



Federal Ministry  
for Economic Affairs  
and Energy



# Introduction to Germany's Energy Transition

## *Energiewende*

25 September 2017, Berlin

Federal Ministry for Economic Affairs and Energy  
Head of Division, International Energy Cooperation  
Dr. Martin Schöpe

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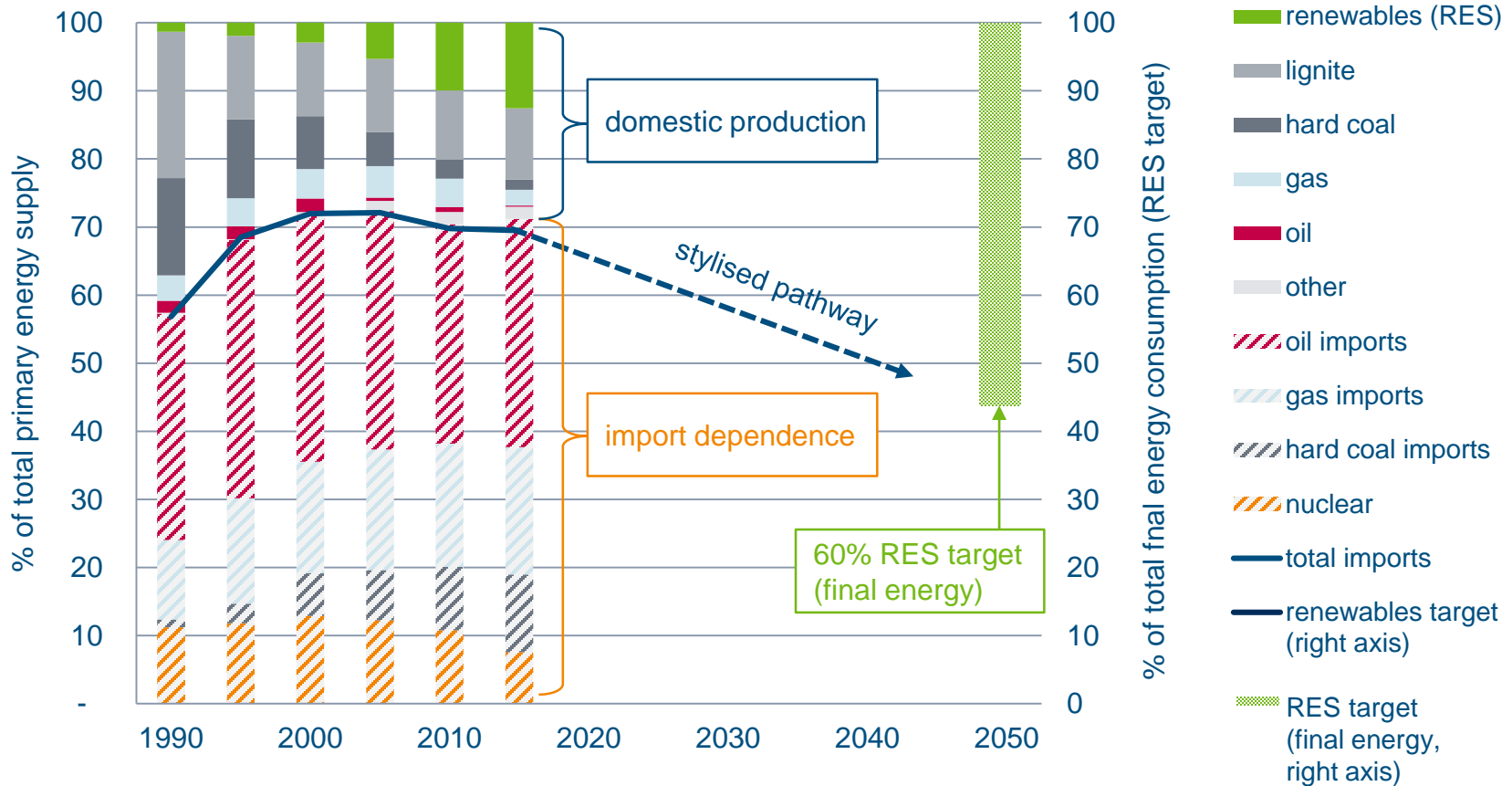
# Five reasons for the *Energiewende*

