

The APEC Energy Overview 2025

Introduction

The APEC Energy Overview is an annual publication that provides insights into the current energy supply, demand, policies, and key developments of the 21 APEC economies. The 2025 edition of the APEC Energy Overview includes data up to 2022 and offers analyses of the region's economic growth and energy consumption trends post-pandemic.

In addition to energy supply, transformation, and final consumption data for the period 2000 to 2022, each APEC member economy chapter provides an up-to-date accounting of energy policies and notable energy developments through the first quarter of 2025.

Key Findings

1. Macroeconomy: While APEC's GDP continued to grow from 2021 to 2022, the pace of growth slowed compared to the previous year. After a strong rebound of over 6.0% in 2021, GDP growth in 2022 was around four percentage points lower. Nonetheless, APEC's GDP (PPP constant 2021 USD) reached a record high of more than USD 87 trillion in 2022, raising the region's cumulative GDP per capita to a high of USD 29,360 in 2022.

2. Energy Supply

- (1) APEC's total primary energy supply (TPES) rose by 2.1% to 364 exajoules (EJ) in 2022, matching its compound annual growth rate (CAGR) from 2000 to 2022. Renewable energy (combined solar, wind, and biomass) accounted for about 9.0% of TPES and grew by over 6.0% from 2021 to 2022.
- (2) Coal remained the dominant fuel in energy supply, comprising 35% of total TPES, and its contribution grew by 4% from 2021. Oil and gas remained the second- and third-largest fuel sources in 2022, at 27% and 23% of TPES, respectively.
- (3) APEC maintained its status as a net importer in 2022; however, net imports declined by more than 17% to just over 10 EJ in 2022 compared to 2021. This is the lowest level in the last two decades.

3. Final Demand

- (1) Total final consumption (TFC) increased by more than 2.0% to over 240 EJ in 2022. The industry sector was the main driver of overall growth in APEC TFC, accounting for more than 30% of APEC consumption with an increase of over 3.0% in 2022.
- (2) Non-energy consumption grew significantly from 2021 to 2022, by almost 3.0% to over 30 EJ.
- (3) Residential energy consumption reached a high in 2022, but its share of total final consumption was 1.4%, down from 2.7% in 2021.
- (4) While the transport, commercial, and agriculture sectors grew from 2021 to 2022, their rates of increase were slower than in 2021. From 2021 to 2022, transport energy use rose by just over 1.0%, commercial by 2.4%, and agriculture by 1.0%.



4. Power Sector

- (1) Power generation in APEC grew by 2.4% to a historic high of 19,058 TWh in 2022. Electricity output from combined solar, wind, biomass, and ocean generation jumped by over 19% to a high of 2,558 TWh, exceeding its generation in 2021.
- (2) Although coal-based generation decreased slightly from 2021 to 2022, it remained the dominant fuel for electricity generation. Gas, the second-largest fuel source by share, grew by 1.6%. Oil generation fell sharply by 6.5% from 2021 to 2022, offsetting the 8.7% increase observed the previous year.
- (3) Nuclear electricity generation also declined slightly, by 0.2%. Hydro, the third-largest source, increased by 1.6% in 2022.

5. APEC Energy Goals

- (1) APEC member economies agreed to meet two energy-related objectives as a collective: reducing TFEC energy intensity by 45% in 2035 relative to a 2005 baseline and doubling the share of modern renewables in the APEC energy mix by 2030 relative to 2010.
- (2) As of 2022, APEC-wide final energy intensity [final energy consumption/GDP (2021 PPP USD)] improved 28% compared to the 2005 level, leaving an additional 17 percentage points needed to meet the 2035 goal.
- (3) The observed improvement in primary energy supply intensity of 26% [primary energy supply/GDP (2021 PPP USD)] mirrors the observed improvement in final energy intensity.
- (4) The share of modern renewables¹ in final energy consumption increased from 6% in 2010 to almost 11% in 2022.
- (5) In terms of supply, modern renewables in TPES increased from 4.8% in 2010 to 8.0% in 2022
- (6) Progress has also been made toward doubling the share of renewables in electricity generation by 2030. Renewables accounted for 27% of APEC's electricity generation in 2022, up from 15.6% in 2010.

Please see the full report at the following link to explore more details:

https://www.apec.org/publications/2025/07/apec-energy-overview-2025

¹ Biomass used in the residential and commercial sectors is assumed to be traditional biomass and is not included in the definition of modern renewables. All other renewables (biomass used by industry, hydro, geothermal, etc.) are considered modern renewables. Modern renewables also include the share of electricity that is generated from renewable sources.