



Federal Ministry
for Economic Affairs
and Energy



**MITTELSTAND
GLOBAL**
ENERGY SOLUTIONS
MADE IN GERMANY

energy solutions – made in Germany

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for Economic Affairs and Energy

eclareon GmbH

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Content

- The German Energy Solutions Initiative
- The German *Energiewende*
- Participating Companies

The German Energy Solutions Initiative

- Facilitates business partnerships in the field of renewables, energy efficiency technologies, smart grids and storage technologies
- Based on a **parliament decision** 2002 with the aims
 - to support SMEs
 - to distribute smart and sustainable energy solutions
 - to contribute to international climate protection
- Coordinated and financed by the **German Federal Ministry for Economic Affairs and Energy**

The German Energy Solutions Initiative

AHK trade missions to your country

- One-day seminar
- Individual business meetings

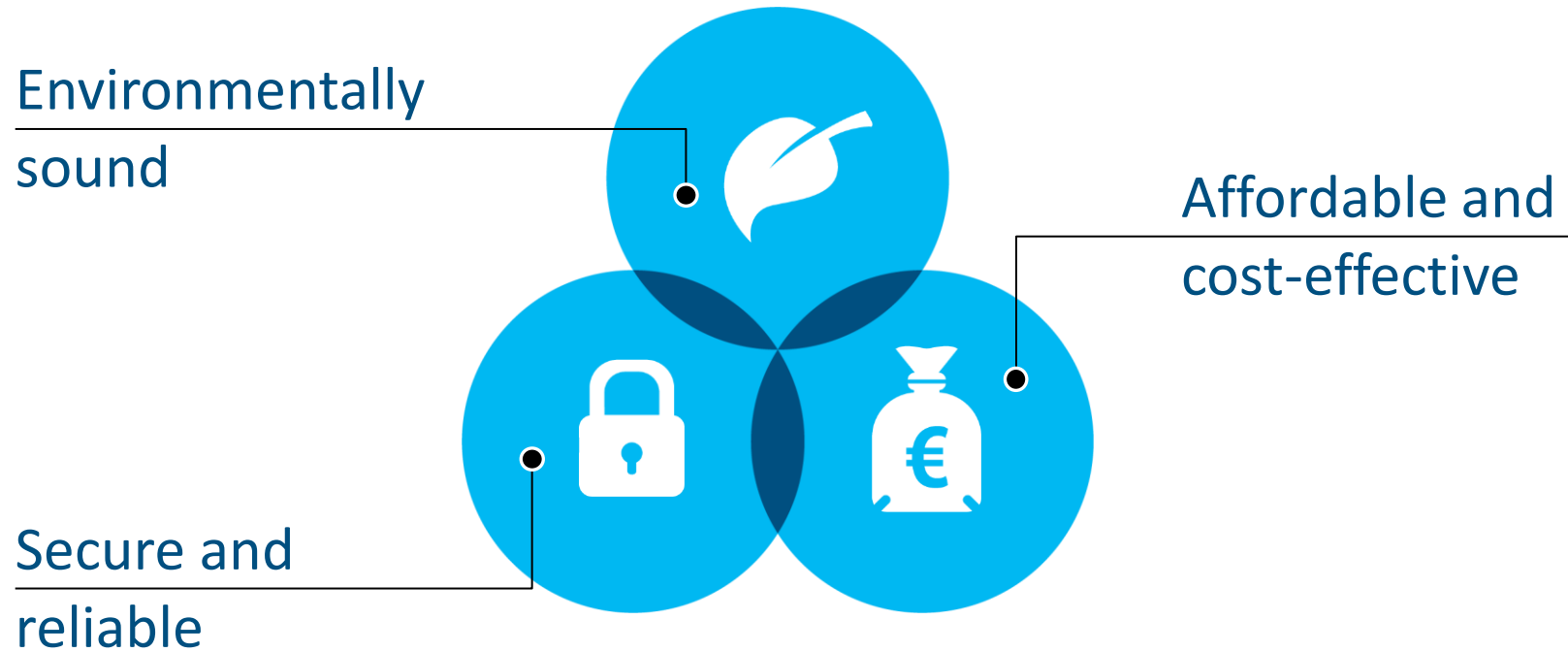
Foreign trade fairs

- German Pavilion with German exhibitors, information forum and events



The German *Energiewende*

The *Energiewende* combines security of supply, costeffectiveness and environmental protection



▪ Source: BMWi

The German *Energiewende*

The energy transition triad combines efficiency, direct use of renewables and sector coupling