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- Reduce dependency on energy imports
- Innovation for growth and employment: new technologies, new business models, digitization
- Reduce carbon emissions and reach climate protection targets
- Phase-out nuclear power generation
- Energy transition can be both sustainable and economically successful



# Renewables reduce energy import dependence



Source: Ecofys 2017 based on AGEB 2012, AGEB 2014

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

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Efficiency first



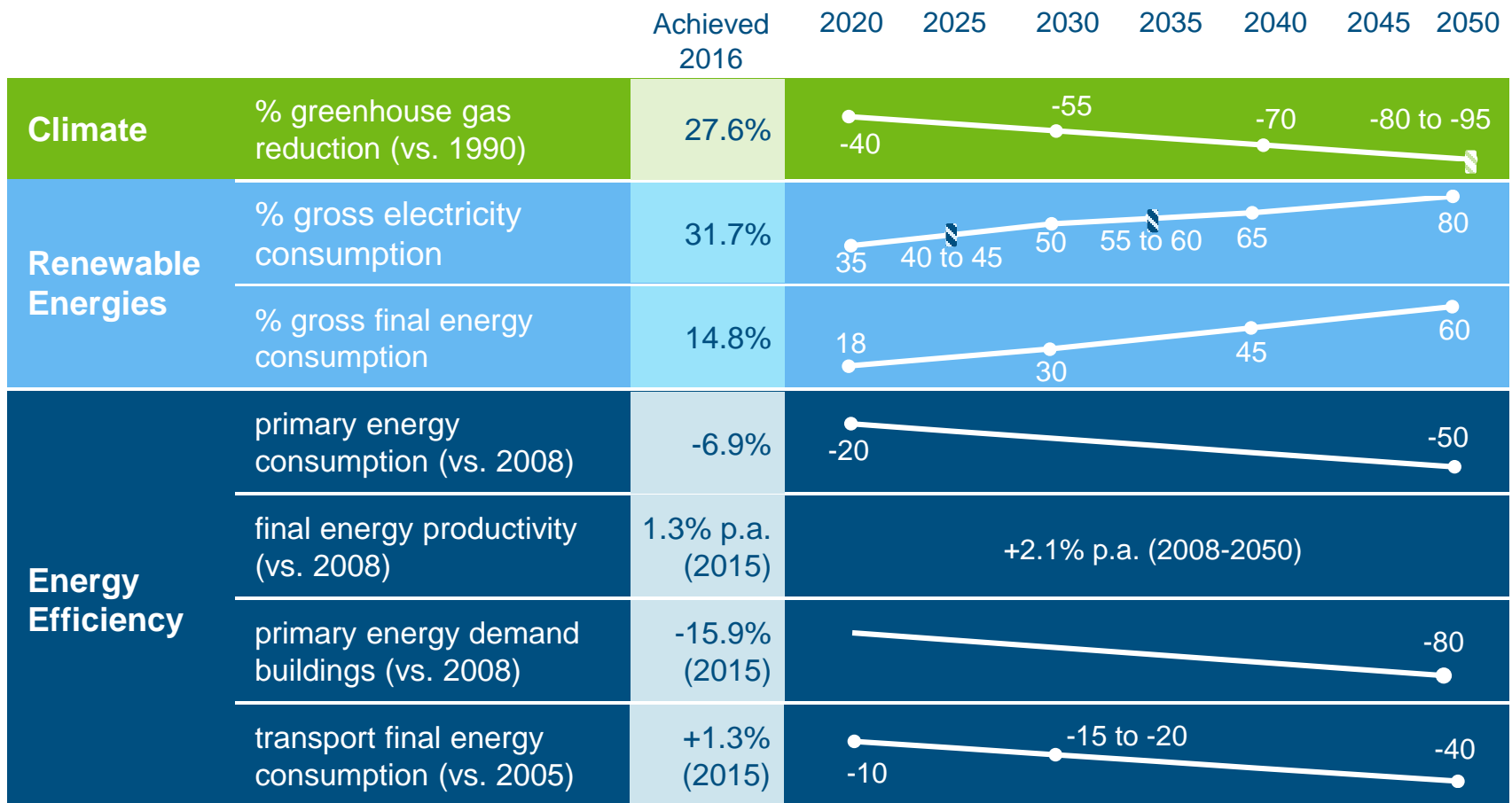
Direct use of renewables



Sector coupling

