



Federal Ministry  
for Economic Affairs  
and Climate Action



MITTELSTAND  
**GLOBAL**  
ENERGY SOLUTIONS  
MADE IN GERMANY

# Energy Transition - Made in Germany

## An Introduction

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Facilitator



# Germany's Climate Action Program 2030 shows strong political commitment to climate protection

## Climate Action Program 2030: selected sectoral measures



### Industry

Investments in energy efficiency

National decarbonisation programme



### Electricity

Coal phase-out by 2038 at latest

Expansion of renewables and gas-fired CHP



### Heat

Tax break for energetic refurbishment

Switch from oil to RES-based heating



### Transport

E-mobility

Investments in public transport

Carbon-based vehicle tax



### Agriculture

Green agriculture

Emissions reduction in livestock farming



### R&D

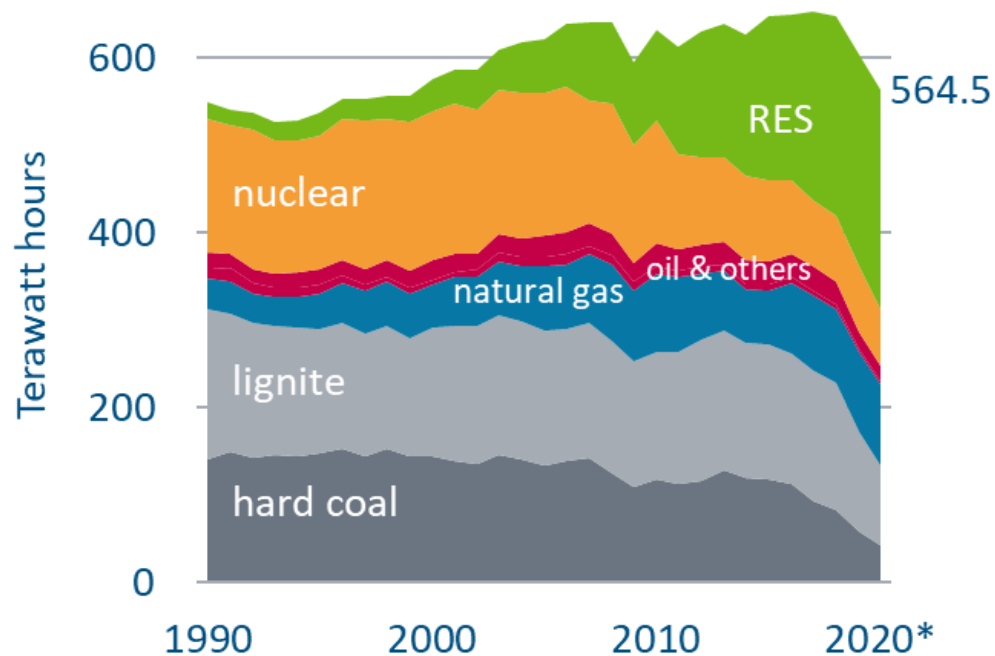
€ 1-billion support scheme for battery-cell production

Research on carbon storage

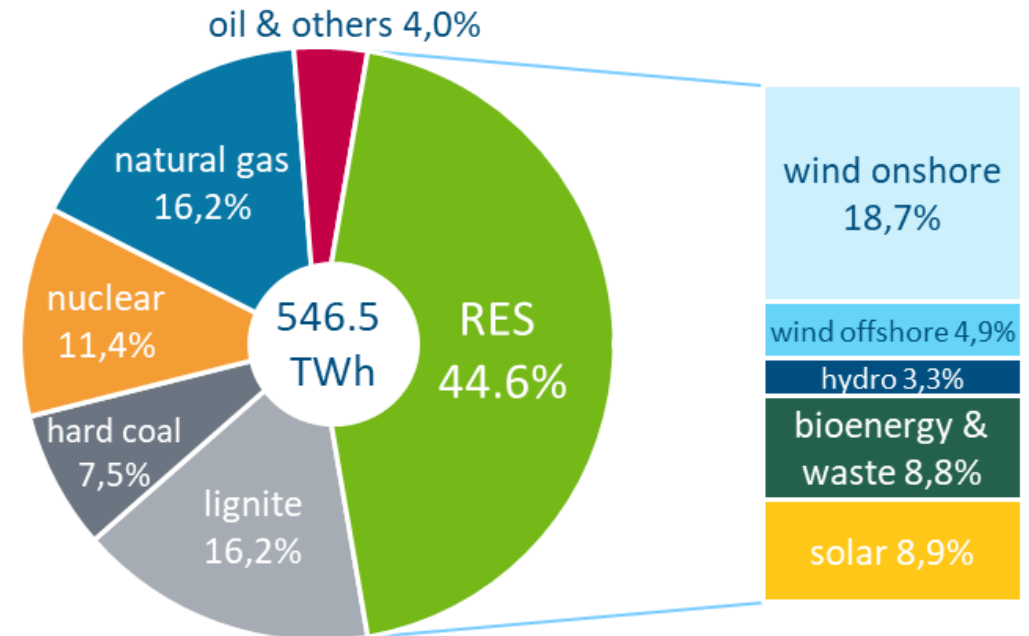
**National carbon pricing  
for non-ETS sectors**

