



Federal Ministry  
for Economic Affairs  
and Energy



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**GLOBAL**  
ENERGY SOLUTIONS  
MADE IN GERMANY

# Energy Efficiency & Renewable Energies in Germany at a Glance

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# Overview

1. German Energy Transition
2. Energy Solutions – Made in Germany
3. The German Delegation



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# German Energy Transition



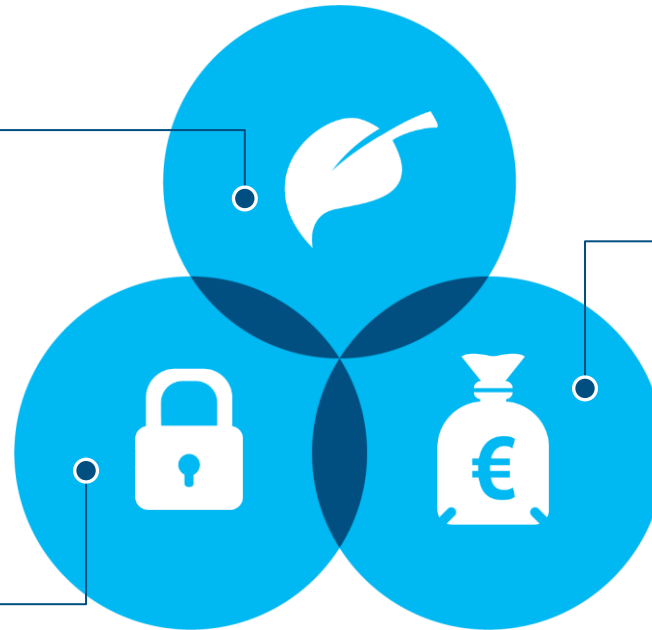
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# The German *Energy Transition* combines security of supply, cost-effectiveness & environmental protection