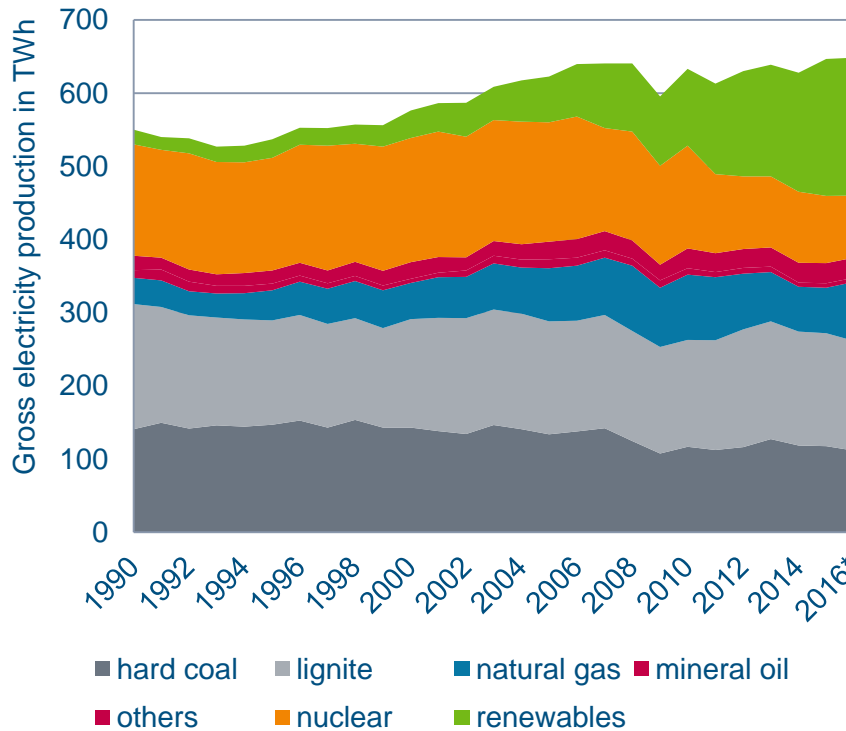


# The *Energiewende* represents the long-term energy and climate strategy of Germany

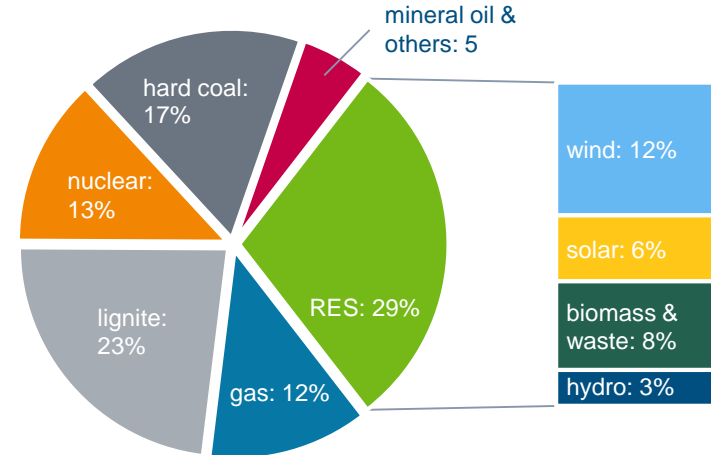


Source: BMWi 2016, UBA 2017

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

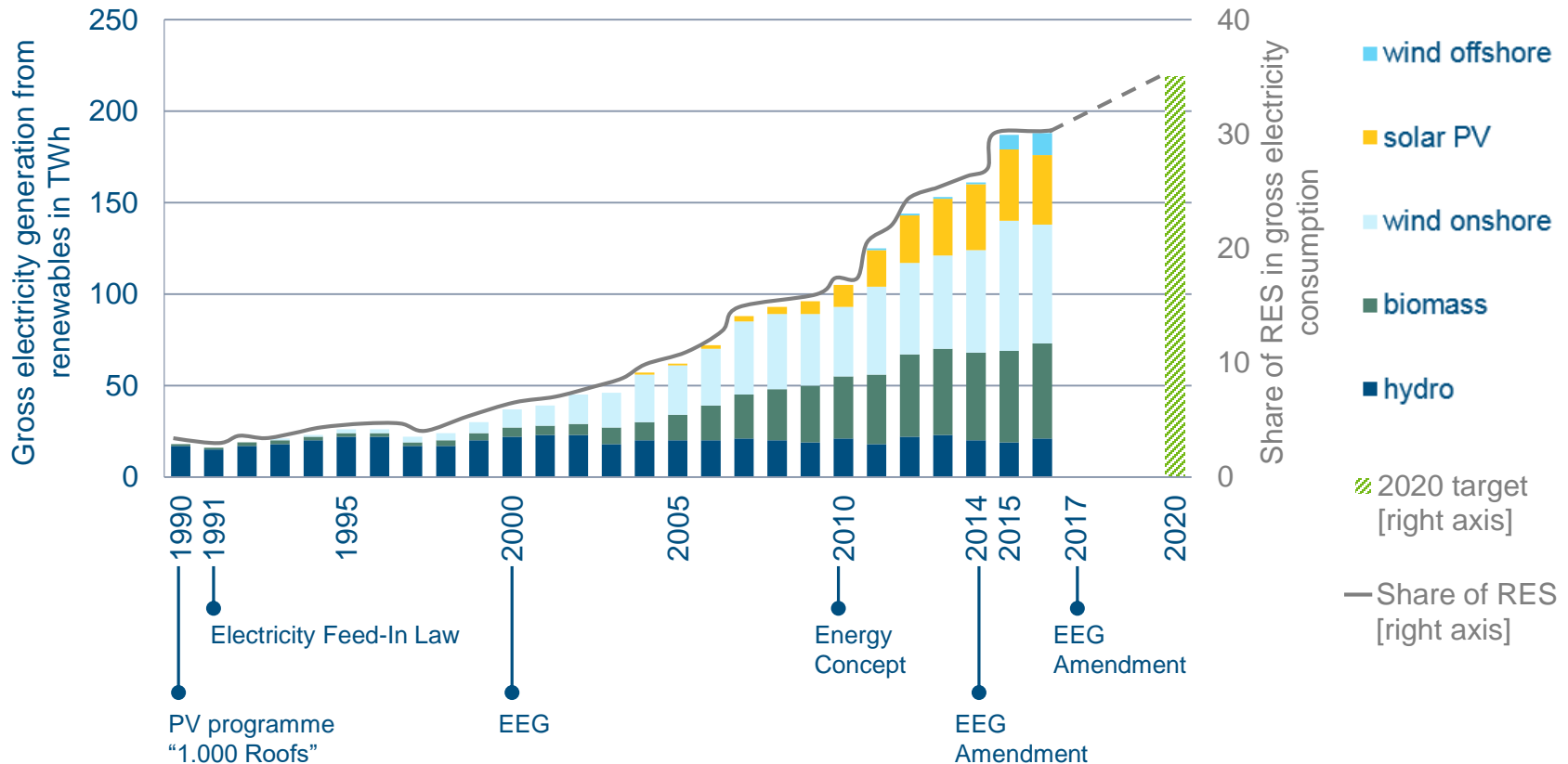


Electricity mix in 2016  
(648.4 TWh in total)