# Renewables have become Germany's No. 1 source of electricity

Gross electricity generation in Germany



Electricity mix in 2020\*

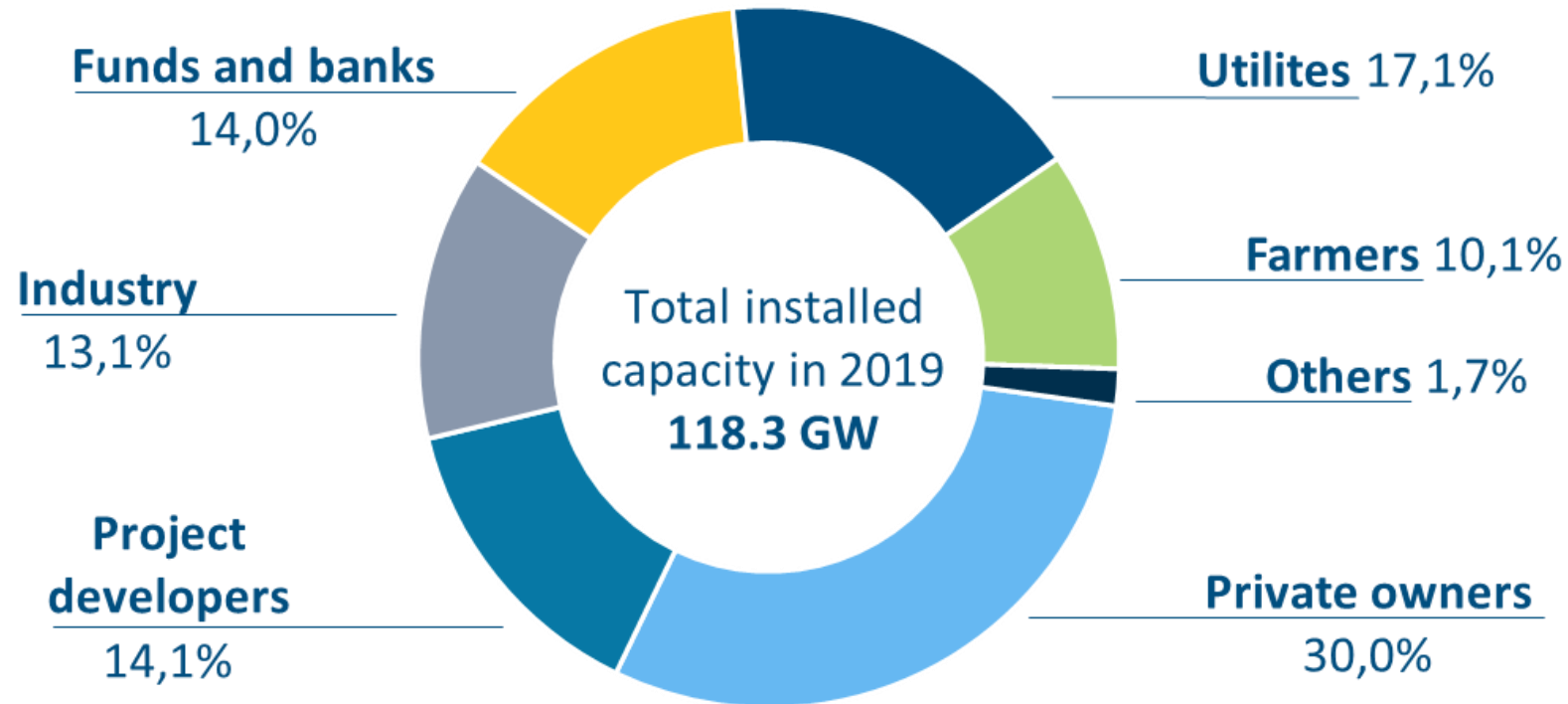


44.6% RES in gross electricity generation corresponds to  
46.2% RES in gross electricity consumption.

