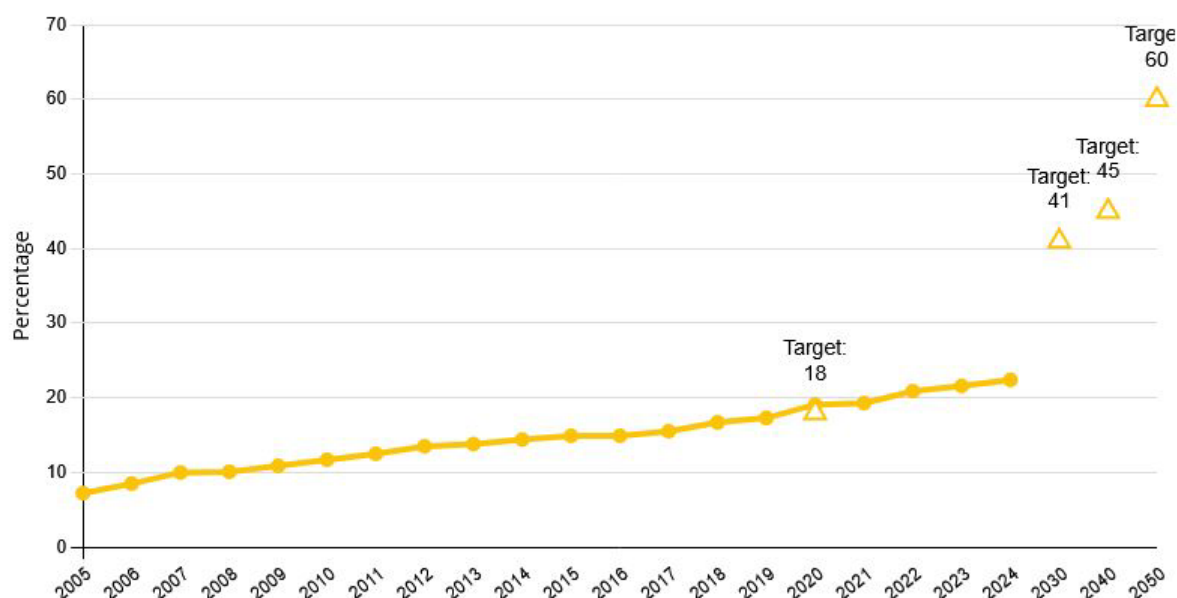




Renewable energies – Strengthening a sustainable energy supply

7.2.a Share of renewable energies in gross final energy consumption

Renewable energies (generation) in gross final energy consumption



Note(s):

2023 and 2024 provisional data.

Data source(s):

Working Group on Renewable Energy Statistics, Federal Ministry for Economic Affairs and Energy

Definition

The indicator shows the share of renewable energies in gross final energy consumption (in %). The indicator compares the generation of renewable energies with gross final energy consumption. Gross final energy consumption includes energy consumption by the end consumer, transmission losses and own consumption by the energy generation sectors.

Intention

Reserves of fossil fuels such as oil and gas are limited. Furthermore, their utilisation is associated with the emission of greenhouse gases. Switching to renewable energies, which are constantly regenerating as natural energy sources, reduces energy-related emissions and consequently the extent of climate change. In addition, dependence on energy imports and the consumption of resources are reduced and technical innovations are promoted.

Target

Increase to 41% by 2030, to 45% by 2040 and to 60% by 2050



7 AFFORDABLE AND CLEAN ENERGY

Content and progress

This indicator relates the amount of electricity generated from renewable energy sources in Germany (including hydropower, onshore and offshore wind energy, and solar power), heat (for example from geothermal energy, biomass, or biogenic waste), and renewable fuels to the gross final energy consumption of all energy sources in Germany. Gross final energy consumption comprises the total energy consumption by end users, transmission losses, and own consumption in energy production. It includes both domestically generated and imported energy carriers.

The indicator is calculated by the Working Group on Renewable Energy Statistics (AGEE-Stat). The calculation is carried out in accordance with the reporting requirements of the European Union's Renewable Energy Directive (Directive 2009/28/EC until 2020, Directive 2018/2001 from 2021 onwards), which stipulates the use of multi-year averages for sources such as hydropower and wind energy due to natural fluctuations in availability. The politically established target of achieving an 18% share of renewable energy in gross final energy consumption by 2020 was exceeded, with a recorded share of 19.1%. In 2024, the share of renewable energy reached 22.4%. If the current trend continues, the next target – 41% by 2030 (as defined in the National Energy and Climate Plan, NECP, August 2024) – is expected to be clearly missed.

However, from a long-term perspective, the value of this indicator has risen significantly from 7.2% in 2005. The use of renewable energy varies considerably by sector. In 2024, renewables accounted for 54.4% of gross electricity consumption, 18.1% of final energy consumption for heating and cooling, and 7.2% in the transport sector.

The indicator is closely linked to the following: indicator 13.1.a Greenhouse gas emissions, indicator 3.2.a Air pollutant emissions, and indicator 7.2.b Share of electricity from renewable energy sources in gross electricity consumption.

Type of target

Target with specific target value

Assessment

For indicator 7.2.a, various target values are defined for different years. For the assessment, the next relevant target is considered. Accordingly, the share of renewable energy in gross final energy consumption should reach at least 41% by 2030.

Although the indicator value is rising, if the average rate of increase over the past six years continues, the politically defined 2030 target would be significantly missed. Indicator 7.2.a is therefore assessed as cloud for 2024.

