

EGEDA Update

**The 61st Meeting of the Expert Group on New and Renewable
Energy Technologies (EGNRET)**

Online

Glen SWEETNAM
EGEDA Chair



Outline

- ❑ Addressing the data challenges of the energy transition
 - ❑ Providing accurate energy statistics
 - ❑ Improving collection and reporting capacity
- ❑ Progress toward APEC's renewable energy goal
- ❑ The energy transition quandary

Regular APEC energy data collection

- The secretariat completed collection of the **2022 annual energy supply and demand data**
 - **APEC Energy Statistics 2022**, which will be published **online** and **APEC Energy Handbook 2022**, which will be printed, are now being drafted
 - The secretariat will send the request for 2023 annual energy supply and demand data from member economies in January 2025.
- Other data collection
 - Annual energy prices
 - Annual GHG emissions
 - CO₂, CH₄ and N₂O emissions from energy combustion and fugitive emissions
 - CO₂ transported and stored
 - Energy efficiency indicators
 - Monthly oil and gas supply and demand (JODI)
 - Quarterly energy supply
 - Major economic indicators
 - Energy-related indicators

Secretariat's participation in international meetings

1. JODI Inter-secretariat working group meeting on 5 December 2024

2. Task Team for the Revision of Standard International Energy Classification (TT-SIEC) under International Energy Statistics Working Group (InterEnerStat)

- ❑ Discuss revisions to SIEC with the ongoing revisions of Central Product Classification (CPC) and International Standard Industrial Classification (ISIC)
- ❑ Monthly online meetings likely to continue for another year
- ❑ Limited Progress to date
 - IEA is continuing to review the definition of synthetic fuel after discussions on 23 January 2024
 - Regarding "Waste", no agreement was reached
 - Categorization of "Fuel wood, wood residues and by-products" is being discussed
 - There is a general agreement for including "cooling " in the energy product classification and not limiting it to district cooling but further discussion and clarification is needed
 - Hydrogen will be classified at the same level of electricity and heat removing it from "Other hydrocarbons"
 - Last meeting was held on January 10, 2025

Energy statistics course (Held in Tokyo)

□ 22 January to 2 February 2024

- No. of economies – 9 (BD; CHL; MAS; PNG; PE; SGP; CT; THA; VN)
- No. of participants – 12
- Trainers - EGEDA secretariat, APERC researchers

□ Objectives

- Increase the capacity of energy statisticians in APEC economies
- Keep the members up-to-date with new developments in energy statistics.
- Enhance the human resource network between APEC economies and APERC
- Increase the level of understanding of the APEC energy database by APEC economies
- Introduce world trends in energy statistics to APEC economies
- Improve the reliability of the APEC energy database

□ The next training course will be on 10-21 February 2025



22nd APEC workshop on energy statistics

- **Date:** 23-26 July 2024
- **Theme:** Tracking the progress of capacity built from the last workshops
- **Participants:** 24 persons from 14 economies participated (9 persons online)
IRENA in-person, 4 speakers from IEA online
- **Objectives**
 - The workshop's main objective was to provide knowledge on the new energy data and statistics required to monitor the energy sector during the energy transition.
 - The workshop enhanced the participants' ability to apply the methodologies and techniques learned from previous workshops in the collection of data such as:
 - new energy products and technologies,
 - energy efficiency indicators, and
 - new and renewable energy data and statistics.
 - The workshop facilitated dialogues on the issues and challenges encountered in collecting these data and statistics through economy presentations and roundtable discussions.