\* preliminary data  
rounded figures

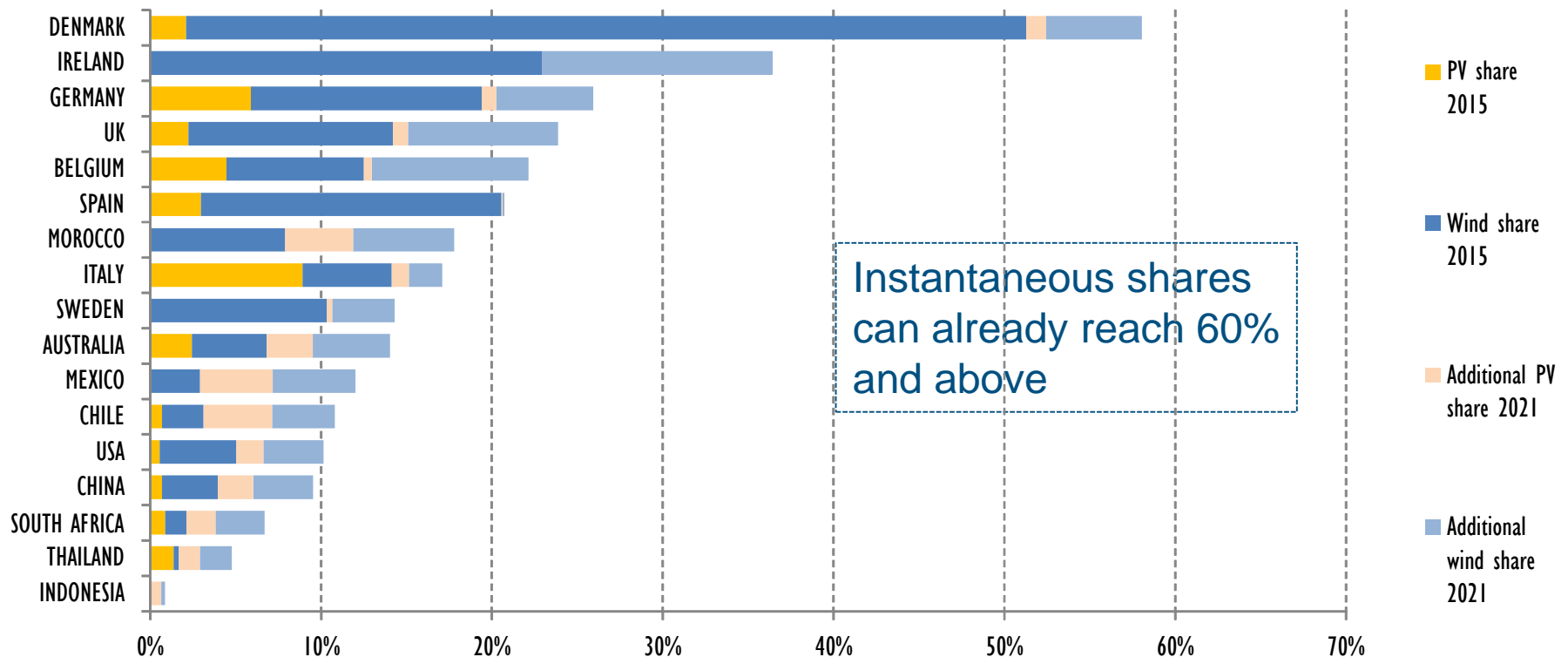
# Continuously developed policies have fostered the deployment of renewables