Environmentally  
sound

Affordable and  
cost-effective

Secure and  
reliable



Source: BMWi

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

Efficiency first



Direct use of renewables

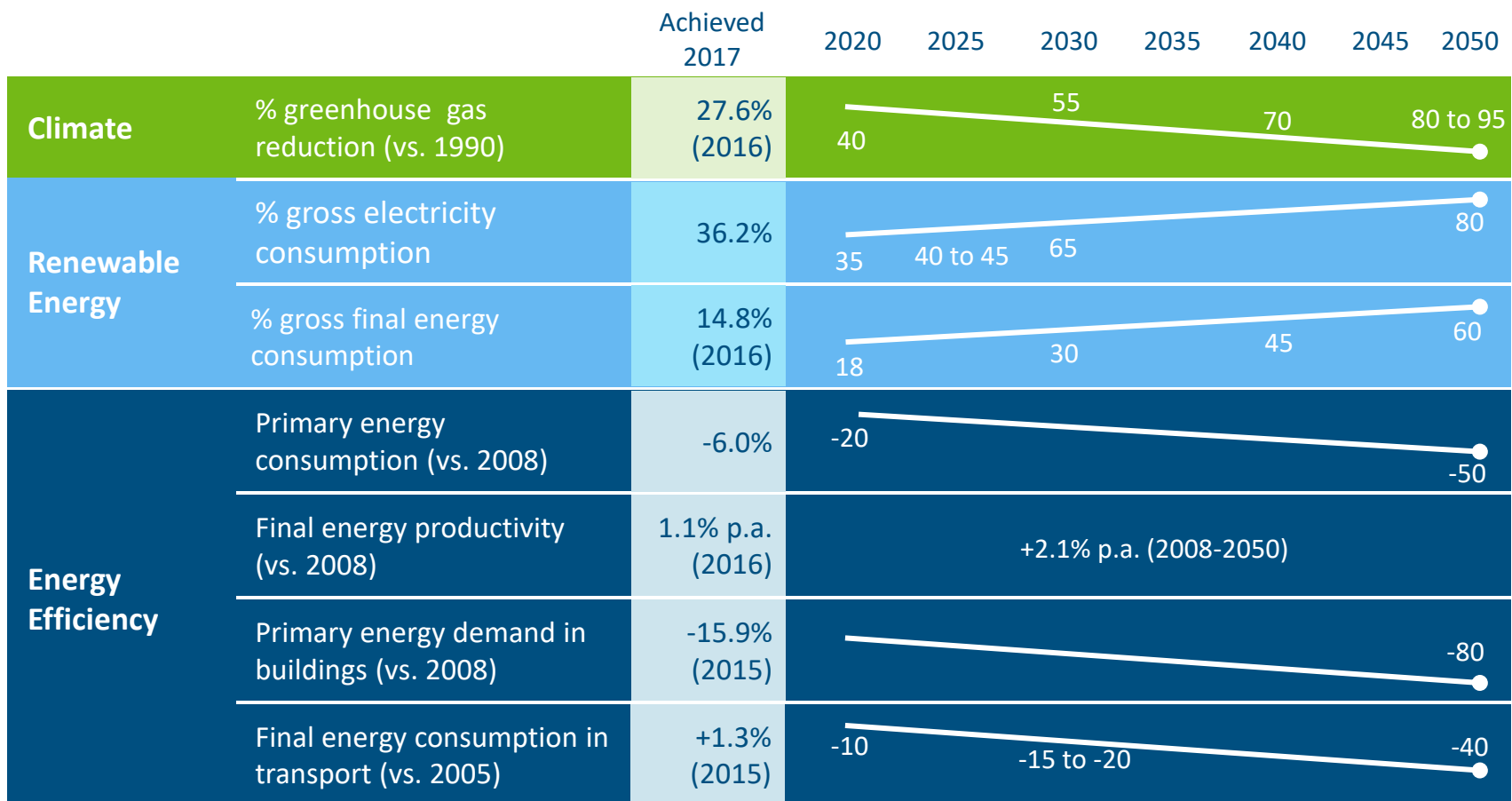


Sector coupling



Source: BMWi 2017

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



Source: Ecofys 2018 based on BMWi 2016, UBA 2018, AGEb 2018

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# Main federal-level energy efficiency measures cover all key areas



## Buildings

- Energy-saving legislation
- Financial support programmes (KfW, MAP)



## Products and appliances

- Active implementation of EU energy efficiency labelling
- National Top Runner Initiative



## Industry and business

- Tendering scheme
- KfW credits and loans
- Obligatory audits and energy efficiency networks

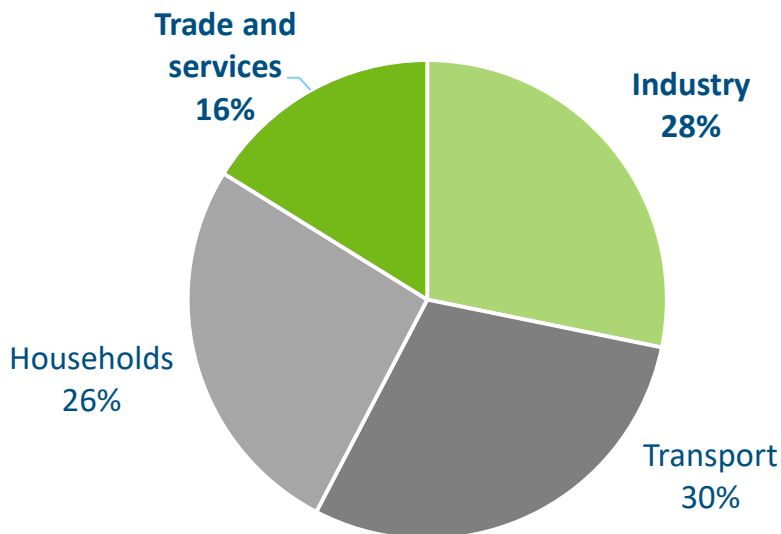


## Transport

- Motor vehicle taxation
- Regulation of consumption

# Energy efficiency in industry and business sector depends largely on investment in new technologies

Relevance of industry and business in final energy consumption in 2016



Industry and business accounted for 44% (4,061 PJ) of final energy consumption (9,152 PJ)

