



Federal Ministry  
for Economic Affairs  
and Energy



# DFBEW-Konferenz am 29. + 30. September\_Energieeffizienz in der Industrie

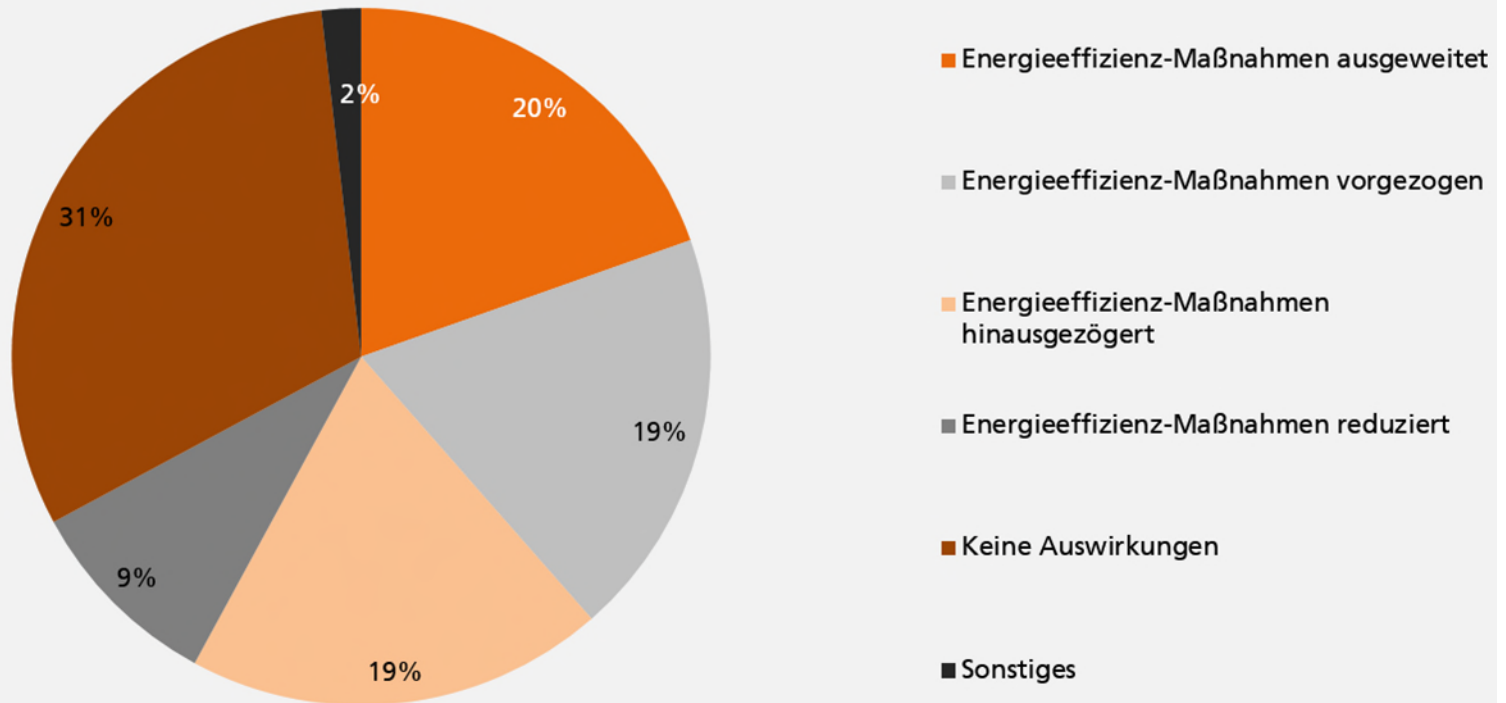
Targets and Strategy for THG-Reduction in Industry

Dr. Hartmut Versen, BMWi Referat IIB2

[www.bmwi.de](http://www.bmwi.de)