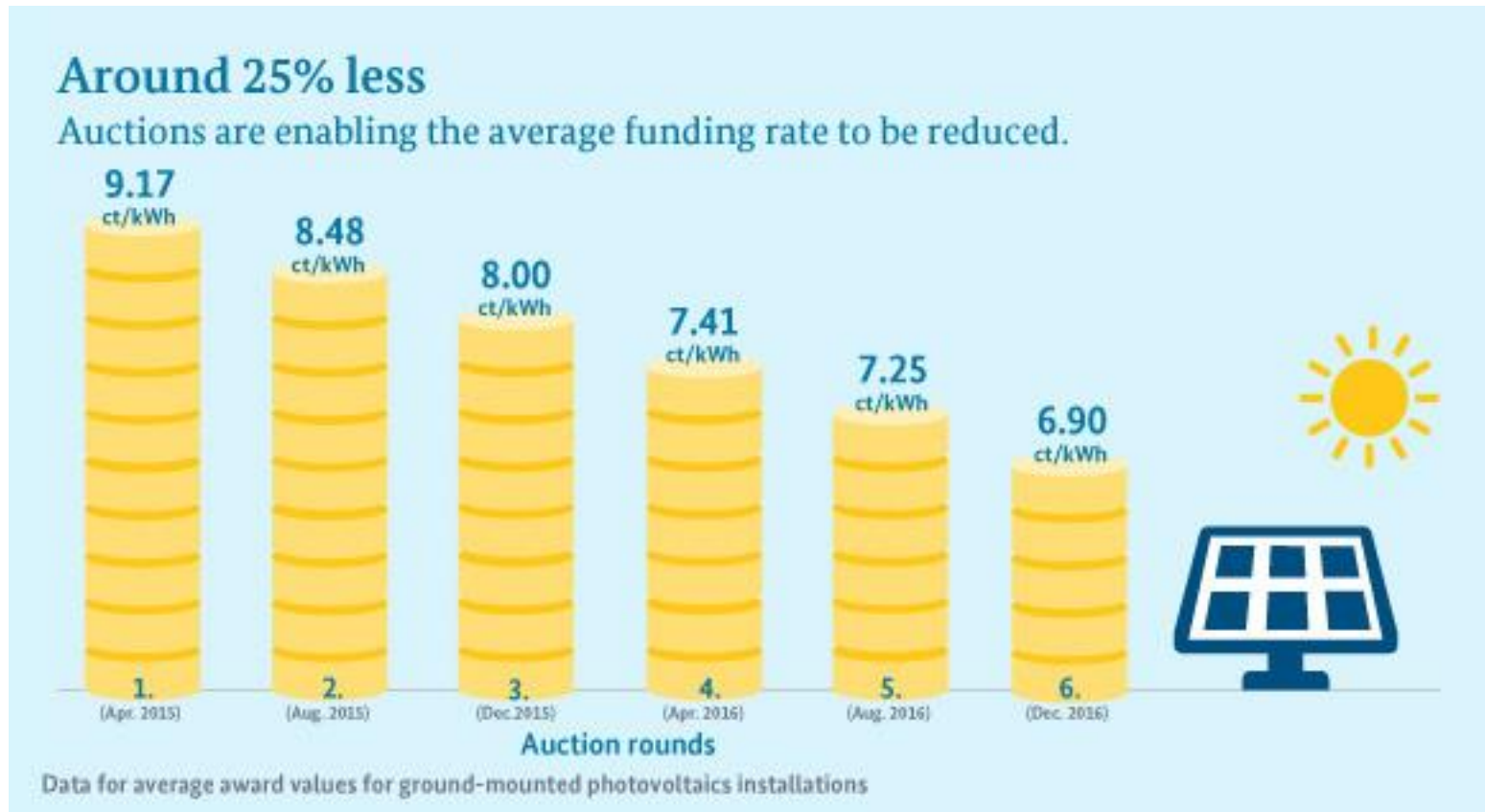
Source: Ecofys 2016 based on AGEESat 2016