23rd APEC workshop on energy statistics

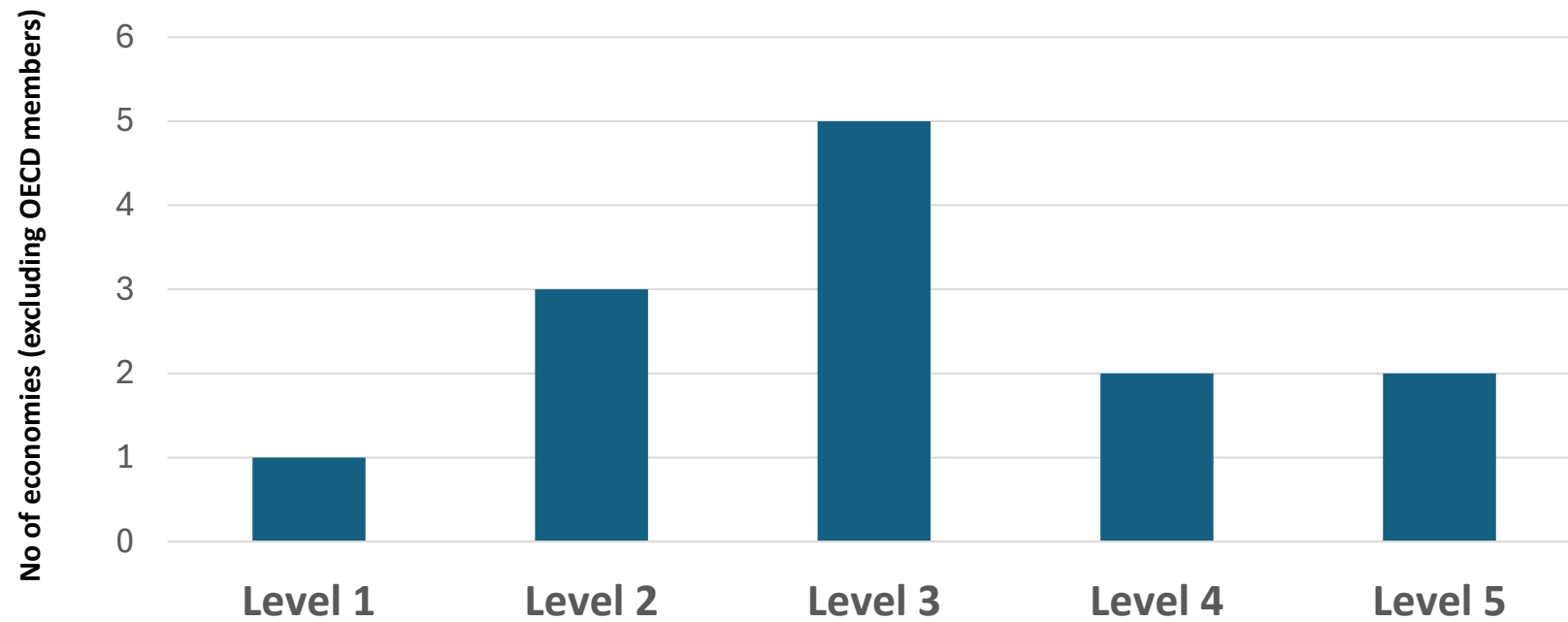
- **Date:** September 2025
- **Theme:** Conducting end-use energy consumption surveys

- **Objectives**
 - The workshop's main objective is sharing of energy consumption survey practices among member economies.
 - The workshop will facilitate dialogues on the issues and challenges encountered in end-use energy consumption surveys and how these can be addressed.

Performance levels for collecting/reporting energy statistics

Level	Performance
1	<ul style="list-style-type: none"> Economy collects energy production data for administrative purposes (e.g., managing private oil and gas companies) Electricity data (only that collected by the state electricity company); no estimates of renewable energy production Economy does not compile energy statistics/balances; does not complete APEC annual energy collection templates.
2	<ul style="list-style-type: none"> Collects energy data from administrative sources; energy balances are incomplete Energy consumption data are aggregated and limited to major sectors (i.e., industry, transportation, buildings, etc.) Economy does not complete the APEC annual energy data collection templates
3	<ul style="list-style-type: none"> Collects energy data from administrative sources; energy balances are incomplete Some energy consumption data are categorized by subsectors; no end-use data Does not complete the APEC annual energy data collection templates
4	<ul style="list-style-type: none"> Collects energy data from administrative sources; energy balances are largely complete Energy consumption data are broken down into subsectors Conducts end-use energy consumption surveys; but does not submit end-use data in the APEC EEI template Completes the APEC annual energy data collection templates
5	<ul style="list-style-type: none"> Collects energy data from administrative sources; prepares complete and accurate energy balances Categorizes energy consumption data by subsector Conducts end-use energy consumption surveys; submits end-use energy consumption data in the APEC EEI template Completes the APEC annual energy data collection templates