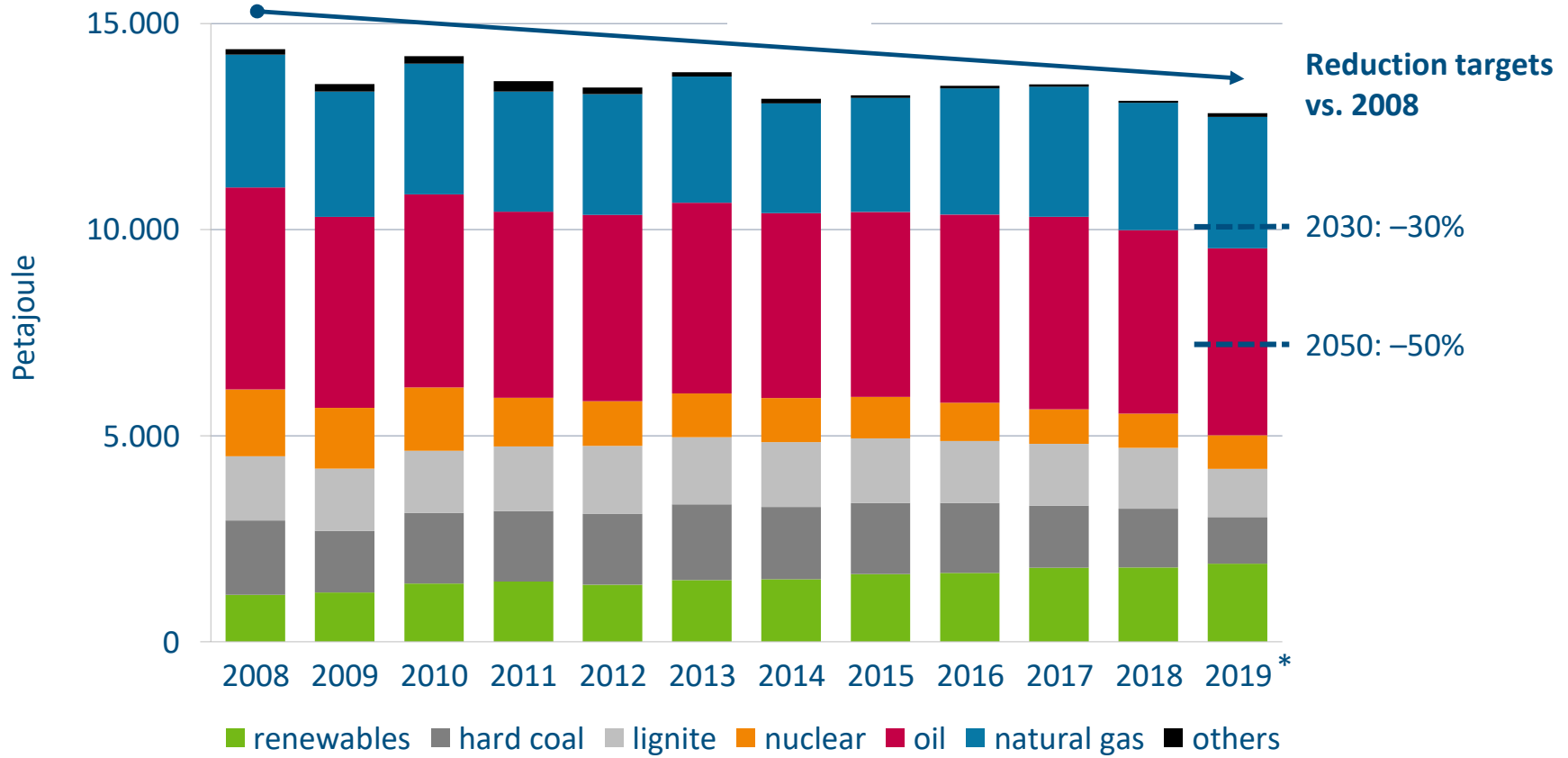
~ 70% Enterprises: Corona has no effect (31%) or accelerated planned Energyefficiency measures (39%)

### In welcher Weise hat die COVID-19-Pandemie die Energieeffizienz-Strategie Ihres Unternehmens beeinflusst? (n=843, n'=986)



