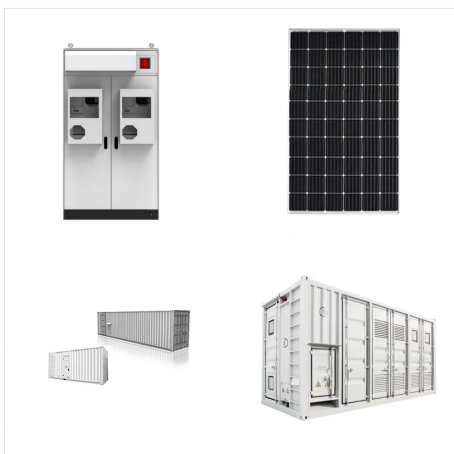




The U.S. Energy Information Administration (EIA) collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA's role is unique ??? by providing an



The IEA's flagship World Energy Outlook, published every year, is the most authoritative global source of energy analysis and projections. It identifies and explores the biggest trends in energy demand and supply, as well as what they mean for energy ???



Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government. U.S. electricity generation from renewable sources, such as hydropower, wind, and solar, accounted for 20% of electricity generation both in 2020 and in 2021. Forecasts in our Short-Term Energy Outlook show how we expect 11 electricity markets

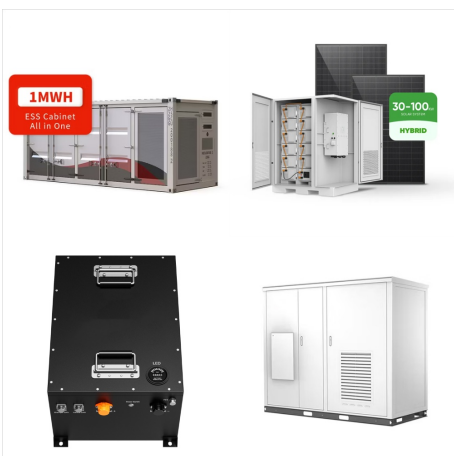
# EIA RENEWABLE ENERGY OUTLOOK



In its Annual Energy Outlook 2022 (AEO2022) Reference case, which reflects current laws and regulations, the US Energy Information Administration (EIA) projects that the share of US power generation from ???



The Energy Information Administration expects renewable deployment to grow by 17% to 42 GW in 2024 and account for almost a quarter of electricity generation. 5 The estimate falls below the low end of the National ???



Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government. Skip to sub-navigation steo (short-term energy outlook) Prices Archive About Glossary FAQs In-brief analysis February 15, 2024 Solar and battery storage to make up 81% of new U.S. electric-generating capacity in 2024

# EIA RENEWABLE ENERGY OUTLOOK



Annual Energy Outlook 2022. Every year, the U.S. Energy Information Administration (EIA) publishes updates to its . Annual Energy Outlook (AEO), which provides long-term projections of energy production and consumption in the United States using EIA's National Energy Modeling System (NEMS) . The . AEO update for 2022

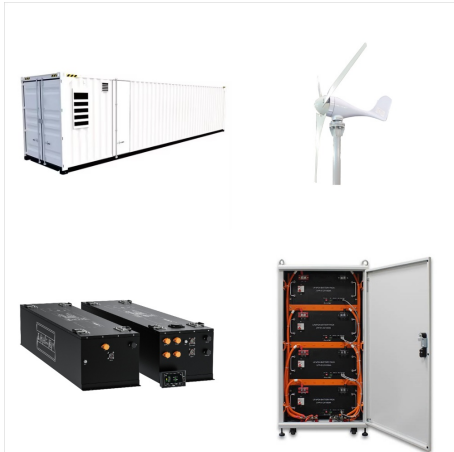


Data source: U.S. Energy Information Administration, Petroleum Supply Monthly; and the U.S. Census Bureau Note: Ethylene derivatives include high-density polyethylene (HDPE), low-density polyethylene (LDPE), ethylene vinyl acetate, polyvinyl chloride (PVC), and other polymers of ethylene not elsewhere specified or included.



U.S. Energy Information Administration | AEO2023 Narrative 1 . Administrator's Foreword . After a 23-year hiatus, I am reintroducing the Administrator's Foreword as part of the . Annual Energy Outlook (AEO). The Foreword affords me an opportunity to provide context and outline future directions for one of our flagship products.

# EIA RENEWABLE ENERGY OUTLOOK



Data source: U.S. Energy Information Administration, Annual Energy Outlook 2023 Note: Does not include off-grid photovoltaics (PV) In 2050, we project that total U.S. solar capacity, which includes both utility-scale solar and rooftop solar in the commercial and residential sectors, could range from 532 gigawatts (GW) to 1,399 GW.