## Area measures

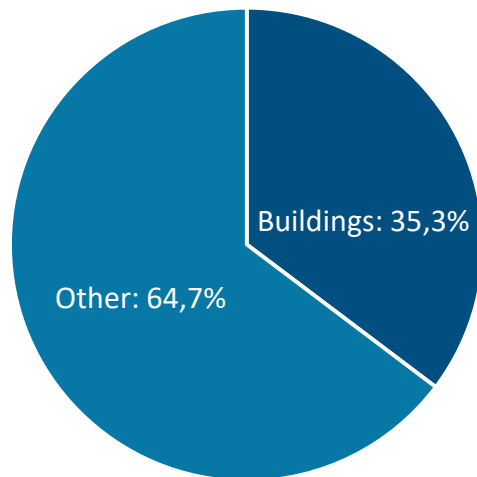
- Mandatory energy audits
- Exemptions from EEG surcharge and eco tax if energy management system is implemented
- Financing measures (KfW loans, grants for cross-cutting technologies and energy efficient production processes)
- European emissions trading
- Voluntary agreements with the manufacturing sector

Source: Ecofys 2018, BMWi 2018



# High potential for increasing energy efficiency in buildings

## Final energy consumption 2015



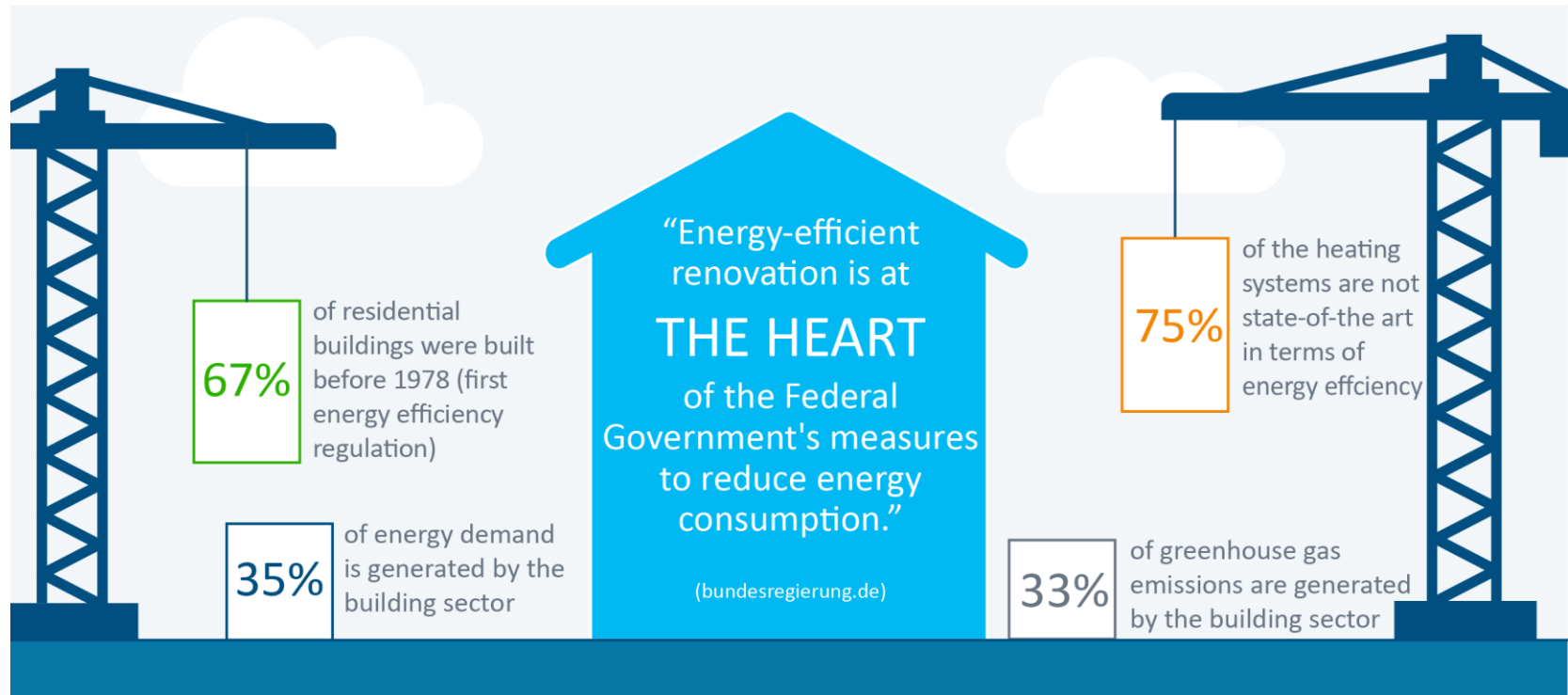
Energy consumption in buildings: 3,069.4 PJ