# Energy consumption is declining but additional measures are needed to meet reduction targets

Primary energy consumption and reduction targets in Germany



\* preliminary

# The Climate Action Plan 2050 defines Germany's first sectoral emission targets for 2030

Sector	1990*	2014*	2030*	2030 reduction compared to 1990
Energy	466	358	175-183	61-62%
Buildings	206	119	70-72	66-67%
Transport	163	160	95-98	40-42%
Industry	283	181	140-143	49-51%
Agriculture	88	72	58-61	31-34%
Other	39	12	5	87%
<b>Total</b>	<b>1248</b>	<b>902</b>	<b>543-562</b>	<b>55-56%</b>

\*in million tonnes of CO<sub>2</sub> equivalent

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

## Climate Action Programme 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

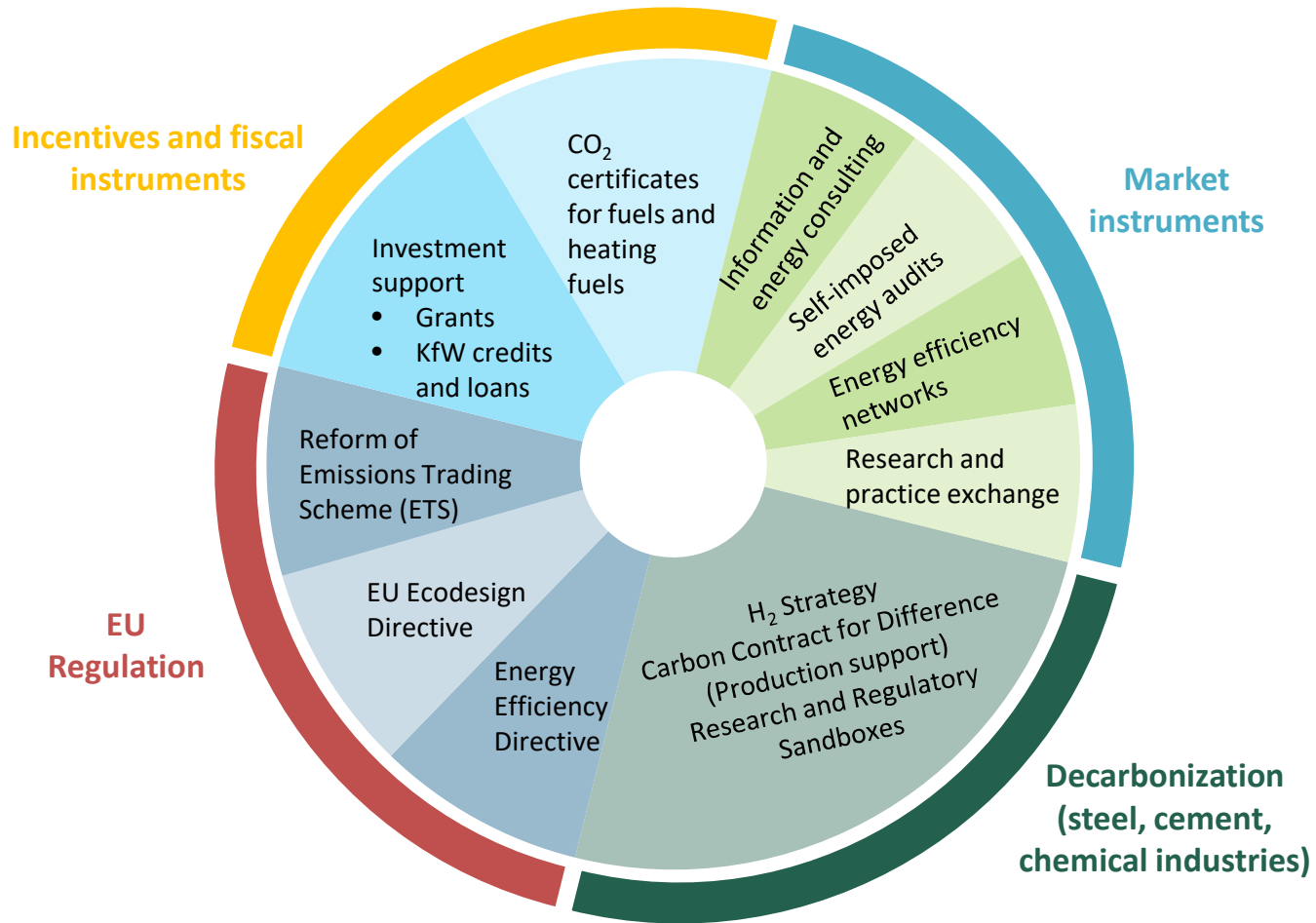


### R&D

€ 1-billion support scheme for battery-cell production

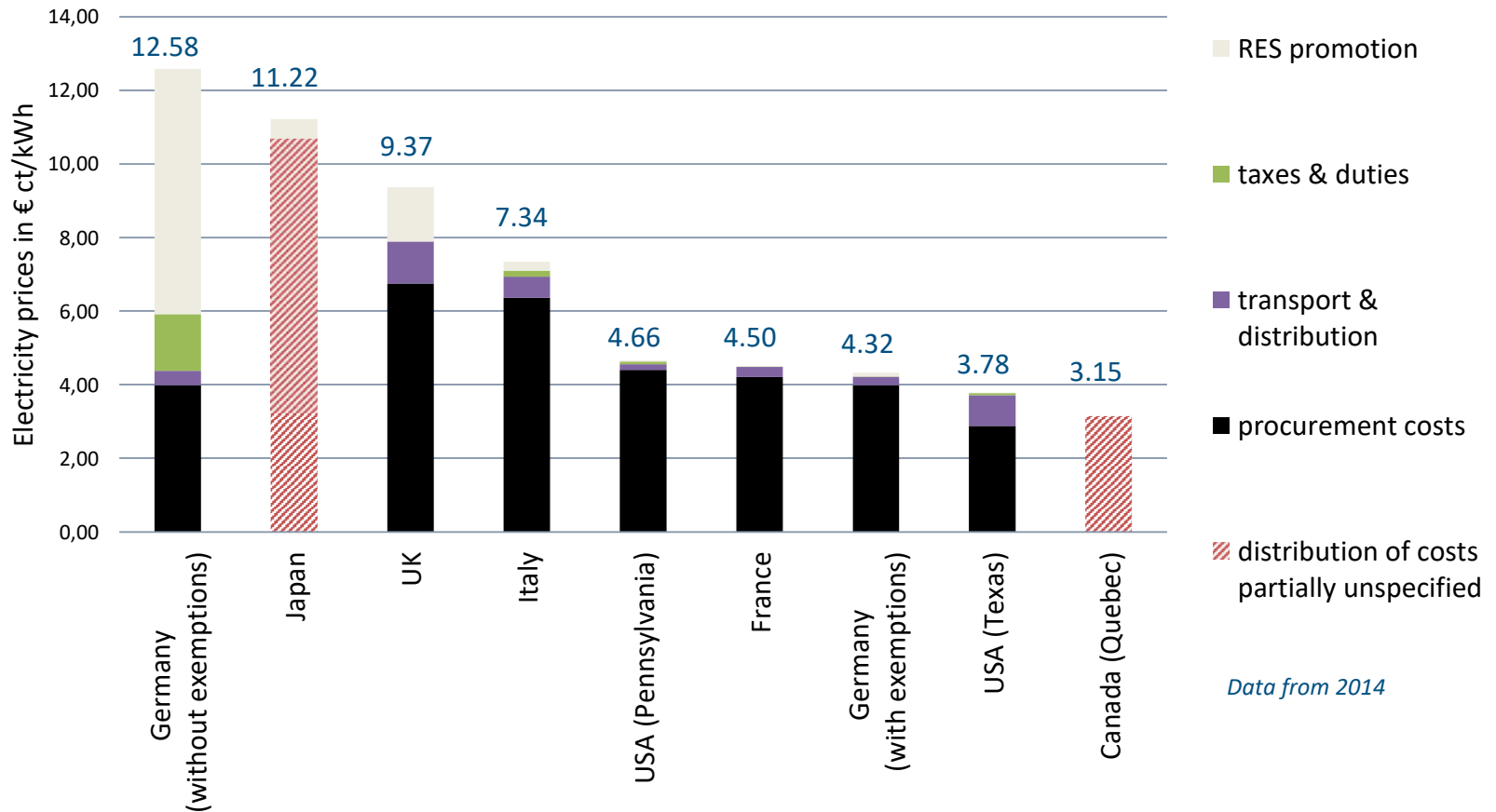