Efficiency first



Direct use of renewables



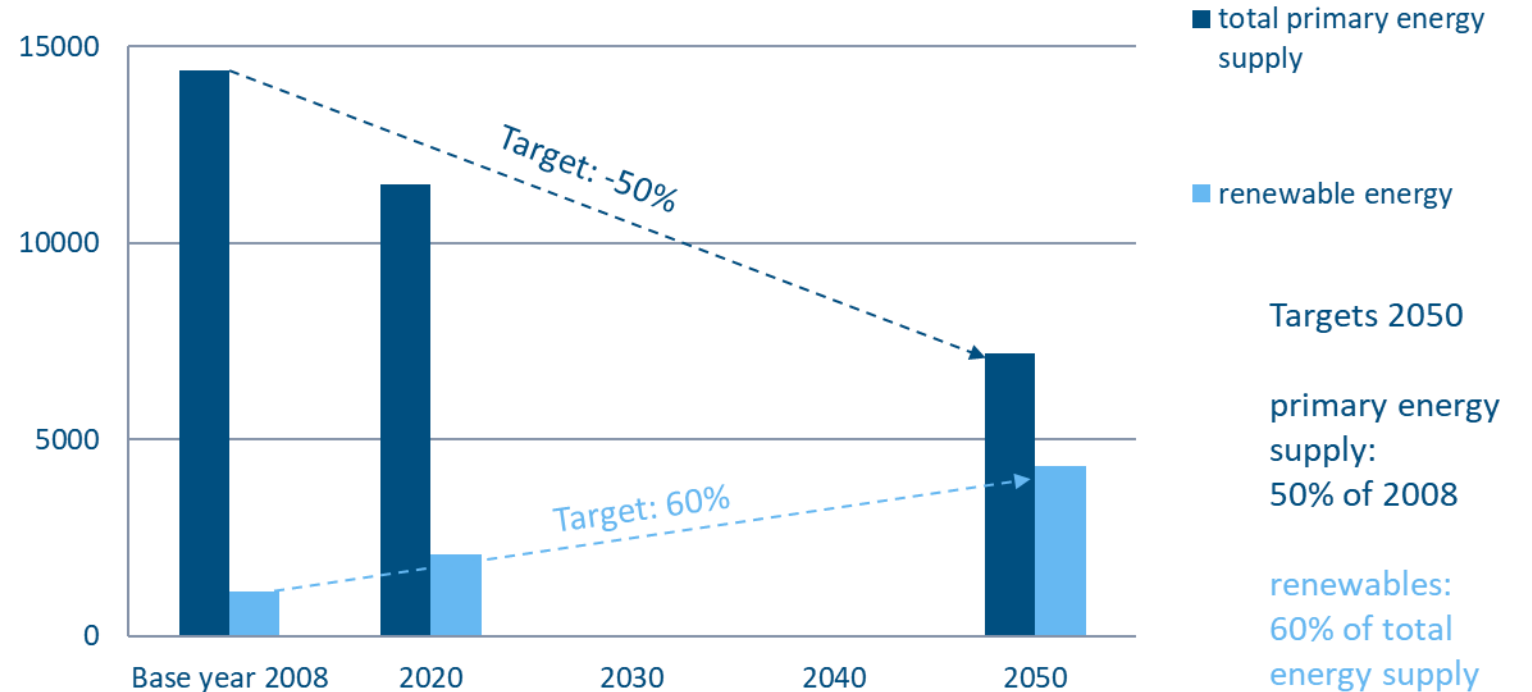
Sector coupling



Source: BMWi 2017

The German *Energiewende*

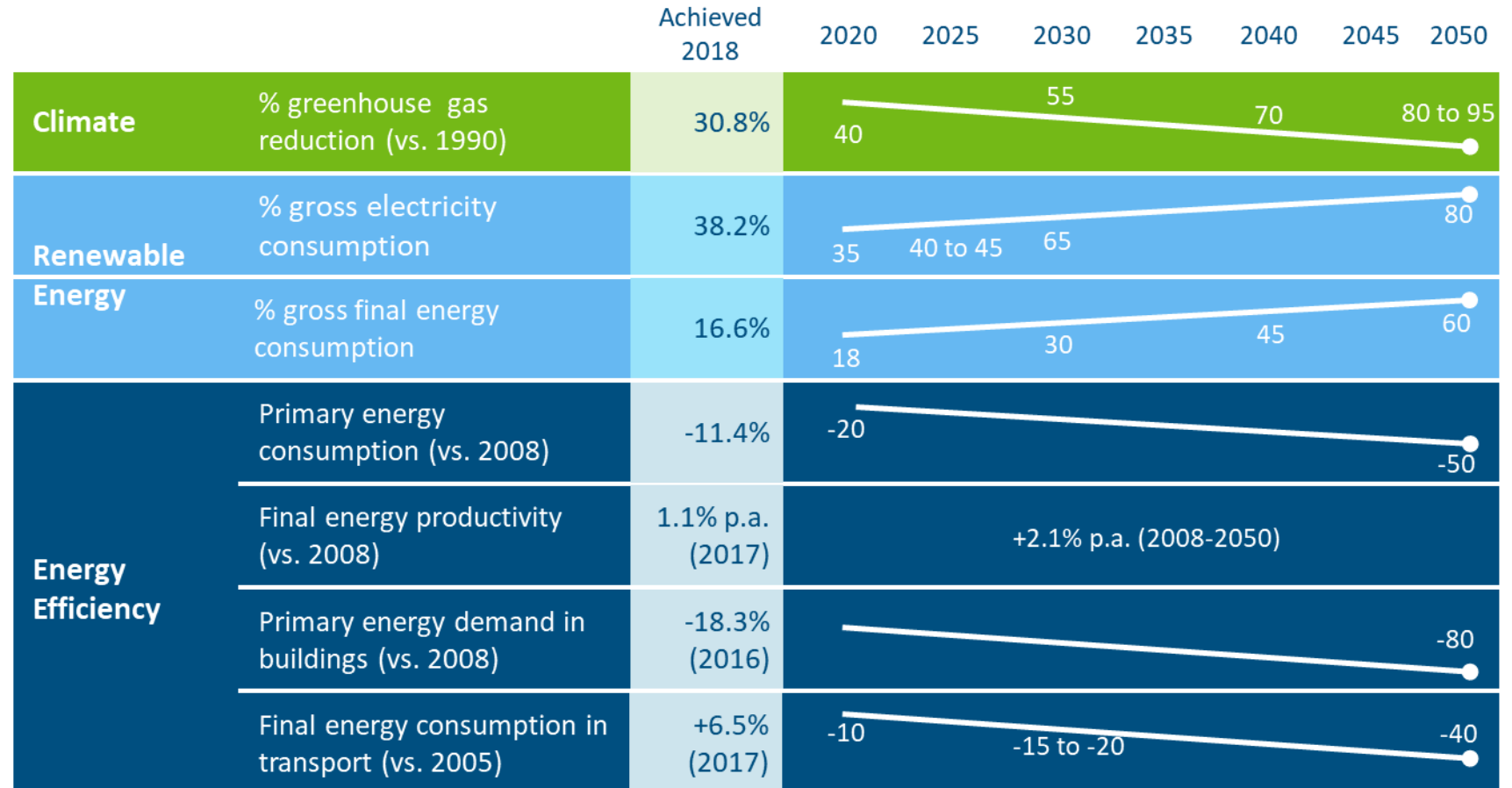
Energy consumption will be reduced by half, while renewables are to provide 60% of the energy supply



Source: Ecofys 2016

The German *Energiewende*

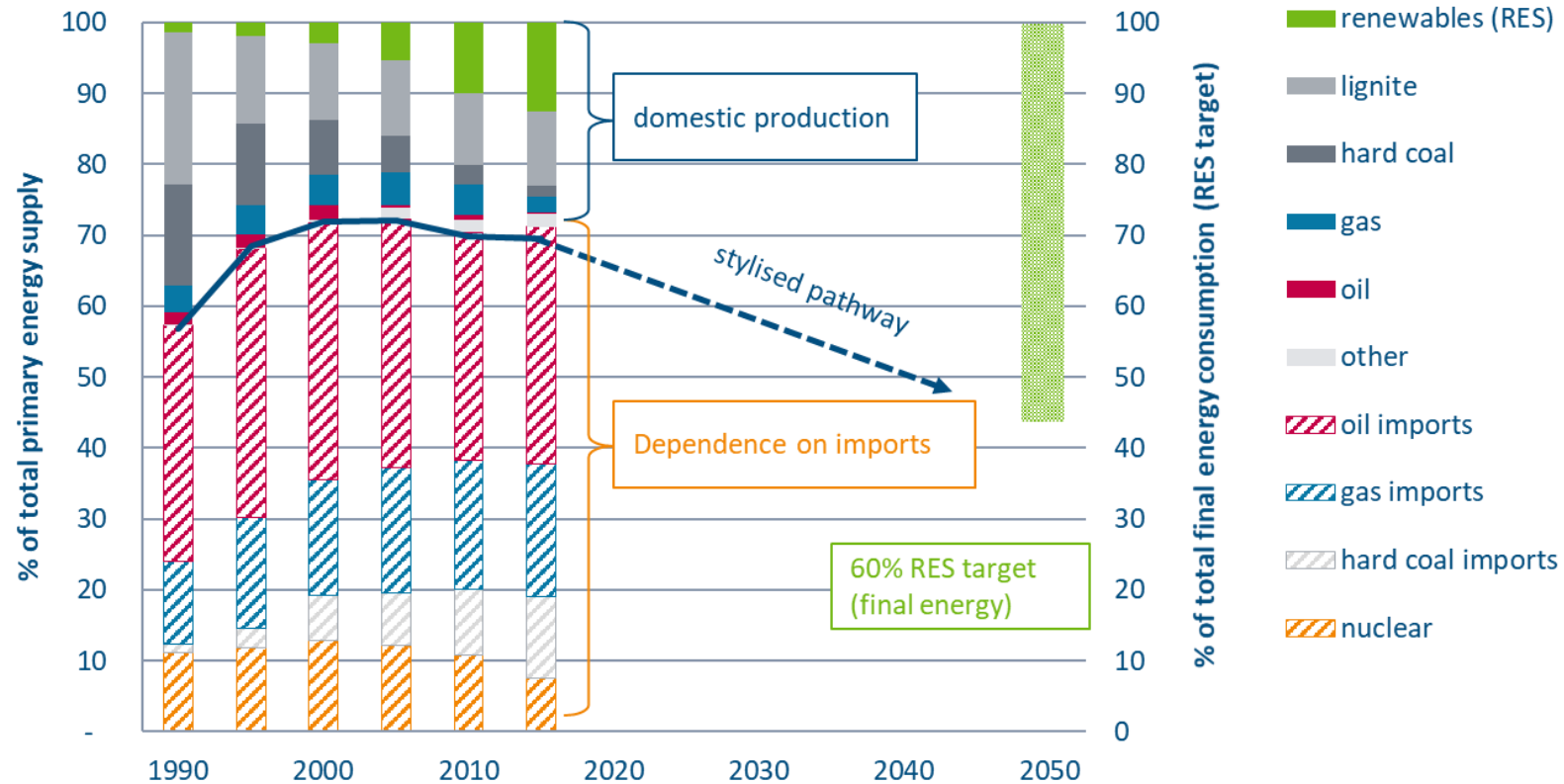
The *Energiewende* is Germany's long-term energy and climate strategy



Source: Navigant 2019 based on BMWi 2016, UBA 2019, AGEb 2018

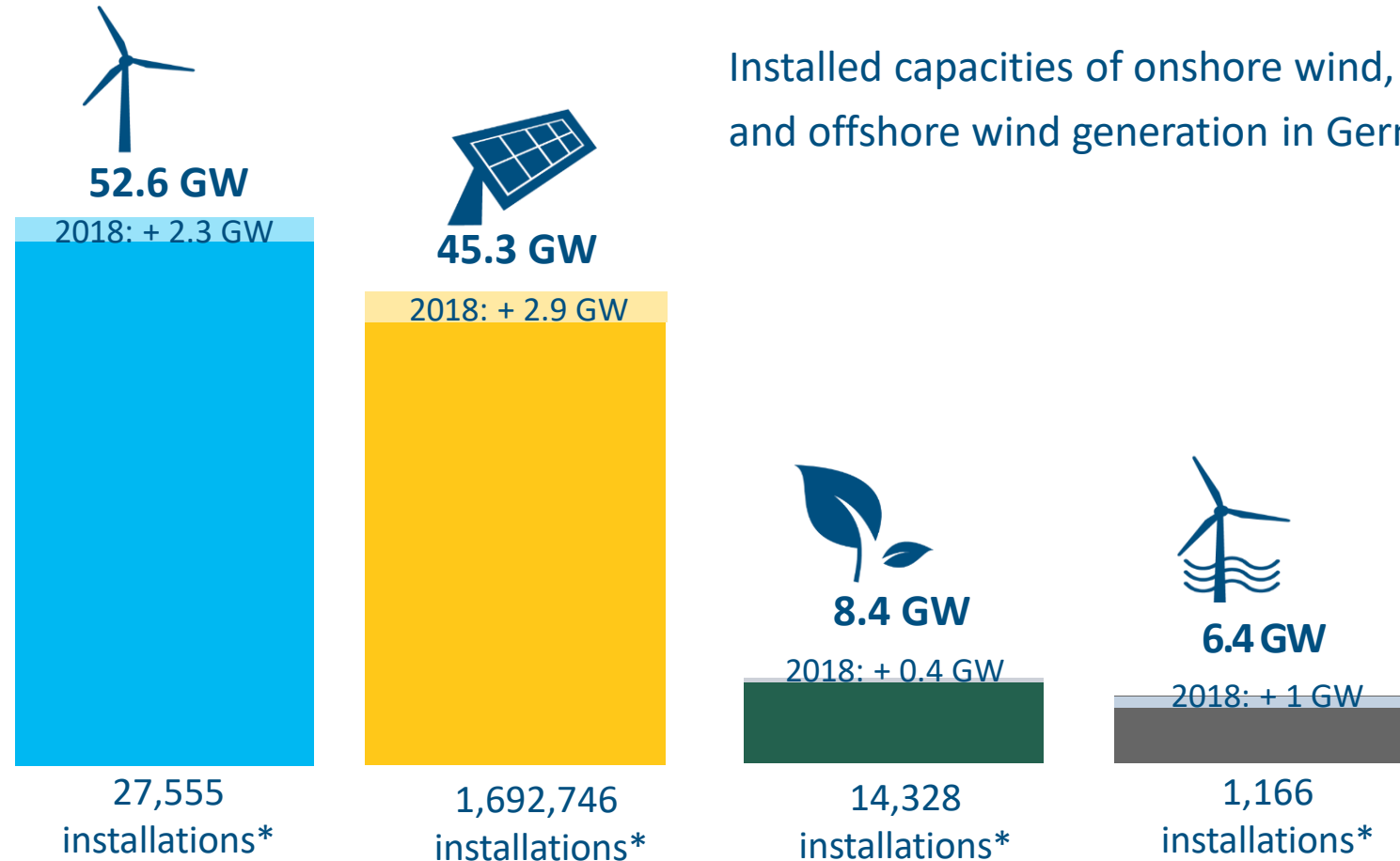
The German *Energiewende*

Renewables reduce dependence on energy imports



Source: Ecofys 2017 based on AGEB 2012, AGEB 2014

The German *Energiewende*

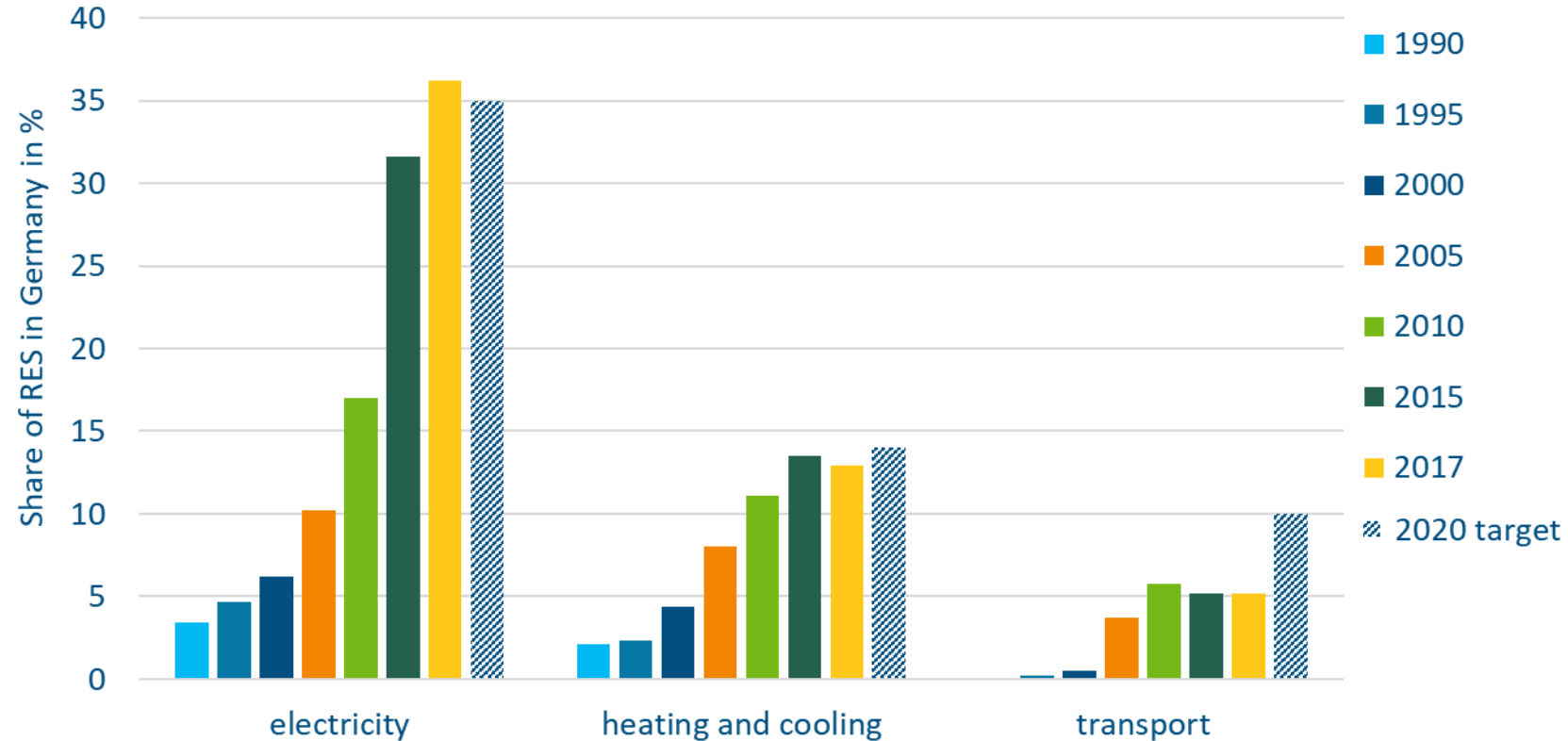


*Number of installations eligible for EEG levy payments in 2017

Source: Navigant 2019 based on Bundesnetzagentur 2018 and Fraunhofer ISE 2019

The German *Energiewende*

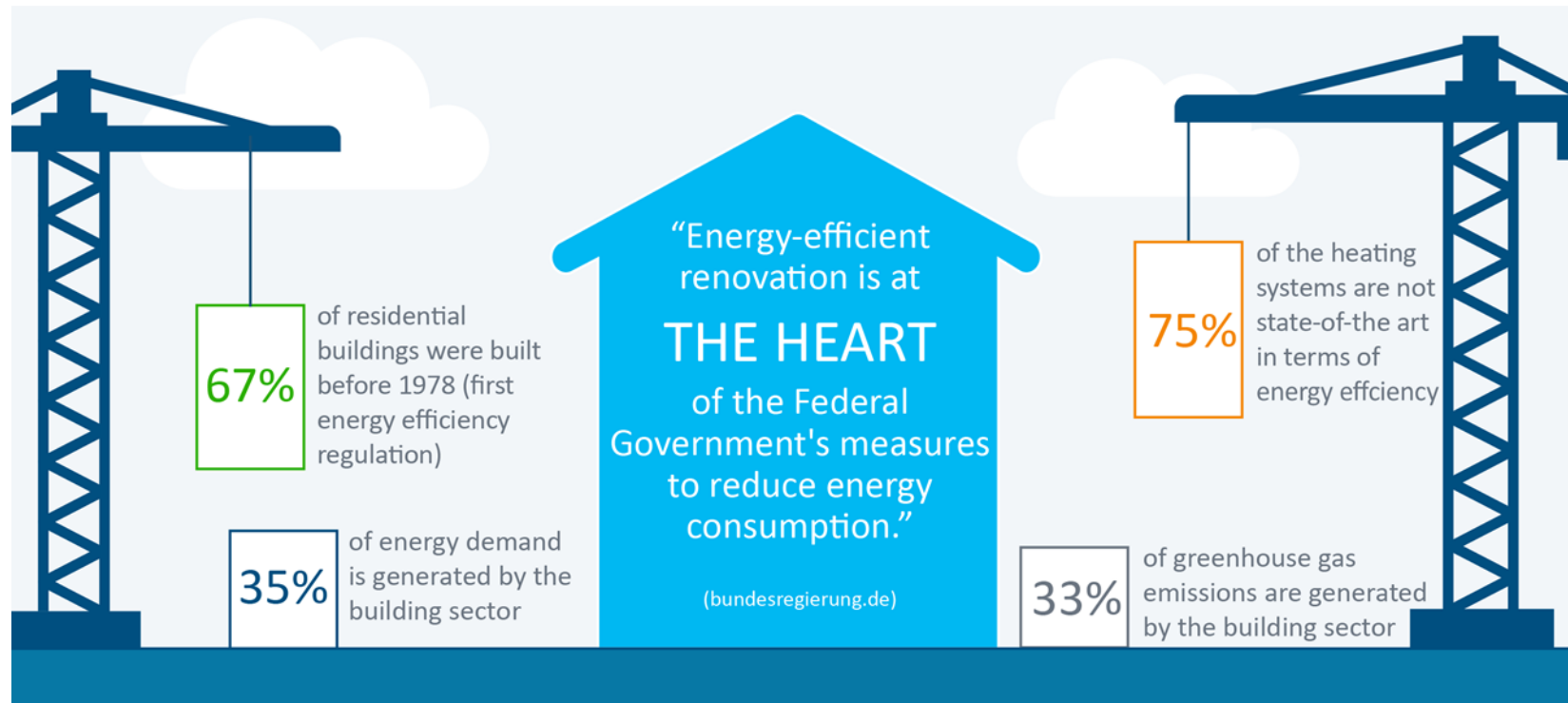
Share of renewables has grown in all sectors, but fastest in electricity



Source: Ecofys based on AGEE-Stat 2016, BMWi 2016, BMWi 2018, Agora 2017, Agora 2018.

