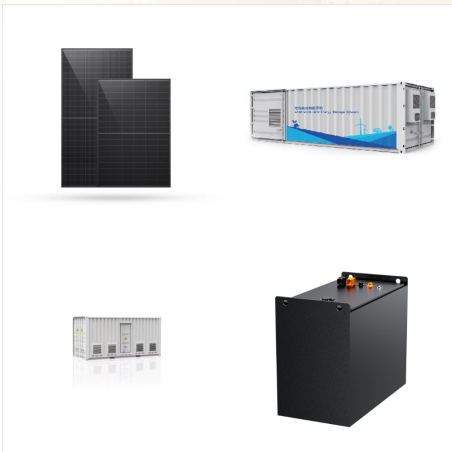




Wind energy accounted for a share of 32 percent of the total renewable energy capacity installed in China as of end of 2021. Meanwhile, solar energy had a share of 30 of China's renewable capacity.



The European Union was second to China with \$180 billion in clean energy investments, accounting for more than 90 percent of the \$79 billion invested in that sector last year, according to the



Record growth in renewable capacity is propelling the transformation of China's energy system. However, uncertainties remain as the Chinese government contends with energy security concerns and continues its green industrial policy push. nearly 20 percent of China's total coal capacity was consequently offline in Q3 2021. In response,

CHINA RENEWABLE ENERGY PERCENTAGE



The development of renewable energy in China has attracted global attention in recent years. In 2012, China's installed capacity of wind and solar power was 61GW and 3.4GW respectively, while the annual electricity generated by renewables was only 2.1% of China's total consumption. By 2017, China's wind and solar power capacity had



This worldwide acceleration in 2023 was driven mainly by year-on-year expansion in the People's Republic of China's (hereafter "China") booming market for solar PV (+116%) and wind (+66%). Renewable energy expansion also accelerates in the Middle East and North Africa, owing mostly to policy incentives that take advantage of the



Guaranteed consumption of renewable energy:
China's Renewable Energy Law initially guaranteed full purchase of renewable energy, but in practice dispatch did not prioritize renewable sources.
Figure 2: 2020 minimum provincial non-hydro renewable obligation, percentage of generation.
Source: National Energy Administration, June 2020.

CHINA RENEWABLE ENERGY PERCENTAGE



In 2021, in the Paris Agreement commitments that China submitted to the U.N., Beijing pledged to "strictly limit" coal growth, strictly control new coal power, reduce energy and carbon intensity by 2025, increase the share of non-fossil energy sources to 20 percent by 2025 and to 25 percent by 2030, and to generate 50 percent of the



In 2023, China commissioned as much solar PV as the entire world did in 2022, while its wind additions also grew by 66% year-on-year. Globally, solar PV alone accounted for three-quarters of renewable capacity additions worldwide.



Approximately one-seventh of the world's primary energy is now sourced from renewable technologies. Note that this is based on renewable energy's share in the energy mix. Energy consumption represents the sum of electricity, transport, and heating. We look at the electricity mix later in this article.

CHINA RENEWABLE ENERGY PERCENTAGE



Source: China State Council Information Office
China saw steady growth in renewable energy capacity in 2021, data by the National Energy Administration showed the end of last year, the country's installed capacity of renewable energy totaled 1.06 billion kilowatts, accounting for 44.8 percent of the total installed power generation capacity. Wind farms and ???



Over the past decade, China has also emerged as a global leader in wind and solar photovoltaic (PV) energy. China's electricity generated by wind power accounted for just 2.1 percent of its total consumption in 2012, compared to 3.7 in the United States and 9.4 percent in Germany. By 2019, however, China's wind-energy generation surged to 406 TWh, well ahead of the United States ???



China added a record 301 GW of renewable power generation capacity including solar, wind and hydro in 2023, accounting for around 59% of the world's total renewable capacity additions last year. It added 216 GW of solar PV capacity alone in 2023 that was equal to 14% of the world's total installed solar PV capacity, more than what many

CHINA RENEWABLE ENERGY PERCENTAGE



The Renewable Energy Law of 2006 : Widely heralded as a landmark piece of legislation in the Chinese renewable energy sector, this law established the preliminary national framework for promoting clean energy in China. More specifically, it aimed to integrate renewables into China's energy system, develop renewable markets and remove economic



In 2021, China set a goal for renewable capacity ??? including wind, solar, hydro, and nuclear power ??? to exceed fossil fuel capacity by 2025, a target that it has hit two years ahead of schedule, Reuters reports. Renewable sources, as China defines them, now make up 50.9 percent of the country's power capacity.