Research on carbon storage

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



Source: Guidehouse 2020 based on BMWi 2020

# Industry exemptions from RES levy keep Germany's energy-intensive industries globally competitive



# Industrie: Herausforderung und Ausblick

- Für 2030 annähernd Zielerreichung möglich – gilt aber nur für das aktuelle 2030-Klimaziel
- Tiefgreifende Transformation notwendig: Hochtemperaturprozesse und Prozesse mit Kohlenstoffbedarf adressieren
- hoher Investitionsbedarf in neue Technologien/Sprunginnovationen
- Kreislaufwirtschaft und Materialeffizienz / -substitution vorantreiben
- grüner H<sub>2</sub> in Chemie und Stahlindustrie (Infrastruktur notwendig!)
- über 95% THG-Reduktion erfordert CCS bei prozessbedingten Emissionen
- Aktuelle Förderung deckt ineff. Optimierung von Prozessen/Anlagen ab



# A concrete action plan lays out the necessary steps to bring Germany' hydrogen strategy to success

## Hydrogen production

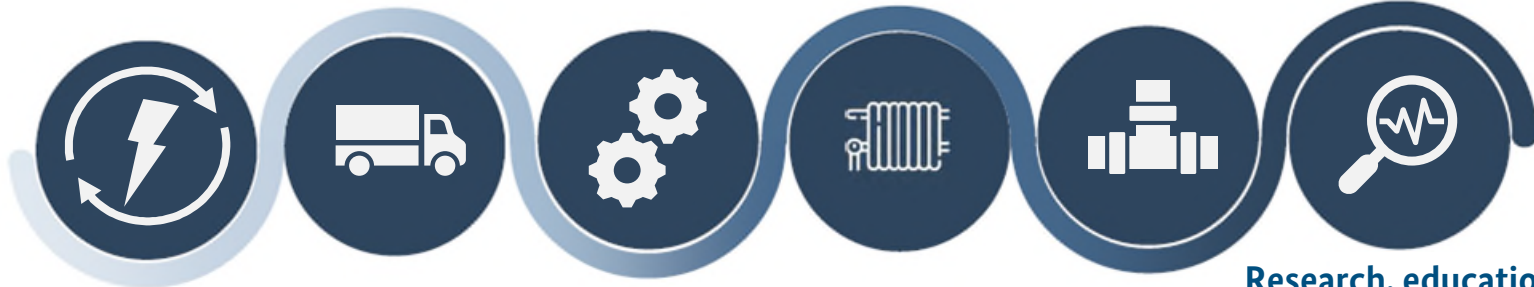
- 5 GW electrolyzer capacity by 2030 including renewable generation
- Additional 5 GW by 2040 considered

## Industry

- Pilot program for Carbon Contracts for Difference (CfD)
- Sector-specific dialogue formats

## Infrastructure and supply

- Stakeholder process to identify actions needed to establish hydrogen infrastructure
- Improve link between electricity, heat and gas sectors



## Traffic

- Implementation of the EU Renewable Energy Directive (RED II)
- 2% e-kerosene quota by 2030

## Heat

- Incentivize 'hydrogen-readiness' for CHP plants
- Funding of fuel-cell heating systems

## Research, education and innovation

- National and international demonstration projects on green hydrogen
- Research offensive named 'Hydrogen Technologies 2030'