# Share of variable RE globally

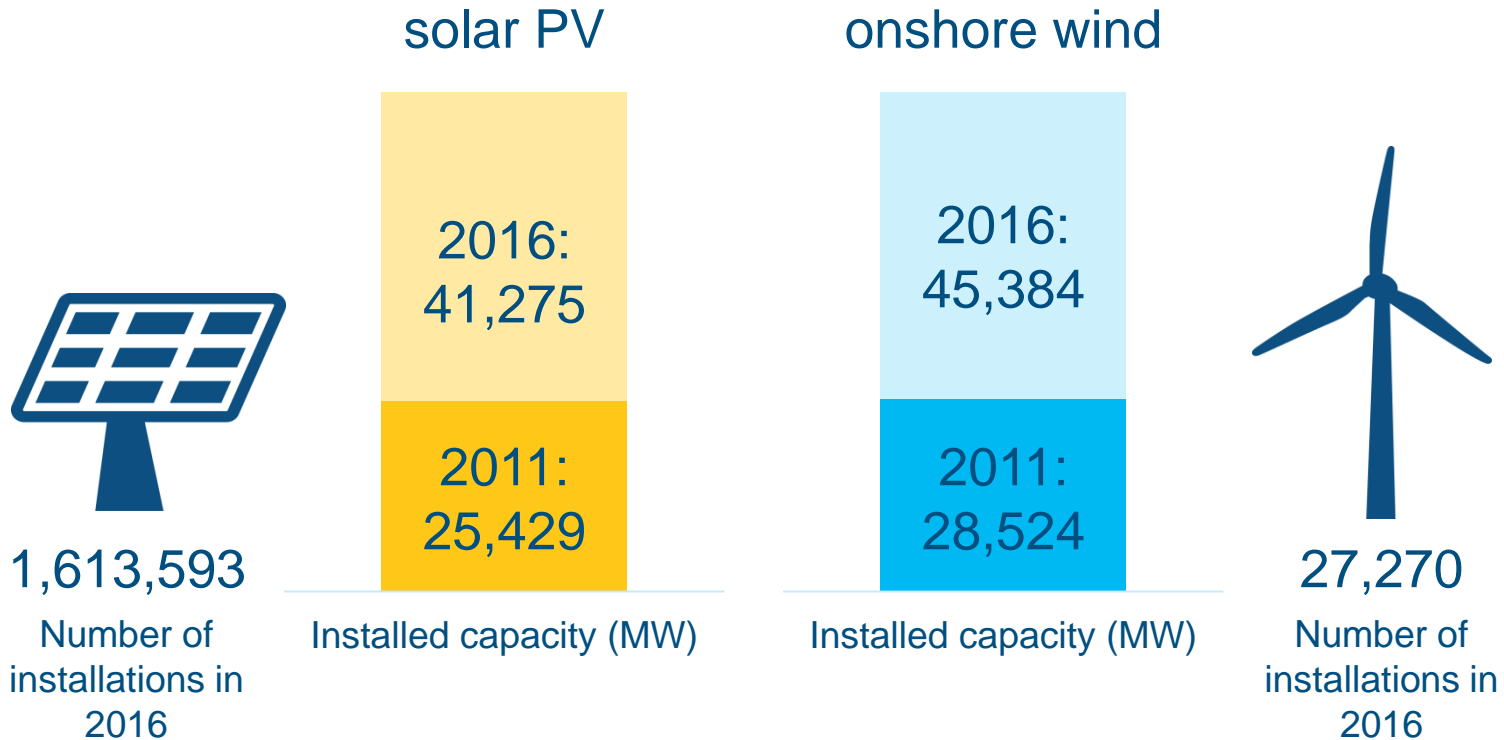


# There has been a significant reduction in support costs since the introduction of auctions in April 2015



Source: BMWI 2017 based on BNetzA

# Wind and solar capacities are steadily growing



Source: Ecofys 2016 based on AGEE-Stat 2017, BNetzA 2016, BSW Solar 2017, Deutsche Windguard 2017

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# The EU's "winter package" aims at deepening European integration in the field of energy

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## Governance Regulation

Each Member State is required to present a national energy and climate action plan for 2021-2030



## Revision of the Renewable Energy Directive

Includes general principles that Member States should follow when designing support schemes



## Revision of the Energy Efficiency Directive

Binding EU-wide target of 30% by 2030, commitment to put energy efficiency first



## Electricity market design

Set the course for free price formation throughout Europe to generate investment and create greater flexibility



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# Thank you for your attention!