Currently a wide range of collection and reporting capabilities

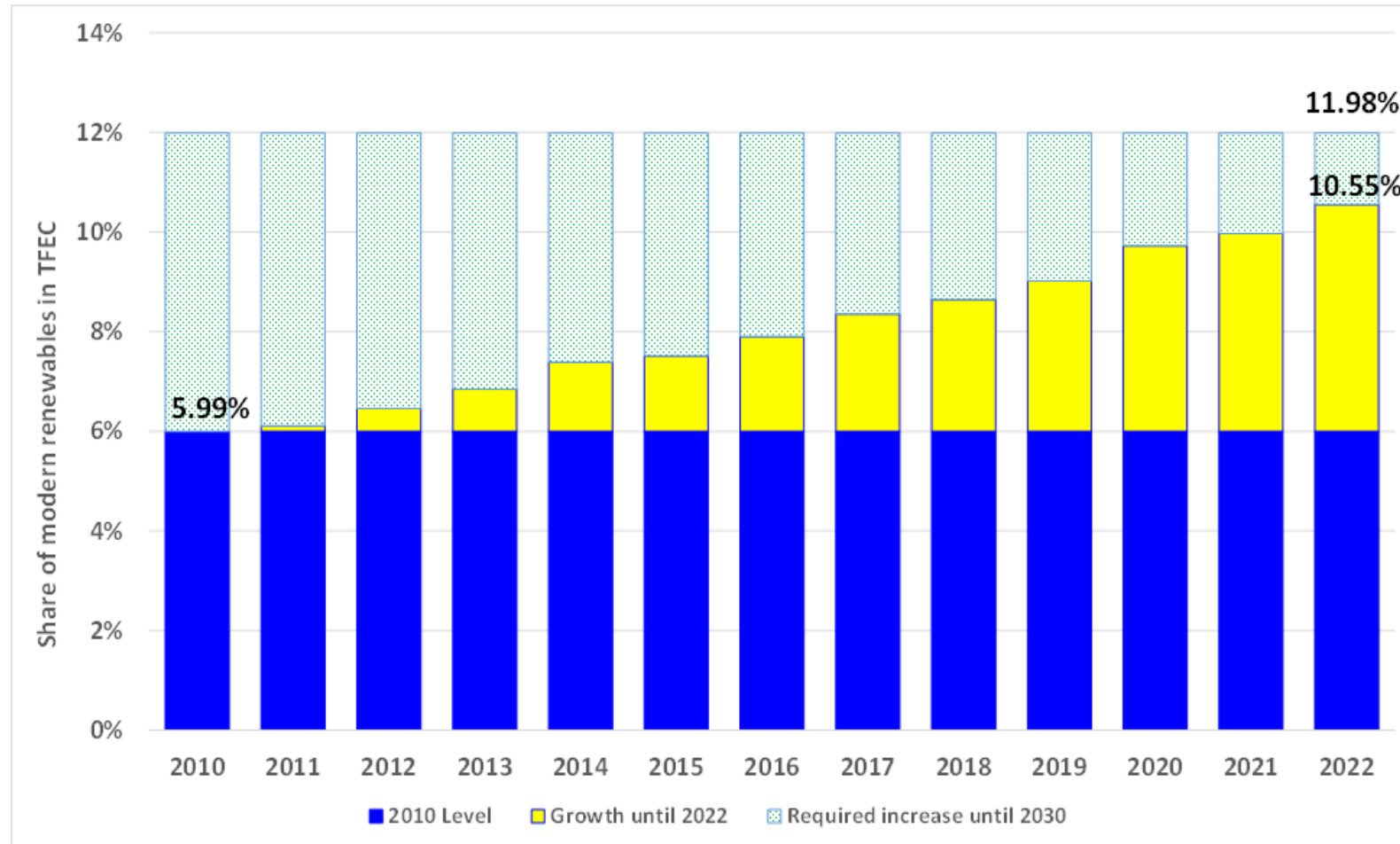


- ❖ *Majority of the members are not able to complete the APEC annual energy data collection templates.*
- ❖ *Most of the data submitted does not reflect the preferred degree of granularity for energy use (fuel by end-use)*

Outline

- Progress toward APEC's **renewable energy doubling goal**
- Starting point for declaration to pursue and encourage efforts to **triple global renewable energy capacity by 2030**

Tracking the APEC renewable energy doubling goal

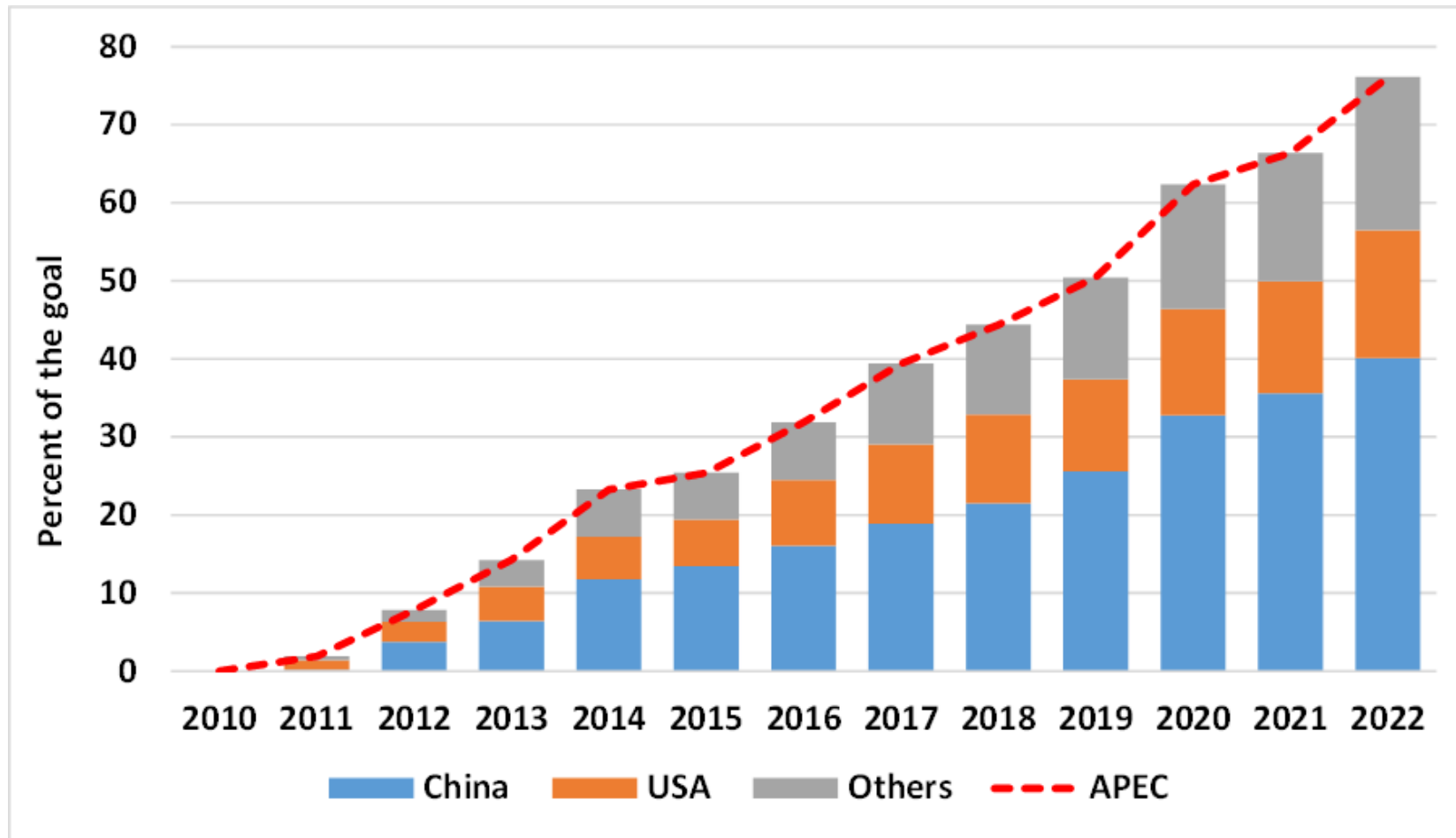


Just
1.43 percentage
points more in the
next 8 years

4.56 percentage
points increase in
the last 12 years

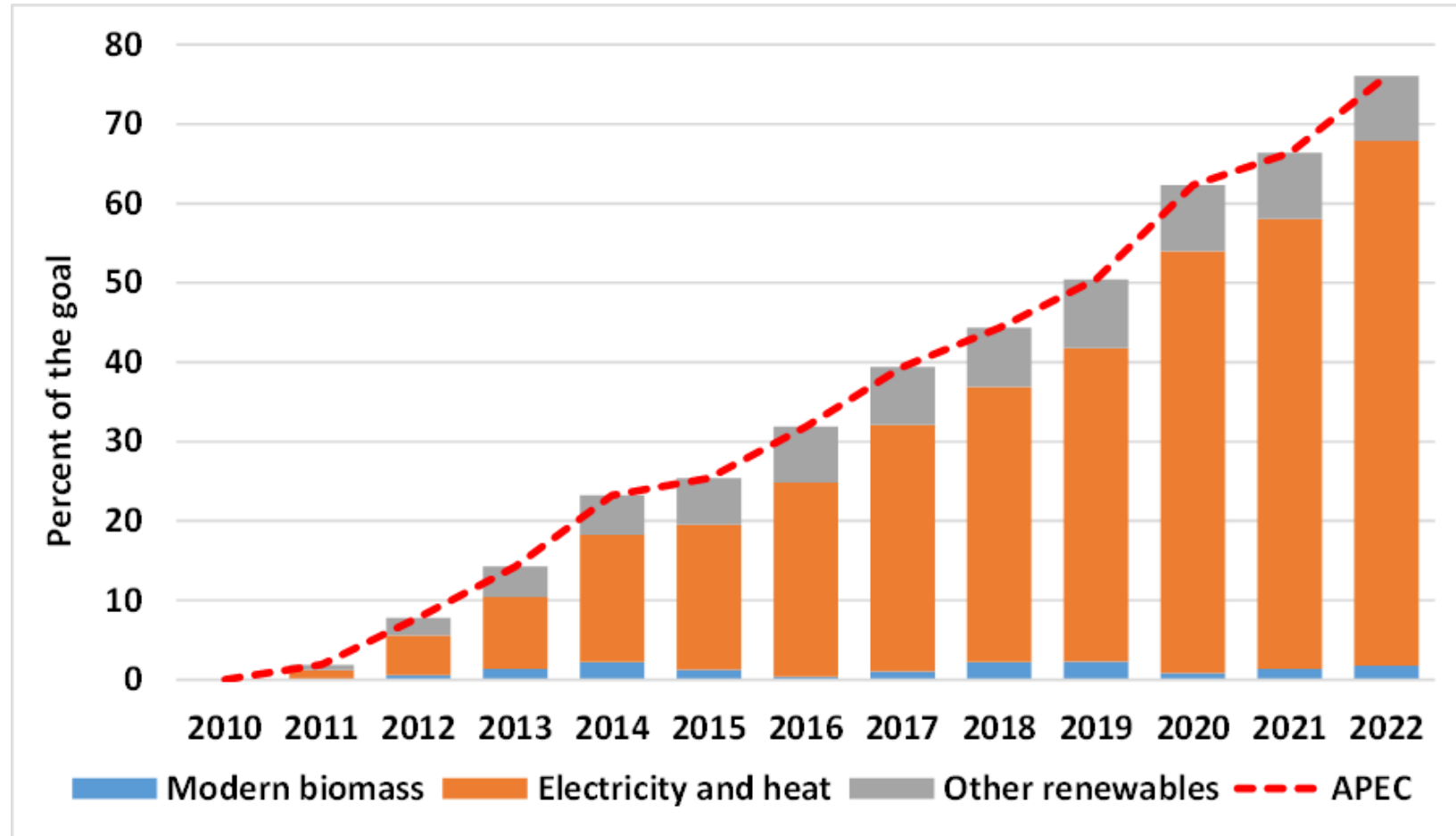
- In 2022, which is still 8 years to 2030, APEC has increased RE share in final energy consumption by 4.56 percentage points, needing to increase by just 1.43 percentage points more in the next 8 years (2023 to 2030).

China and the USA are the main sources of renewable energy growth



- China's renewable energy share increased by 3.1 times from 2010 to 2022; that of the USA increased by 1.7 times during the same period. The rest of APEC also increased by 1.7 times.

Electricity generation is the main source of renewable energy growth



- Electricity generation accounted for 87% of the total increase in renewable energy share; other renewables for 11%, while modern biomass for 2%.

Pursuing and encouraging efforts to triple global renewable energy capacity by 2030

Support for tripling global renewable energy capacity

COP28 Declaration (excerpt)

*To accelerate the energy transition, the COP 28 Presidency took a leading role in launching the Global Renewables and Energy Efficiency Pledge. With the endorsement of 130 national governments (as of 11 December, including the European Union (EU)), the Pledge stipulates that signatories commit to work together **to triple the world's installed renewable energy generation capacity to at least 11,000 GW by 2030.....***

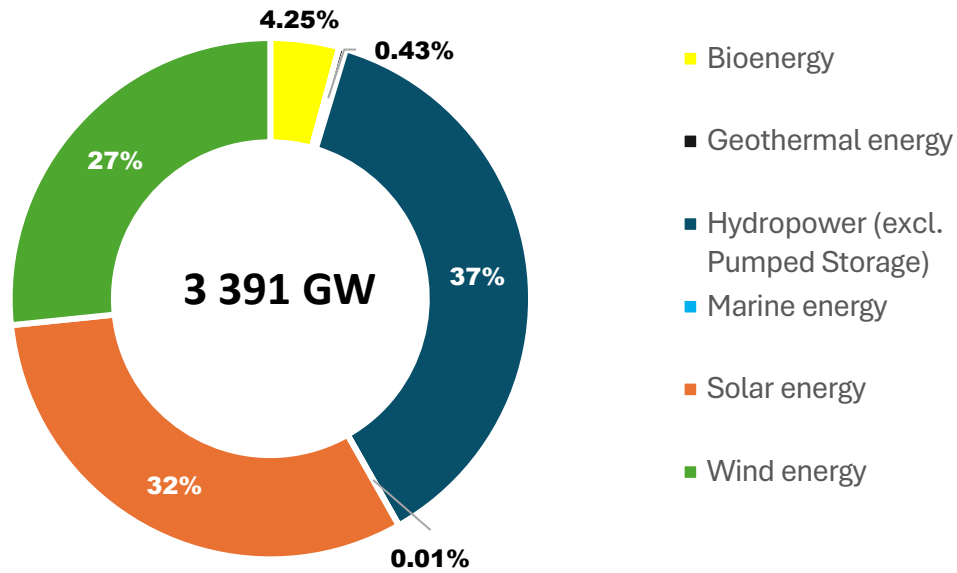
(COP28 UAE, 2023)

2023 APEC Leaders' Golden Gate Declaration (excerpt)

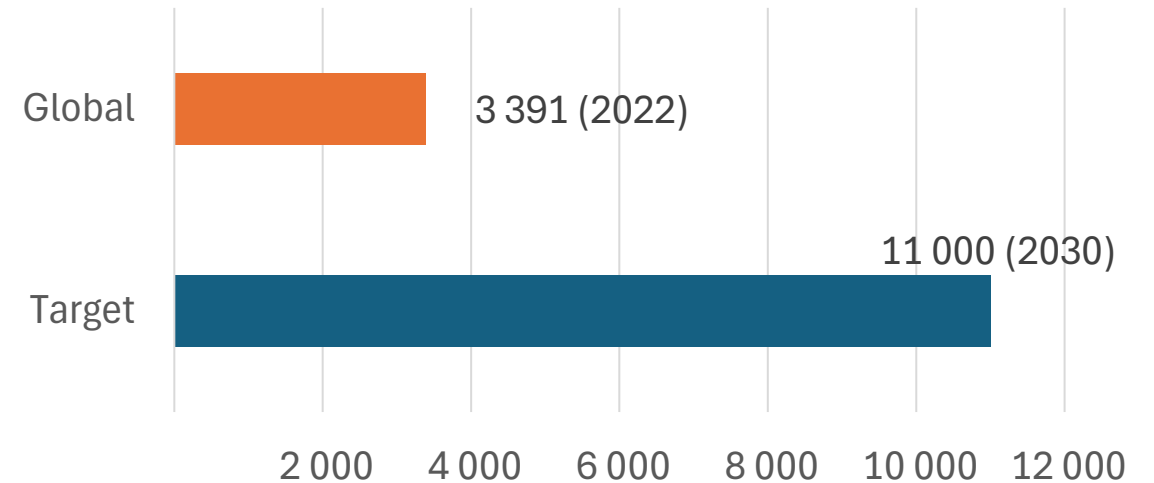
We will pursue and encourage efforts to triple renewable energy capacity globally through existing targets and policies as well as demonstrate similar ambition with respect to other zero and low emissions technologies including abatement and removal technologies in line with domestic circumstances by 2030.

Global installed renewable energy capacity in 2022

Estimated global RE capacity (GW)



