

Renewables 2022 Global Status Report **United States of America Factsheet**

Key Headlines:

- **Renewables energy shares and targets**
 - The United States ranked second globally in 2021 in a number of renewable energy categories notably installed power capacity, including total renewable power, solar PV, wind power, concentrating solar thermal power and wind power. It ranked first globally in geothermal power capacity.
 - By year-end, the United States had installed 13.4 GW (net 12.9 GW, all onshore) of wind power capacity during 2021, for a total of 135 GW.
 - The United States installed 26.7 GWdc of solar PV in 2021 to rank second globally. Its total installed capacity for solar PV reached 122.9 GW, growing 22% year-on-year. The country ranked fourth globally in hydropower capacity at 80 GW, with its net capacity expanding 103 MW in 2021.
 - In the Americas, the United States remained the world's second largest bioelectricity producer with 60 TWh in 2021.
 - The United States alone installed a further 4.2 GW battery storage in 2021.
 - Markets for heat pumps grew 15% in 2021 and heat pumps accounted for between 40% and 50% of heating equipment sales for newly constructed buildings, depending on the building type.
 - The United States ranked fifth for solar thermal sales in 2021 (adding 601 MWth), bringing its total capacity in operation to 18.2 GWth.
- **Investment**
 - In the United States, investment fell nearly 17% to USD 46.7 billion in 2021.
 - The United States maintained its lead in issuing green bonds, increasing its volume 63% to USD 81.9 billion in 2021.
 - In the United States, the Bipartisan Infrastructure Deal includes USD 65 billion to upgrade power infrastructure by building thousands of kilometres of new transmission lines to facilitate the expansion of renewables.
 - U.S. Department of Energy Hydrogen Program Plan allocated USD 64 million in funding for 18 projects that will support the H2@Scale vision for affordable hydrogen production, storage, distribution and use.
- **Renewable energy policies and fossil fuel phase-out**
 - New rules adopted in 2020 enable distributed energy resources to be aggregated together and to participate directly in the country's bulk electricity markets.
 - Fossil fuel phase-out and bans popular at the subnational level with Oregon Banned the expansion or new construction of power plants that burn coal.

- Phase-out of oil and gas production in California.
- Ban on oil and gas in new buildings in Massachusetts.
- Renewable heating and cooling mandates in buildings in Connecticut and Rhode Island.

UNITED STATES ENERGY STATISTICS

GDP	23.00 USD trillion as of 2020
Population	331,893,745 as of 2020
USD invested in renewables in the country	The United States invested 46.7 billion USD in renewables in 2021, equivalent to the GDP of Uruguay 2020.
Total installed capacity of renewable power	398 GW – Almost enough to power all of Central & South America, a growing trend (85GW additions in 2021).
Renewable energy developments in past 10 years	Renewable energy share in final energy demand increased by 42% between 2009 and 2019.

RENEWABLE ENERGY POLICY SITUATION IN THE UNITED STATES

Indicator	Sector and year
Renewable energy targets	<ul style="list-style-type: none"> • Economy-wide RE: No national target, but a sub-national target of 100% clean energy in Oregon by 2040. • Power: 100% clean electricity by 2035. Several installed capacity targets announced in 2021 including in Massachusetts, New Jersey and North Carolina for offshore wind. National target of 30GW of electricity from offshore wind by 2030 and 110GW by 2050. • Transport: Partial ICE phase-out by 2030.
Net-zero target	Net zero target by 2050 in law.
Renewable energy policies	
<i>New policies in 2021</i>	<ul style="list-style-type: none"> • Tax deductions and exemptions: Solar ready provisions for detached one- and two-family dwellings and townhouses.

City /subnational targets	<ul style="list-style-type: none"> • More than 360 US cities with 496 RE, P, H&C or T targets in 2021. • Around 172 US cities with net-zero targets.
City / subnational policies	<ul style="list-style-type: none"> • Around 376 cities with 596 RE, P, H&C or T policies in 2021, mostly renewable energy portfolios and community choice aggregations¹. • Oregon Banned the expansion or new construction of power plants that burn coal. • Ban on oil and gas in new buildings in Massachusetts. • Renewable heating and cooling mandates in buildings in Connecticut and Rhode Island. • Phase-out of oil and gas production in California.

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
	9. United States	47. United States

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¹ Renewable portfolio standards are regulatory mandate to increase production of energy from renewable sources. Community choice aggregations also known as municipal aggregation—programs allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider.