



energy solutions – made in Germany

IX SIMPÓSIO GERMANO-CABO-VERDIANO **DE ENERGIA**

"EFICIÊNCIA ENERGÉTICA E ENERGIAS RENOVÁVEIS PARA

O SETOR DO TURISMO EM CABO VERDE"

Christiane Vaneker, RENAC AG 23 de Maio 2023, Sal, Cabo Verde





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 Climate Action









We offer

Information about German energy solutions:

- Online database: Profiles and contact information of German companies
- Latest information about
 German energy solutions
- Upcoming events of the Initiative
- Newsletter

Networking and business opportunities with German companies both in your country and in Germany:

- Energy trade missions
 with one-day seminar and
 individual business
 meetings
- Foreign trade fairs

Know-how exchange:

- Fact-finding missions to
 Germany with first-hand
 information on energy
 solutions made in
 Germany, on-site visits and
 networking opportunities
- Showcases of flagship
 projects around the world













The German Energy Transition

"Energiewende"





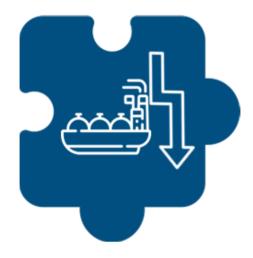
Facilitator

Source: Guidehou se 2023 based on BMWK 2022

The energy transition is the guarantor of a secure, climate-neutral and economically successful future



Mitigating climate change



Reducing dependency on fossil fuel imports



Improving energy security









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

		2022	2030	2040	2045	2050
Climate	Greenhouse gas emission (vs. 1990)	-38.7%*	-65%	-88%	GHG neutral	GHG sink
Renewable Energy	Gross electricity consumption	46.5%*	80%			
	Gross final energy consumption	22.0%*	30%	45%		60%
Energy Efficiency	Primary energy consumption (vs. 2008)	- 15.2% (2021)	-30%			-50%
	Final energy productivity (vs. 2008)	1.4% p.a. (2008-20)		+2.1% p.a. (2008-2050)		
	Primary energy demand in buildings (vs. 2008)	- 23.6% (2019)	-			-80%
	Final energy consumption in transport (vs. 2005)	-11.4% (2020)	•			-40%

*preliminary data

Source: Guidehou se 2023 based on Agora Energiewende 2023, UBA 2022 & BMWK 2021









Germany accelerates the energy transition to address the energy crisis

Renewable energy*

Electricity generation: + 11%



Expansion of installed capacity PV: + 31%



Expansion of installed capacity wind onshore: + 9%

*January - September 2022 compared to same period in 2021

Buildings & energy efficiency



Share of heat pumps in the heating structure: + 7%**



Reduction of gas consumption by households: - 16.7%*



Reduction of gas consumption by industries: - 14.6%*

* January-September 2022 compared to the same period in 2021 **January-May 2022 compared to 2021







Diversification of energy supply Temporary LNG infrastructure will be H2-ready Restructuring energy imports and thinking about the fossil-free future: Development of energy imports from Russia 60% Natural Gas

Interim status

1.5.2022



Before beginning

of war

40%

20%

0%

Crude Oil

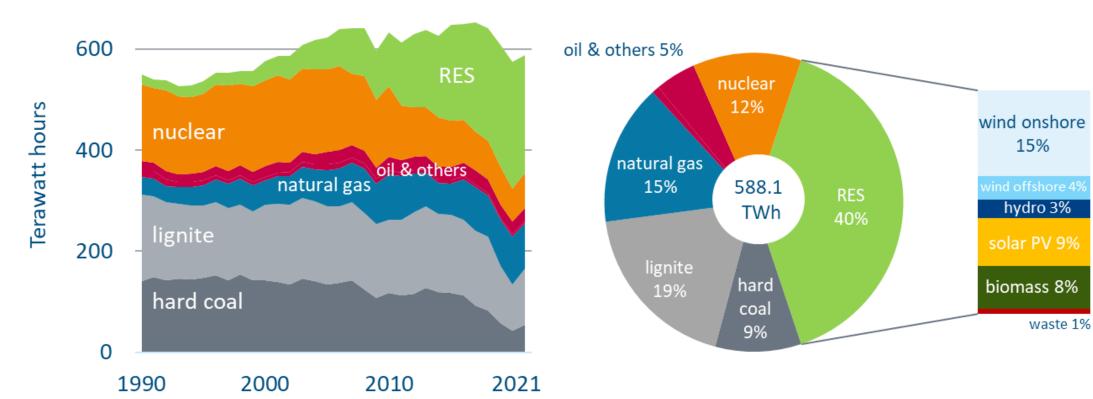
Hard Coal

Current status

14.10.2022

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

Development and status quo of gross electricity generation by sources in Germany in 2021