Current and target global RE generation capacity

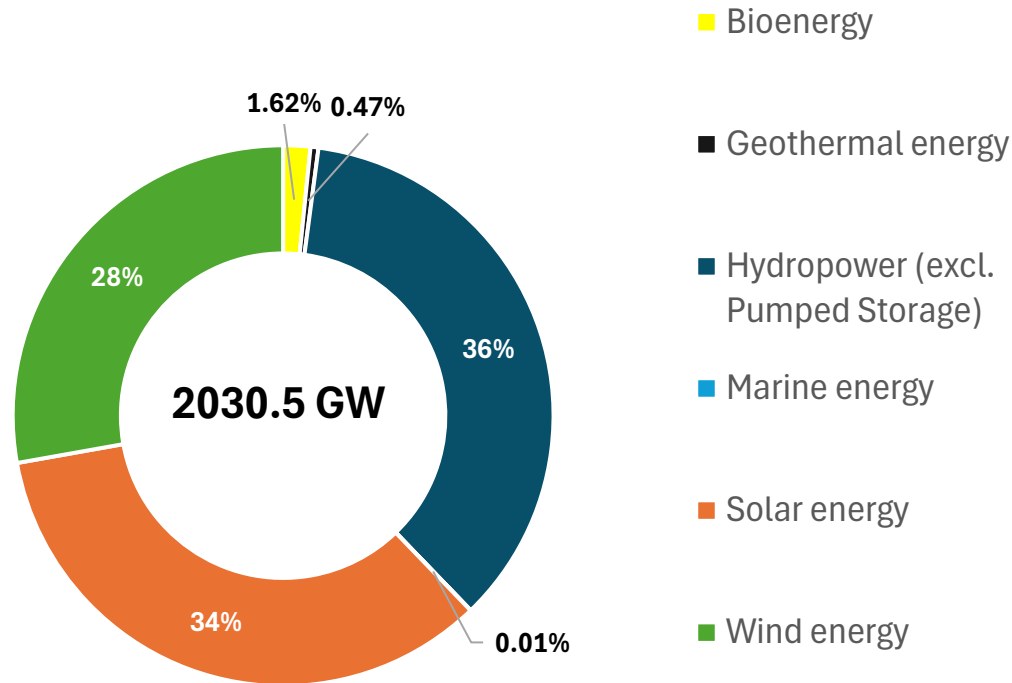


Source for both figures: IRENA

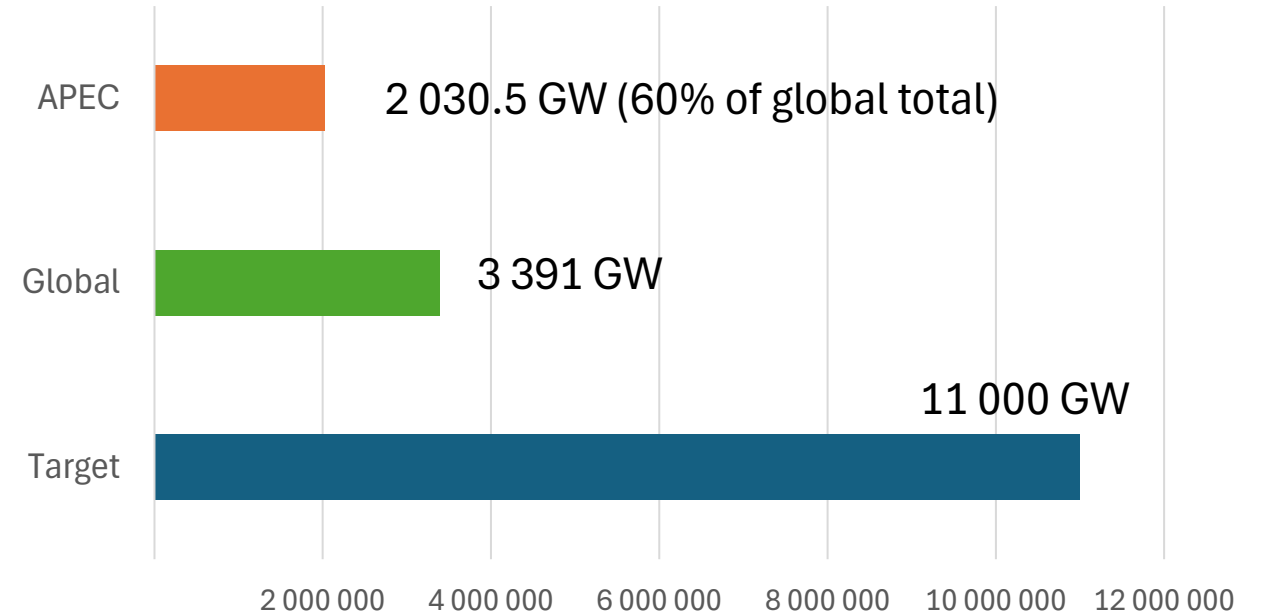
- The COP28 target for 2030 is 11 000 GW of installed renewable generation capacity.
- In 2022, IRENA estimates that hydropower, solar, and wind represented roughly equal shares of installed renewable generation capacity.

APEC's share of global RE capacity in 2022

Estimated APEC RE capacity (GW)



