

Renewables 2022 Global Status Report

Germany Factsheet

Key Headlines:

- Renewables energy shares and targets
 - Germany is amongst three out of 47 countries in Europe with intermediary renewable energy targets in 2030 (30%) and 2040 (45%), with the most recent progress at 16.4% in 2020.
 - Germany has 3 times higher share of variable renewables in its electricity production than the global average of 10% (33% in Germany).
 - The German government announced its national hydrogen strategy in 2020, it expects 90 to 114 TWh of H2 demand by 2030 though it expects green hydrogen production capacity to be 14 TWh by 2030.
- Renewable energy policies and fossil fuel phase-out
 - Germany is the only country in Europe with renewable energy mandates¹ for the installation of solar PV in buildings at the sub-national level, with policies in seven jurisdictions including in Baden-Württemberg, Berlin, and Hamburg.
 - Germany has a binding phase-out target of coal mining by 2030 at the latest, putting it amongst 25 other national and subnational governments to ban fossil fuels and move to 100% renewable power by 2040.

¹ Obligation to produce a specified fraction of electricity from renewable energy sources.

GERMANY ENERGY STATISTICS

GDP	3,570.62 billion euros
Population	83,222,442
USD invested in renewables in the region	Europe invested 79.7 billion USD in renewables in 2021, equivalent to the GDP of Luxembourg in 2020.
Total installed capacity of renewable power in 2021	138.9 GW - Enough to power Italy, a growing trend (6.8 GW additions in 2021).
Renewable energy developments in past 10 years	Renewable energy share in final energy demand increased by 65% between 2009 and 2019.

RENEWABLE ENERGY POLICY SITUATION IN GERMANY

Indicator	Sector and year
Renewable energy targets	<ul style="list-style-type: none"> • Economy-wide RE: 30% by 2030, 45% by 2040, 60% by 2050. • Power: 65% renewable power by 2030, in 2022 target was revised to 80% by 2030, 200 GW solar PV by 2030, 30 GW offshore wind by 2030 and at least 70 GW by 2045. <p>Transport: ICE phase-out/EV Target for all new vehicles by 2030.</p>
Net-zero target	Climate neutrality by 2045.
Renewable energy policies	
<i>New policies in 2021</i>	<ul style="list-style-type: none"> • Launched carbon pricing for the heating and transport sectors. • Financial incentives to limit the installation of oil-fired heating systems and fossil fuel boilers in new and existing buildings.
City /subnational targets	<ul style="list-style-type: none"> • More than 68 German cities with RE, P, H&C or T targets in 2021. • Around 26 German cities with net-zero targets, 2 of which were announced in 2021 (Berlin and Essen).

GLOBAL RANKINGS

Total renewable power capacity, end-2021 (GW)	Renewable power capacity per person, not including hydropower, end 2021 (GW)	Leaders in renewables share in total final energy consumption, end 2019 (%)
1. China	1. Iceland	1. Iceland
2. USA	2. Denmark	2. Norway
3. Brazil	3. Germany	3. Sweden
4. India	4. Sweden	4. Tajikistan
5. Germany	5. Australia	5. Brazil
		25. Germany

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