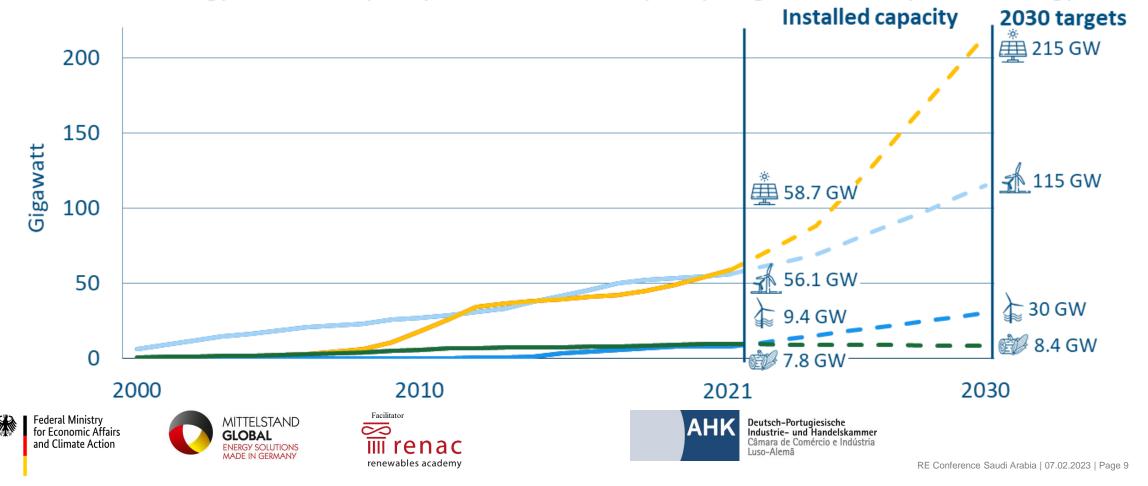






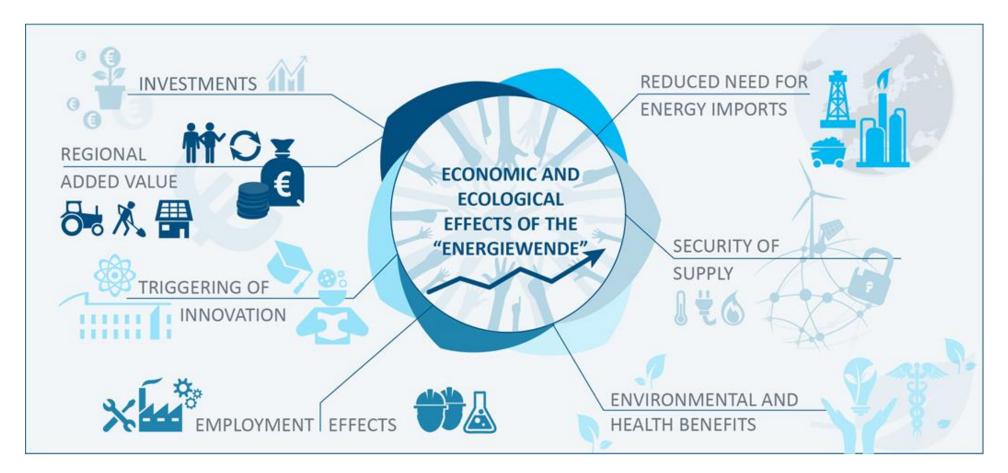
Technology-specific capacity expansion targets make deployment of renewables plannable

Renewable energy installed capacity 2000-2021 and capacity targets for 2030 per technology



Source: Edelman.ergo 2016

The energy transition has positive effects at various levels of the economy







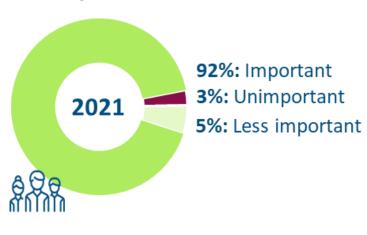


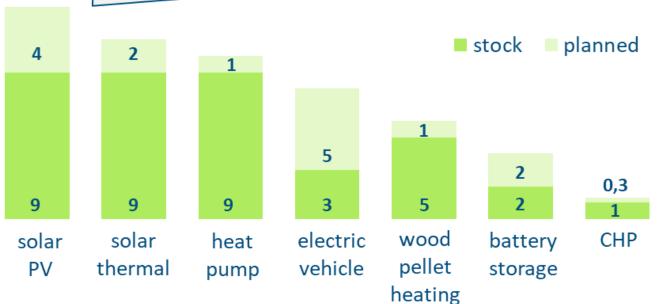


The Energiewende enjoys wide support within the German population

Support of the Energiewende (in %, 2021)

Participation of German households in technologies contributing to the Energiewende (in %, 2021).













& KfW 2021

Source: Guidehouse 2022 based on UBA 2022 & IW Koeln 2021 Iconsby Flaticon.com

Renewable energy has become an important economic factor in Germany

Economic factors related to renewable energy sources in Germany in 2021



Employment in renewable energy related jobs

344,100 jobs



Exports of German technology related to renewable energy

€10.6 billion (2020)



Investments in renewable energy sources

€13.4 billion



Economic stimulus from the operation of renewable energy plants

€20.2 billion









Renewables have created almost 13 million jobs worldwide by 2021

Employment* in renewable energies including hydropower in 2021 (in thousands)



* Employment in the rest of the world (for countries not named): 2,290

** EU including Germany









Contact us

Coordination Office of the German Energy Solutions Initiative

office@german-energy-solutions.de www.german-energy-solutions.de/en twitter: @export_EE

Facilitator: Renewables Academy (RENAC) AG

Christiane Vaneker breid@renac.de www.renac.de