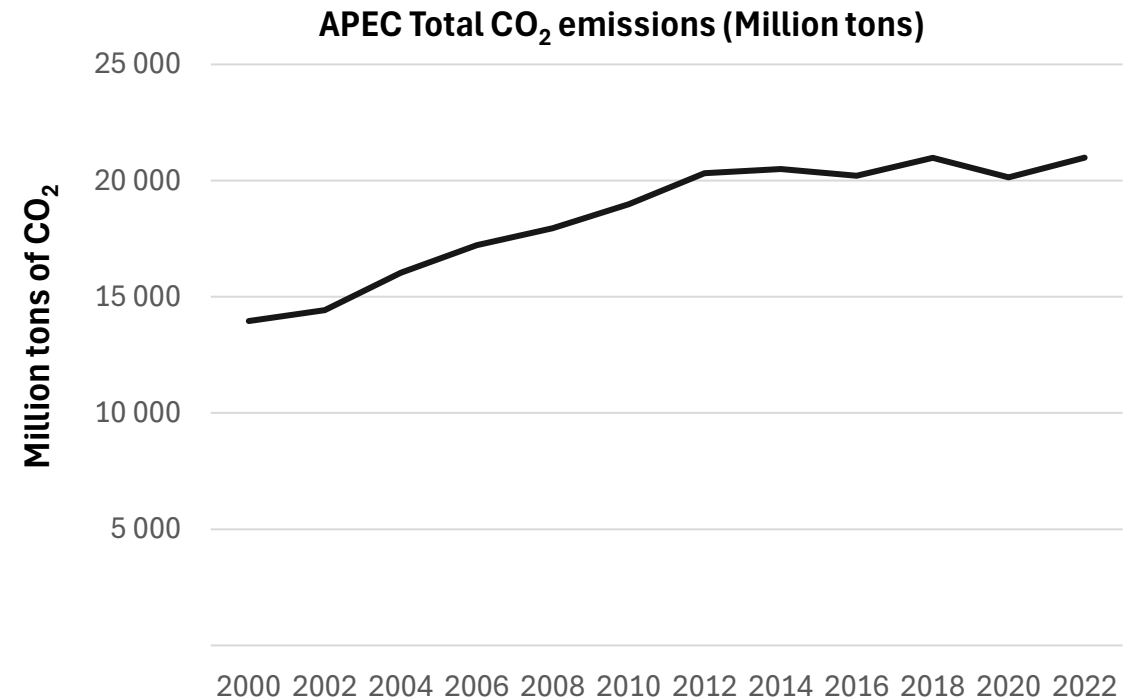
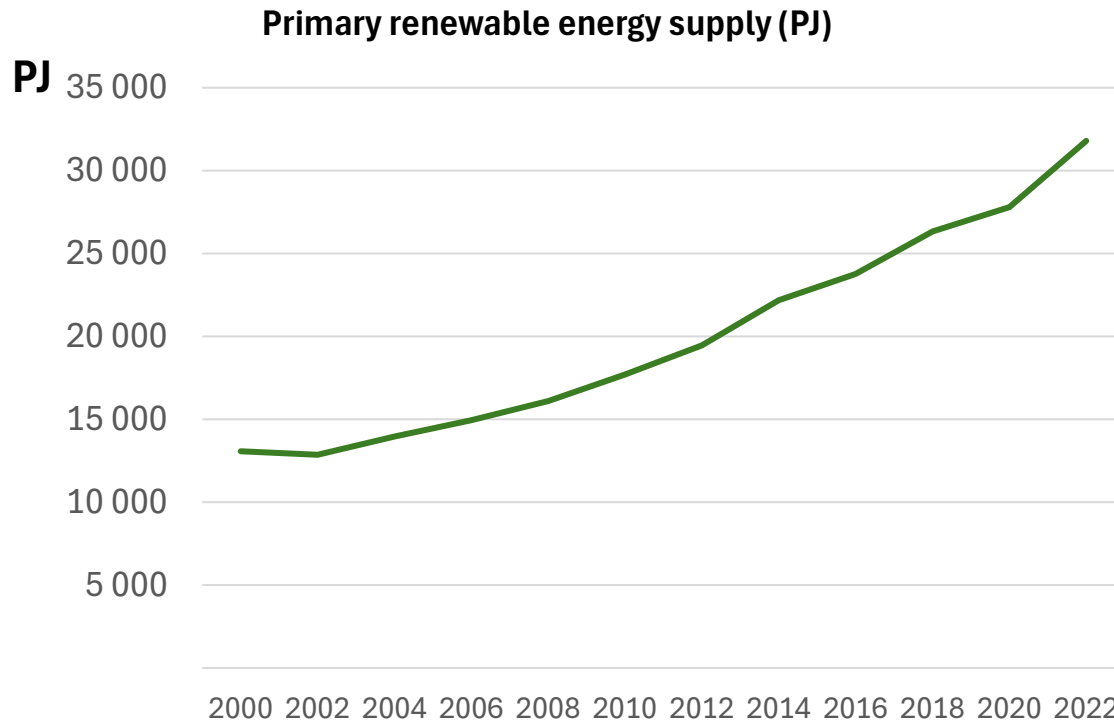
APEC and global level relative to 2030 target



Source: EGEDA, IRENA

- In 2021, APEC accounted for approximately 58% of the global total of RE generation capacity.
- In 2022, APEC accounted for approximately 60% of the global total of RE generation capacity.

The energy transition quandary



- The growth in renewable energy supply is accelerating in APEC.
- From 2000-2012, RE grew 3.4% per year; from 2012-2022, RE grew 5.0% per year.
- APEC is exceeding its energy goals on both renewable energy and energy intensity yet from 2012-2022 CO₂ emissions have not declined.

Thank you.

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