## Area measures

- On-site energy consulting programme
- KfW programme for energy-efficient construction and renovation
- Heating check and labelling
- Energy-saving legislation (EnEV)
- Energy performance certificates
- Key points of the energy efficiency strategy for buildings

Source: Ecofys 2017 based on AGEb, 2016, BMWi 2016

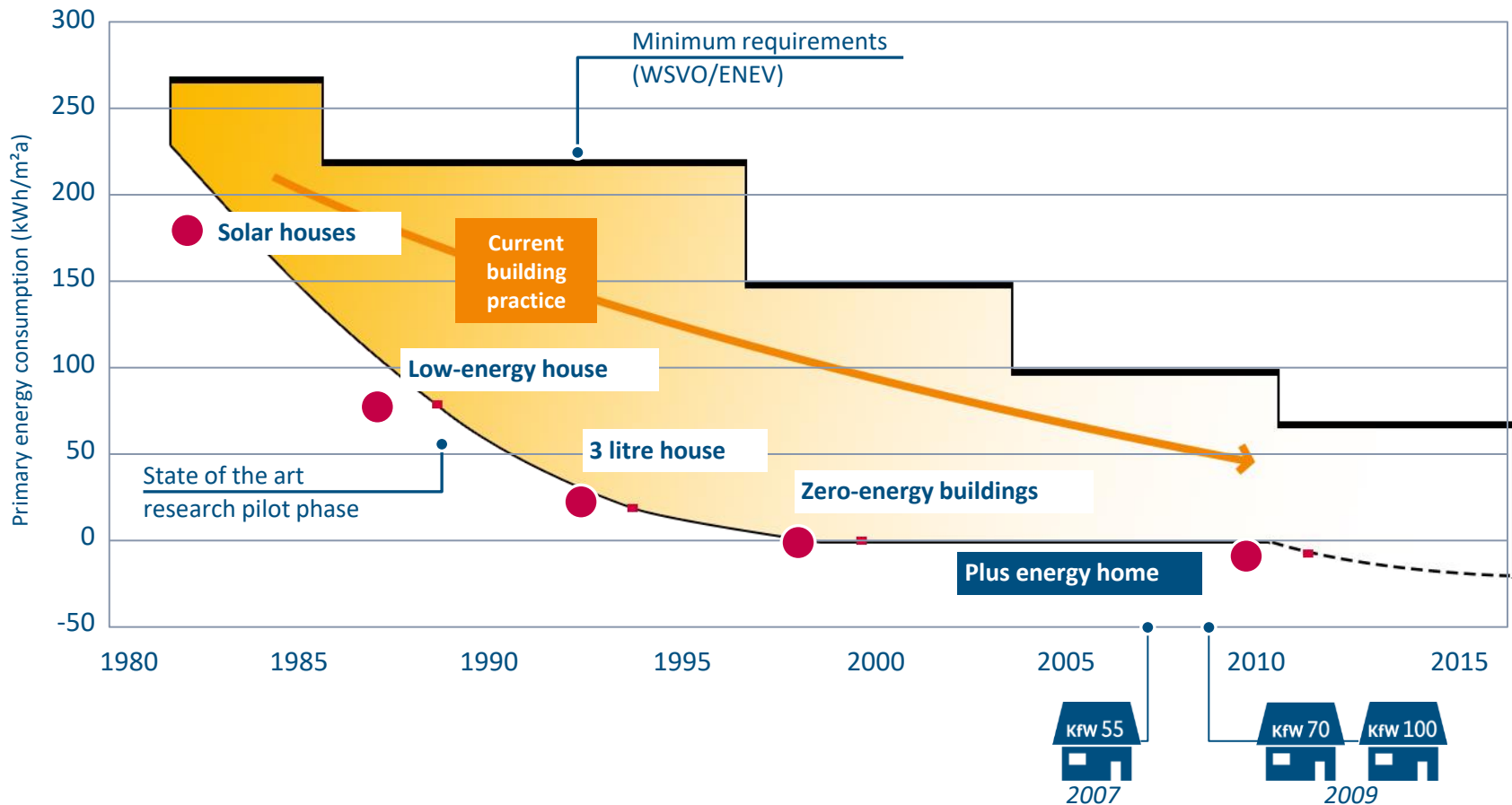
# Low-energy refurbishment of existing building stock is crucial for the success of the energy transition