China has been investing heavily in renewable energy over the past decade, with the total installed energy capacity of renewable energy increasing steadily. According to the National Energy Administration (NEA), China's installed renewable energy capacity reached 1063 gigawatts (GW) in 2021, accounting for 44.8 percent of China's total

CHINA RENEWABLE ENERGY PERCENTAGE



Another issue that requires close attention is China's continued investment in fossil fuels, especially coal with nearly all the new global coal fired capacity. In tandem with its growing renewable capacity, coal still remains the most prominent fuel source in China's energy mix, with coal production reaching a record high in 2023. While

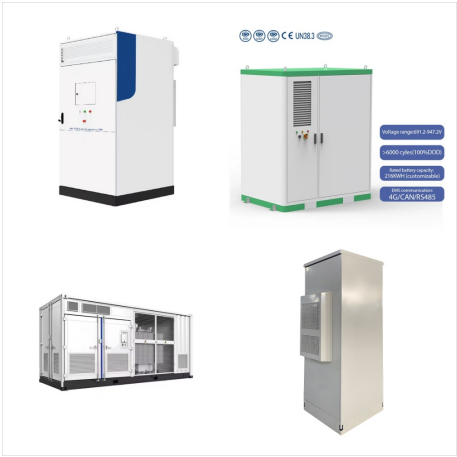


In the year 2021, 55 percent of China's energy supply came from coal. Download: [Download high-res image \(247KB\)](#) Download: [Download full-size image](#); Fig. 1. In conjunction with the objective of augmenting the percentage of renewable energy utilization in China, it is imperative for the government to undertake reforms aimed at restructuring

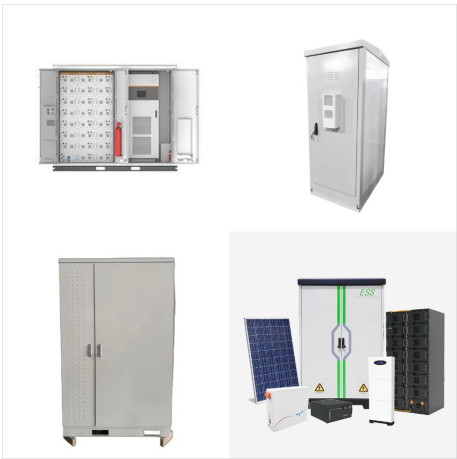


Renewable energy statistics 2024 provides datasets on power-generation capacity for 2014-2023, actual power generation for 2014-2022 and renewable energy balances for over 150 countries and areas for 2021-2022. Data was obtained from a variety of sources, including an IRENA questionnaire, official national statistics, industry association

CHINA RENEWABLE ENERGY PERCENTAGE



Solar power. Solar was the largest contributor to growth in China's clean-technology economy in 2023. It recorded growth worth a combined 1tn yuan of new investment, goods and services, as its value grew from 1.5tn yuan in 2022 to 2.5tn yuan in 2023, an increase of 63% year-on-year.



China's total renewable energy consumption is set to reach about 1 billion tonnes of standard coal equivalent (TCE) by 2025, as the country bids to raise the share of non-fossil fuels in total



China energy indicators, 2021 NuclearCoal Natural gas Petroleum and other liquids Renewables
Primary energy production (quads) 94.0 7.5 8.6 4.2 20.7
Primary energy production (percentage) 70% 6% 6% 3% 15%
Primary energy consumption (quads) 96.2 13.4 30.9 4.2 20.5 where increased renewable capacity and coal production reduced natural gas-fired

CHINA RENEWABLE ENERGY PERCENTAGE



China has devoted significant resources to the construction of renewable energy capacity in recent years, building large wind, solar and hydro plants in the west of the country as it seeks to meet



Unabated climate change could lead to estimated GDP losses of between 0.5 and 2.3 percent as early as 2030, according to the report. with over 4 million jobs in renewable energy. China has also announced that it will no longer build coal-fired power plants abroad and will step up support for other countries in developing green and low



The installed power generation capacity of renewable energy, which includes wind power, solar power, hydropower and biomass energy, totaled 1.45 billion kilowatts so far this year, according to the National Energy Administration. The country's total power generation capacity reached around 2.9 billion kilowatts, up 12.9 percent from a year earlier.