\* preliminary data

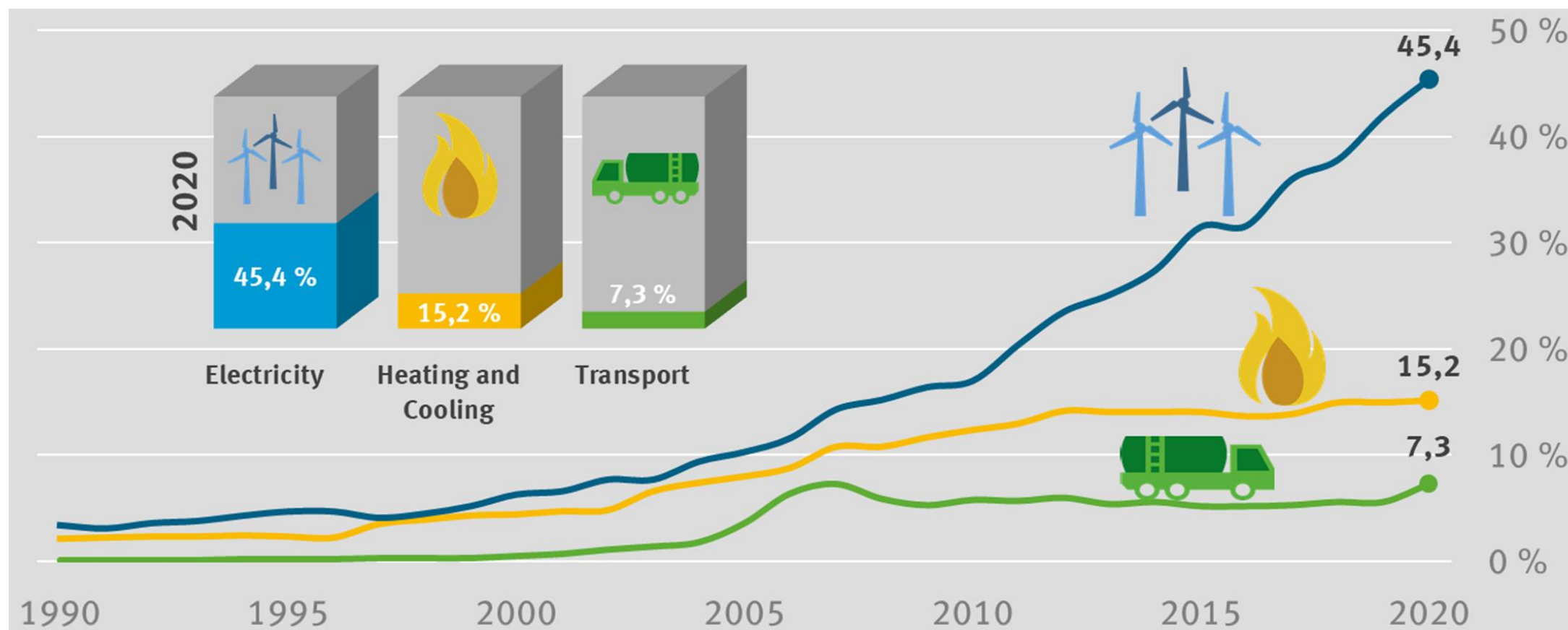
# Diversified ownership structure of renewables illustrates broad support in Germany

