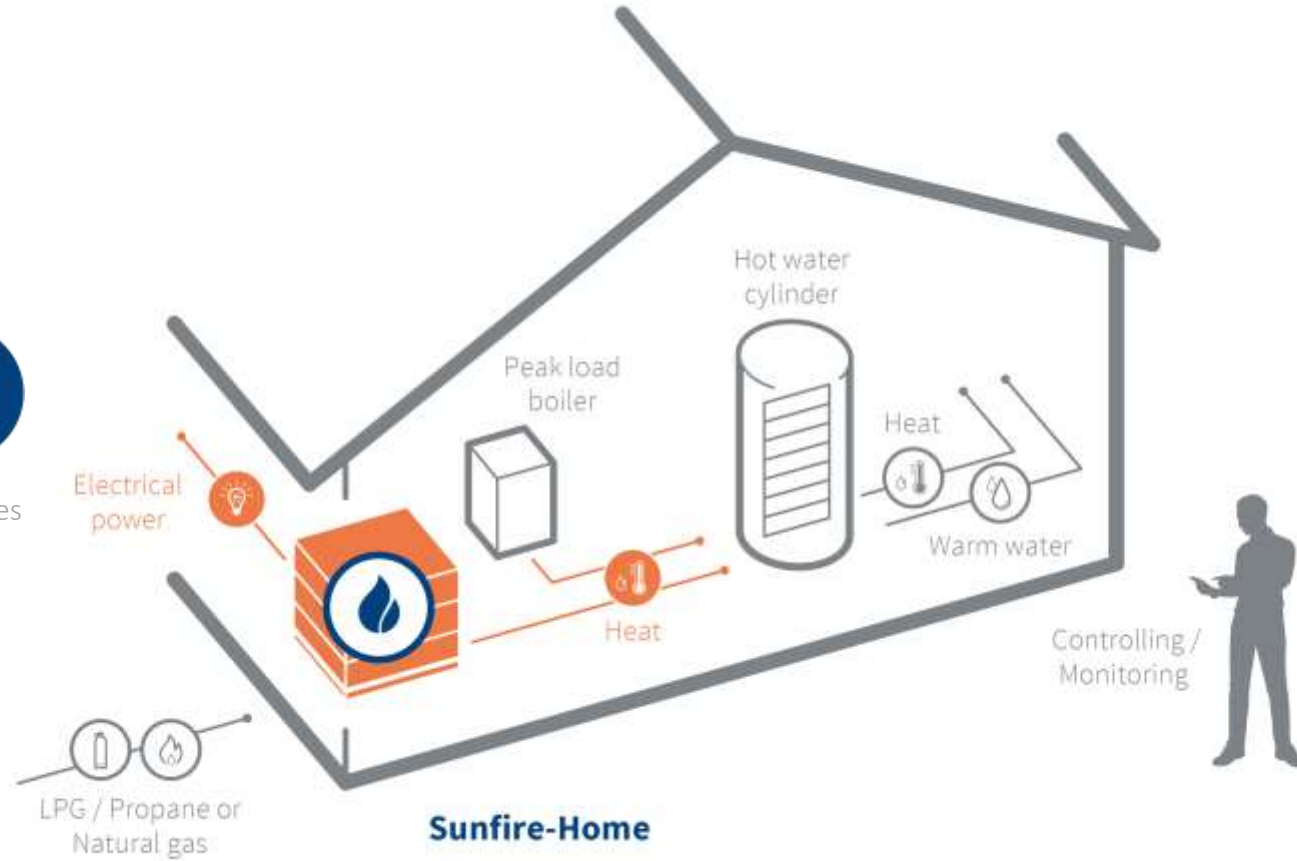
INTEGRATION IN YOUR HOME



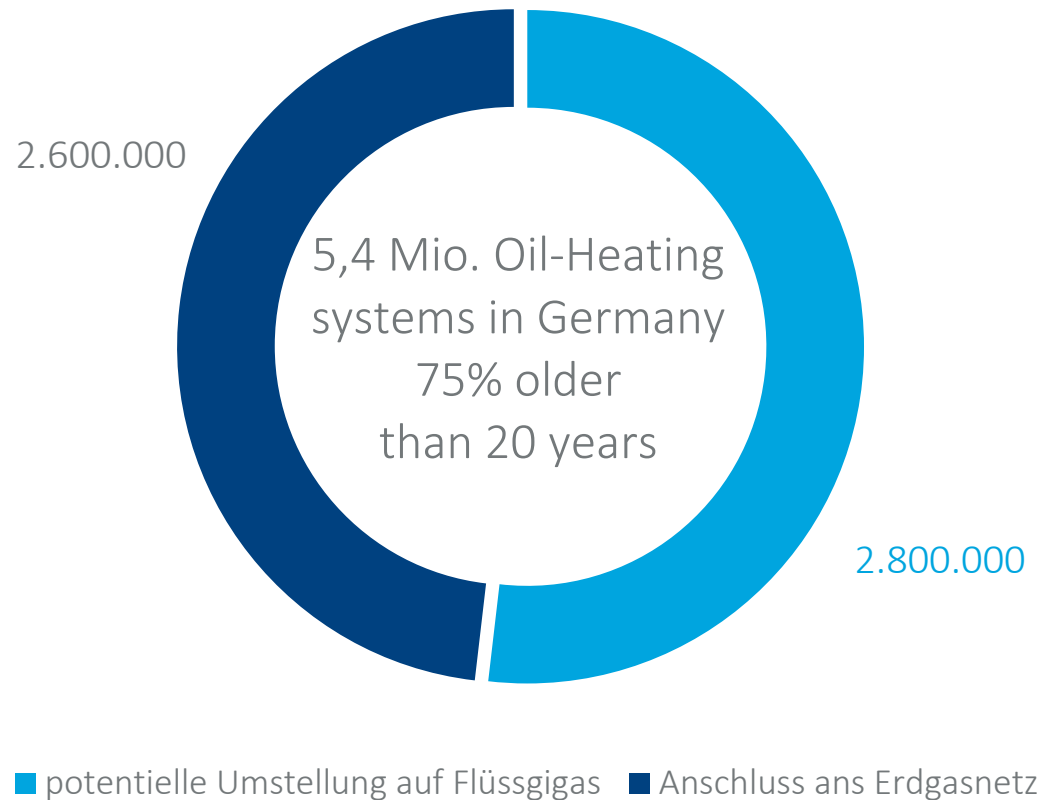
Charging



Appliances



OPPORTUNITIES FOR GERMANY & EUROPE



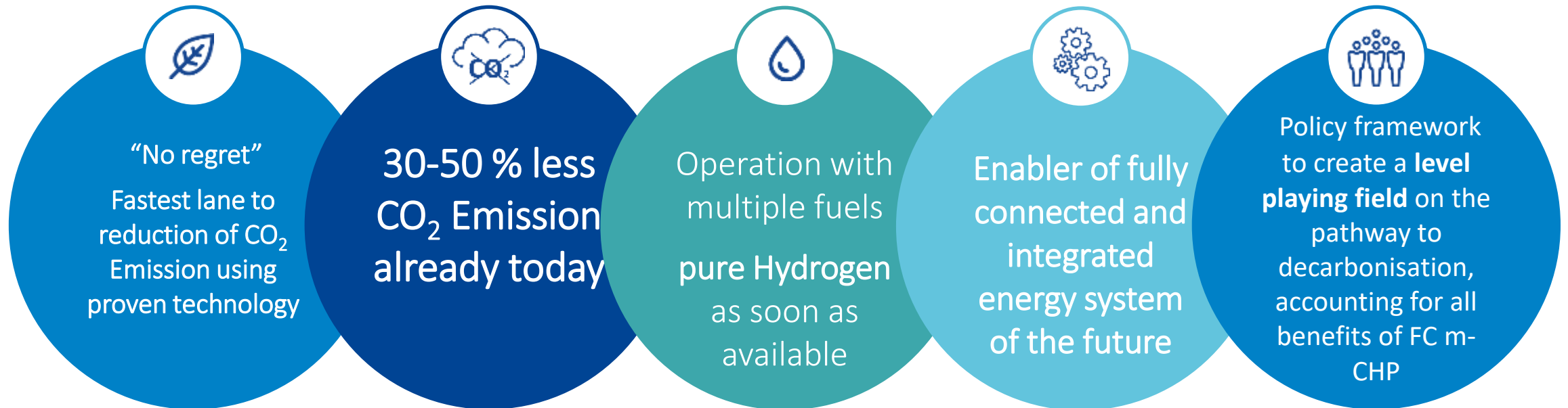
- Clients seek for independence from increasing electricity prices
- Clients invest in clean, efficient solutions to power their homes
- In combination with battery and solar up to 100% self-sufficiency

building sector comprises huge potential for reduction of CO₂ emissions (>30%)!

- **250 & 1400 Mio. t in Germany & Europe**

Source: Deutscher Verband Flüssiggas e.V. „Energiewende und Flüssiggas – Status Quo und Perspektiven“ (2018)
Bundesverband des Schornsteinfegerhandwerks – Zentralinnungsverband (ZIV) „Erhebungen des Schornsteinfegerhandwerks“ (2018)

ZUSAMMENFASSUNG



THANK YOU!

Aron Guttowski
aron.guttowski@sunfire.de

Sunfire GmbH · Gasanstaltstraße 2
01237 Dresden · Germany
www.sunfire.de