Source: Edelman.ergo, Ecofys 2016

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# Building efficiency regulation follows the technical learning curve



Source: Fraunhofer IBP, BMWi 2014, Ecofys 2017



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# Energy Solutions Made in Germany



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# Objectives of the initiative

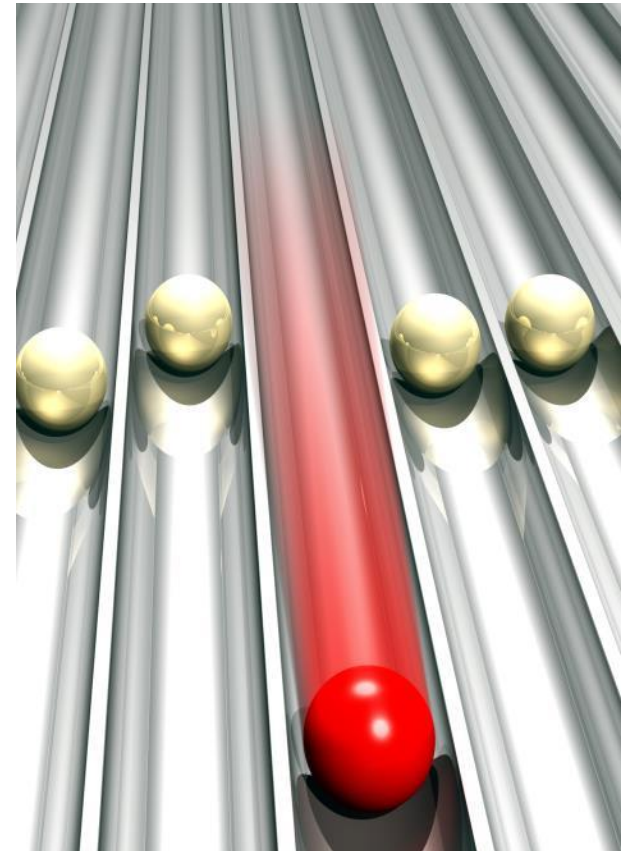
**Promotion** of renewable energy and energy efficient technologies

**Showcase** sustainable energy solutions

**Implementation** of projects

**Know-how transfer**

Contribution to international **climate protection**



# Instruments offered by the initiative



✓ Foreign trade fairs



✓ Networking opportunities



✓ Know-how transfer  
✓ Information  
✓ Capacity building



✓ Trade missions



✓ Fact finding missions



✓ Project development & flagship projects



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# The German Delegation



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# Participating German Companies

**Siekerkotte GmbH & Co. KG**

**EEPro GmbH**

**Volterion GmbH**

**skytron energy GmbH**

**TESVOLT GmbH**

**Solare Datensysteme GmbH**

**ABO Wind AG**



# Thank you for your kind attention!

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