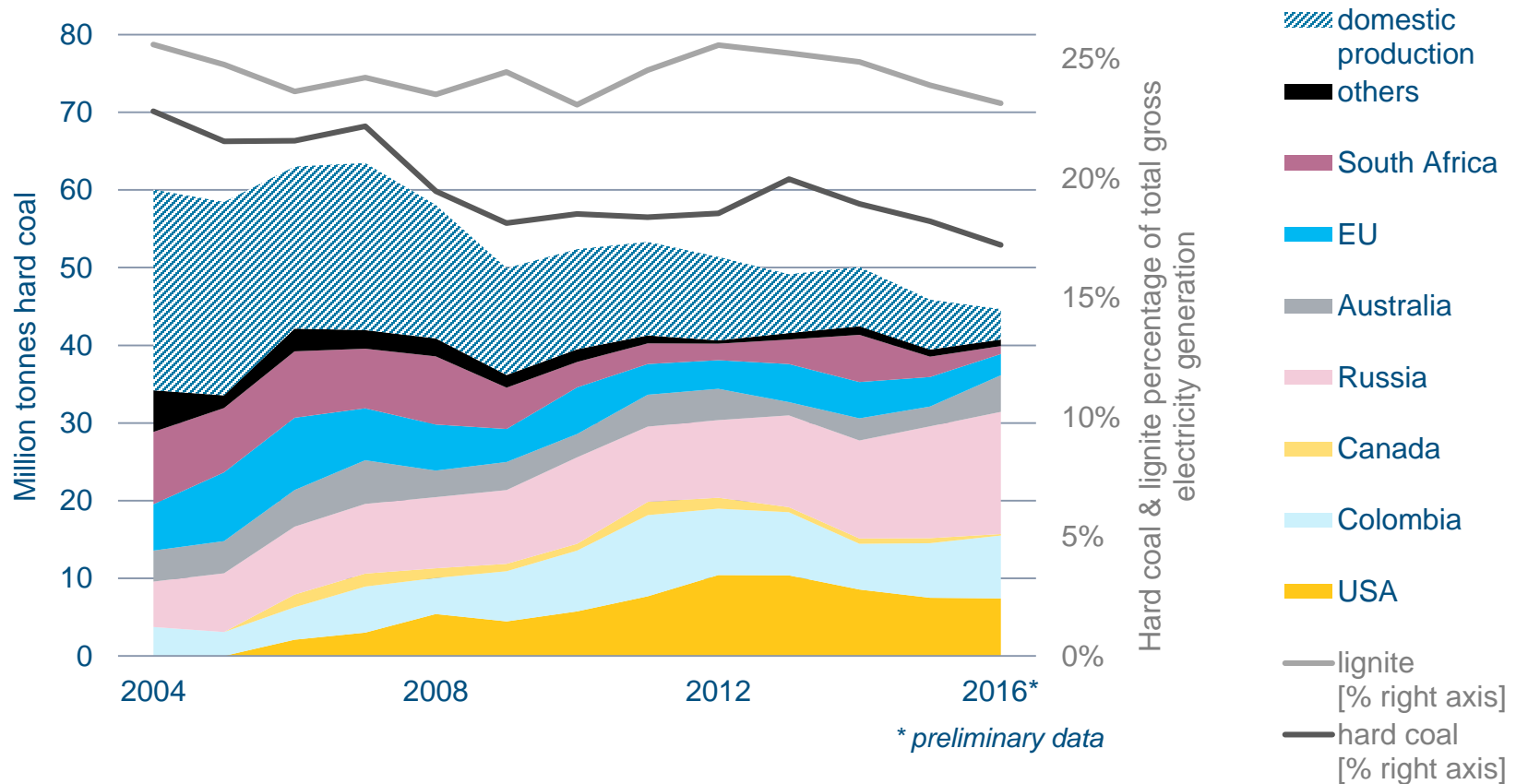
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# Coal imports to Germany increased only slightly while domestic production significantly declined



Source: Ecofys 2017 based on Statistisches Bundesamt 2016, BMWi 2016, AGEF 2016