The International Energy Outlook 2023 (IEO2023) explores long-term energy trends across the world through 2050. Since our last IEO two years ago, IEO2021, the global energy system has evolved against a backdrop of new energy policies, the transition to zero-carbon technologies, energy security concerns, and economic and population growth.



Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government. Renewable generation surpassed coal and nuclear in the U.S. electric power sector in 2022. This monthly supplement to the Short-Term Energy Outlook addresses price volatility and forecast uncertainty for crude oil and natural gas;

# EIA RENEWABLE ENERGY OUTLOOK



? Data source: U.S. Energy Information Administration, Petroleum Supply Monthly; and the U.S. Census Bureau Note: Ethylene derivatives include high-density polyethylene (HDPE), low-density polyethylene (LDPE), ethylene vinyl acetate, polyvinyl chloride (PVC), and other polymers of ethylene not elsewhere specified or included.



The Energy Information Administration expects renewable deployment to grow by 17% to 42 GW in 2024 and account for almost a quarter of electricity generation. 5 The estimate falls below the low end of the National Renewable Energy Laboratory's assessment that Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA)



Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government. U.S. renewable energy supply and consumption; Available formats: PDF; 9a. U.S. macroeconomic indicators and CO 2 emissions; Annual Energy Outlook (released:

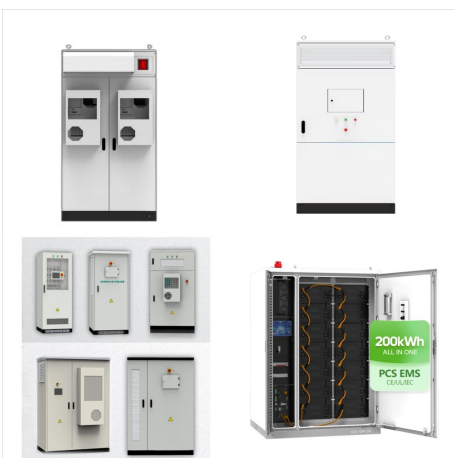
# EIA RENEWABLE ENERGY OUTLOOK



Incentives such as investments tax credits have encouraged growth in renewable generation capacity. By August 2023, installed U.S. solar capacity totaled more than 125 gigawatts (GW), including 80 GW of utility-scale solar capacity and an estimated 45 GW of small-scale solar capacity. Hydroelectric capacity in the United States has remained relatively steady ???



Data source: U.S. Energy Information Administration, Annual Energy Outlook 2023 Note: PV = photovoltaic; technologies in which capacity additions are not expected in 2028 do not have a capacity-weighted average. Levelized Costs of New Generation Resources 9 in the Annual Energy Outlook 2023 ultra-supercritical coal biomass advanced nuclear



In our International Energy Outlook 2021 (IEO2021) Reference case, we project that, absent significant changes in policy or technology, global energy consumption will increase nearly 50% over the next 30 years. Although petroleum and other liquid fuels will remain the world's largest energy source in 2050, renewable energy sources, which include solar and wind, will ???

# EIA RENEWABLE ENERGY OUTLOOK



Renewable sources???wind, solar, hydro, biomass, and geothermal???accounted for 22% of generation, or 874 billion kWh, last year. Annual renewable power generation surpassed nuclear generation for the first ???



? On October 16, 2024, the International Energy Agency (IEA) released its latest annual World Energy Outlook (WEO). This flagship publication is the most authoritative global ???



We expect solar electric generation will be the leading source of growth in the U.S. electric power sector. In our January Short-Term Energy Outlook (STEO), which contains new forecast data through December 2025, we forecast new capacity will boost the solar share of total generation to 5.6% in 2024 and 7.0% in 2025, up from 4.0% in 2023.. The STEO includes two ???



U.S. Renewable Diesel Fuel and Other Biofuels Plant Production Capacity - The report contains data for U.S. renewable diesel fuel and other biofuels (excluding fuel ethanol and biodiesel) plants. Petroleum Supply Monthly - Supply and disposition of crude oil, petroleum products, and biofuels on a national and regional level.



Economy, weather, and CO 2. U.S. macroeconomics Our forecast for October 2024 assumes real U.S. GDP will grow by 2.7% in 2024 and 1.9% in 2025, up from last month's forecast of 2.6% and 1.8% respectively, as a result of updated data from the Bureau of ???



In its Annual Energy Outlook 2021 (AEO2021), the U.S. Energy Information Administration (EIA) projects that the share of renewables in the U.S. electricity generation mix will increase from 21% in 2020 to 42% in 2050. Wind and solar generation are responsible for most of that growth. The renewable share is projected to increase as nuclear and coal-fired ???



Liquid fuels remain the largest energy source in the Reference case, but renewable energy use grows to nearly the same level Renewable energy use is driven by favorable technology costs and government policy, but it does not replace petroleum and other liquid fuels absent future technology breakthroughs or significant policy changes. Figure 1.