The German *Energiewende*

Low-energy refurbishment of existing building stock is crucial for the success of the energy transition

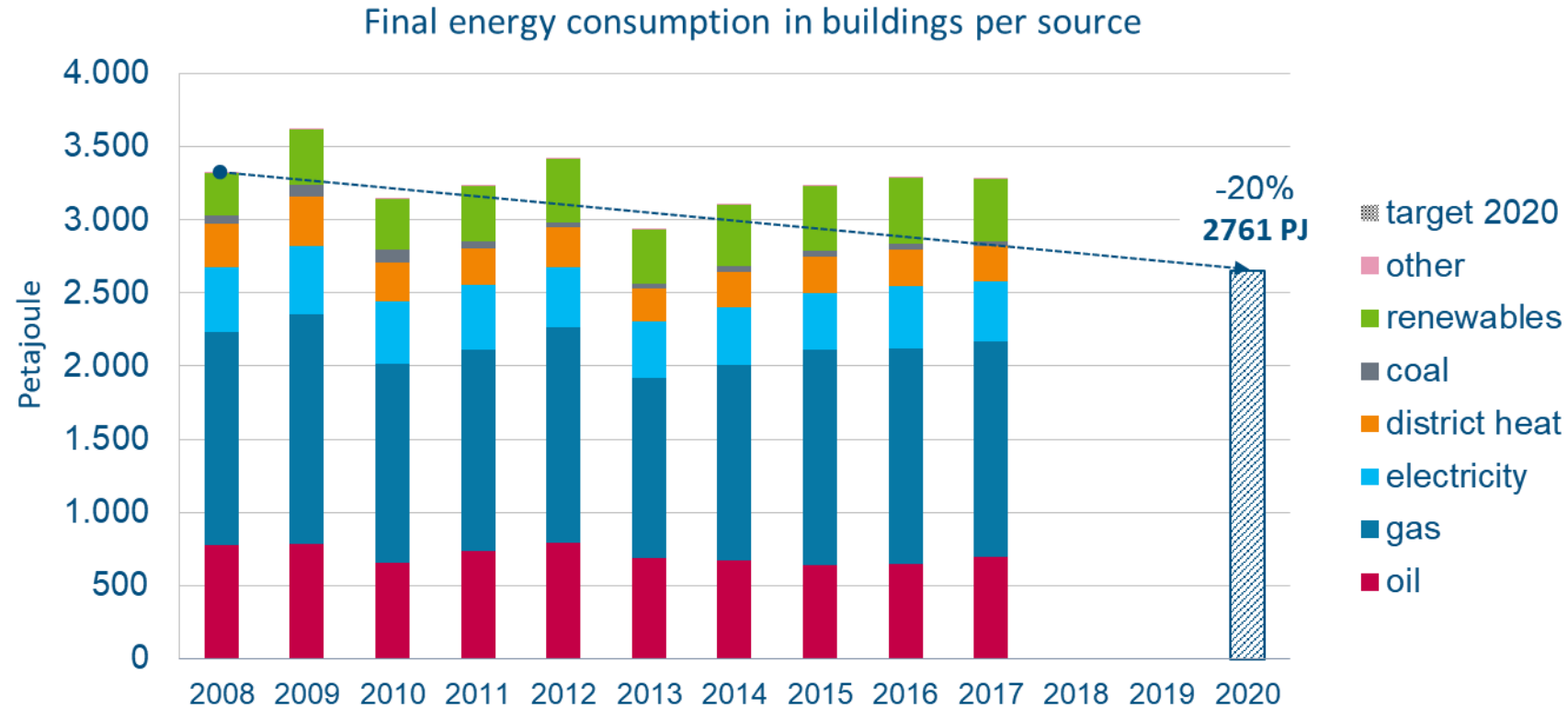


* includes direct and indirect emissions

Source: Edelman.ergo, Navigant 2019

The German *Energiewende*

Space heating accounts for the highest share of energy consumption in Germany's buildings

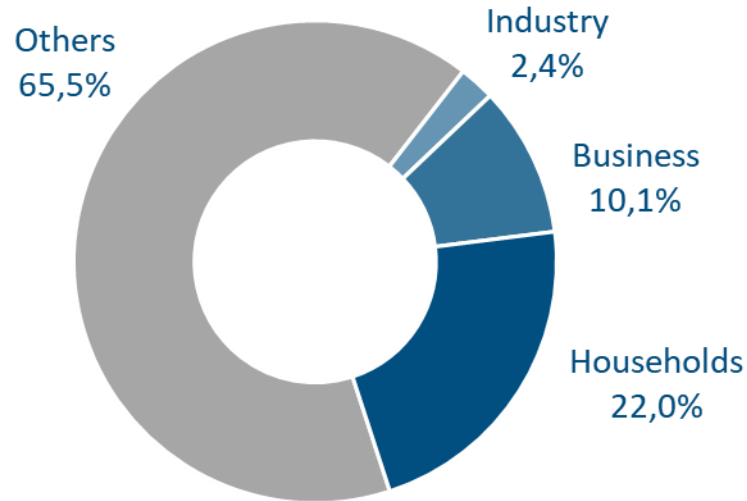


* For residential buildings, includes space heating, hot water and space cooling.
For non-residential buildings, includes space heating, hot water, space cooling and lighting.

Source: Navigant 2019 based on BMWi 2019

The German *Energiewende*

Energy efficiency in buildings is a key priority of the energy transition



Area measures

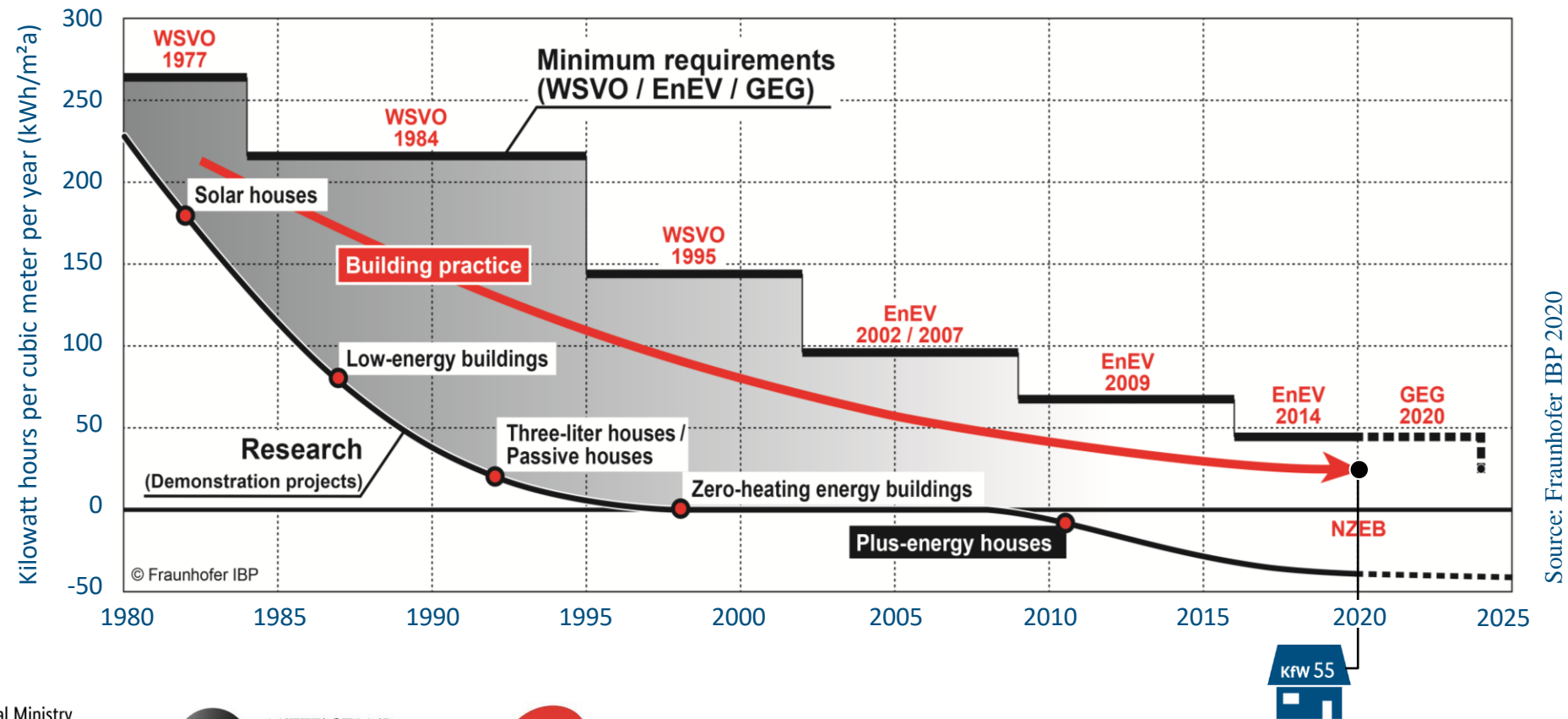
- Federal subsidies for efficient buildings (from 2021 on: BEG)
 - Holistic programme for energy efficiency measures and renewable energy
 - Exchange premium for inefficient oil boilers
- Tax incentives for energetic refurbishments
- Energy Saving Act, Energy Saving Ordinance and Renewable Energies Heat Act (from 2020 on: Energy in Buildings Act)
- Energy consulting (e.g. tailored modernization roadmap)
- Promotion of serial refurbishment
- Innovative projects for the almost climate-neutral building stock 2050