## Ownership structure of renewable energy sources for electricity generation in 2019



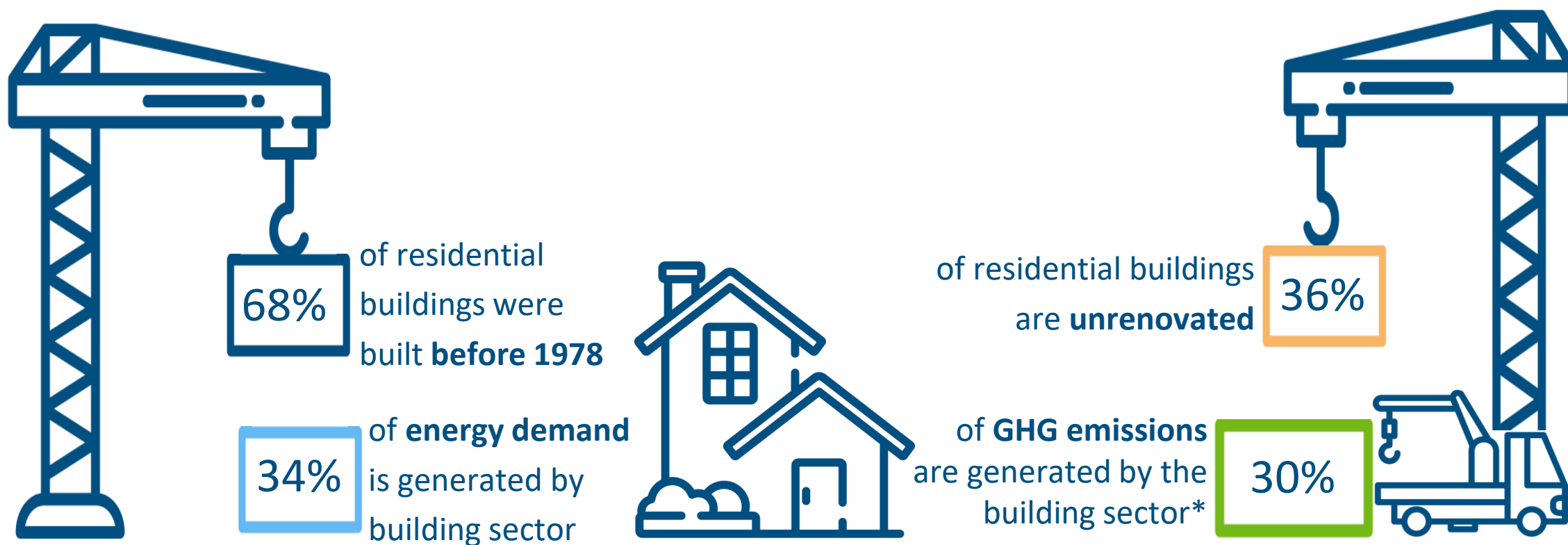
Source: Guidehouse 2021 based on BMWi 2019 & AEE 2019

# Shares of renewable energy sources in the electricity sector, for heating/cooling and for transport



Source: Umweltbundesamt, basierend auf AGEE-Stat, 02/2021

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



Source: Guidehouse 2021 based on dena 2021 & co2online 2021,  
Icons by Flaticon.com

# The energy transition triad defines the priorities for the building sector



House with insulation



House with insulation and solar collectors



House with insulation, solar collectors and heat pump

## Energy transition triad for buildings

I

Significant and sustainable **reduction of energy demand**

II

Direct use of **renewable energies** wherever possible

III

Efficient use of renewable electricity through **sector coupling**



# German Energy Solutions Initiative

- Enables business partnerships in the field of renewable energies, energy efficiency technologies, smart grids and storage technologies
- Based on a 2002 parliamentary resolution with the aims
  - Support for SME's
  - dissemination of intelligent and sustainable energy solutions
  - Contribution to international climate protection
- Coordinated and financed by the Federal Ministry for Economic Affairs and Climate Action (BMWK)





# Information

<https://www.german-energy-solutions.de/en>

**Online database:** profiles and contact information of German companies

- **Current information** about German energy solutions
- **Upcoming events** of the initiative
- **Newsletter**





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# The participating German Companies



Facilitator



# Participating German companies

<b>Company</b>	<b>Representative</b>	<b>Business segment</b>
Centroplan GmbH	<b>Jörg Lübke</b>	Solutions for solar-panelled roofs
mfh systems GmbH	<b>Andreas Piephans Dejan Dobrijevic</b>	Heating and cooling systems
MIG Material Innovative Gesellschaft mbH	<b>Wolfgang Bonder</b>	Chromate reduction system that limits toxicity in cement or cement-based materials and thermal insulation coating system
LED-LIGHT Germany	<b>Gunter Klee</b>	Energy-efficient lighting systems and renovation
Pravida Bau GmbH	<b>Otto Pravida</b>	Construction projects of commercial and industrial buildings

# Contact

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