Source: Navigant 2020 based on BMWi 2019

The German *Energiewende*

Building efficiency regulation follows the technical learning curve

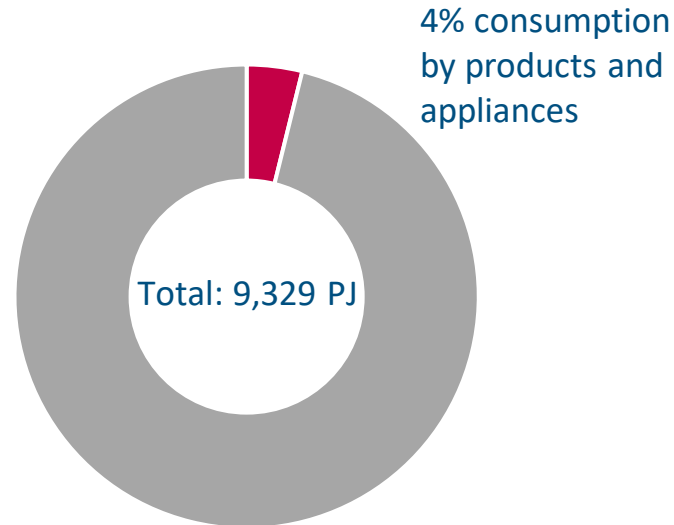
Primary energy need (non-renewable) for heating of a semi-detached house



The German *Energiewende*

Products and appliances have ecodesign and labelling to raise awareness of the efficiency potential

Relevance of products and appliances in Germany's final energy consumption in 2017



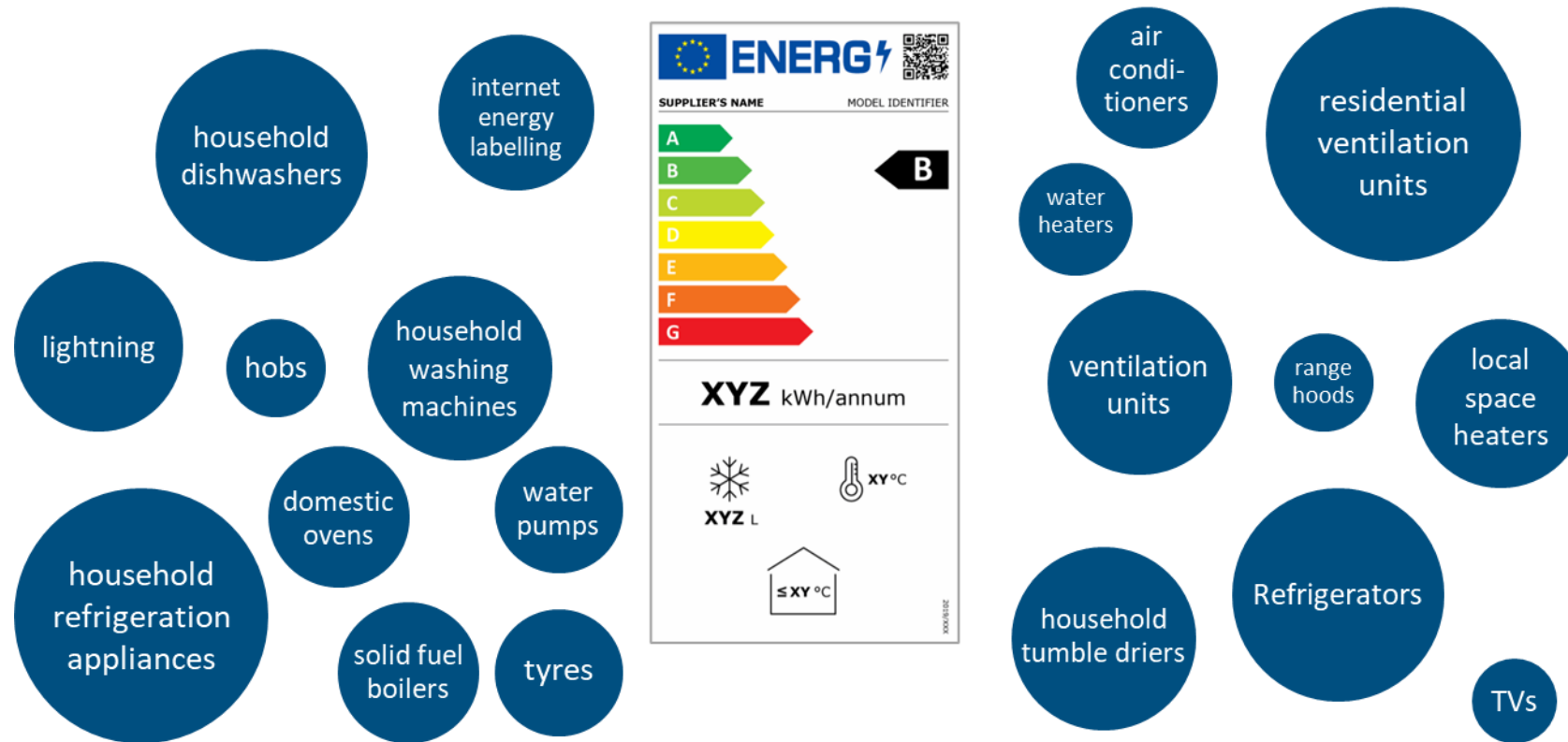
Area measures

- Active participation in the EU standardisation process: Energy Consumption Labelling and Ecodesign Ordinance
- Electricity tax
- Guidance on energy (campaign: Climate Seeks Protection, Energy Efficiency Initiative)

Source: Navigant 2020 based on Destatis 2018 and BMWi 2019

The German *Energiewende*

The EU has added an increasing number of products & appliances to its energy efficiency labelling scheme



Source: Navigant 2019 based on European Commission 2019

Participating Companies

- Industrial Solar GmbH
- ONI-Wärmetrafo GmbH
- ETU Software GmbH
- sonnen GmbH
- SunOyster Systems GmbH
- RESOL- Elektronische Regelungen GmbH
- EcoSyst GmbH
- BABLE UG

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