



## **EGEDA** update

EGNRET56 Meeting 7 April 2022

Edito BARCELONA EGEDA Secretariat



### **Outline**

- □Regular APEC energy data collection
- □APEC energy overview
- □APEC workshop on energy statistics
- □EGEDA's training on energy statistics
- □EGEDA meeting
- Tracking the APEC renewable energy doubling goal



## Regular APEC energy data collection (1)

- Annual energy supply and demand data of 21 member economies for 2019 have been collected, processed and analysed
  - APEC Energy Statistics 2019 and APEC Energy Handbook
     2019 publications are being updated for EWG members
     endorsement
- □Annual energy supply and demand data for 2020 are now being collected
  - All data are expected to be in by September 2022
  - The secretariat will finish the draft APEC Energy Statistics 2020 and APEC Energy Handbook 2020 and submitted to the APEC secretariat for review by end of October 2022
  - We hope to post the 2020 publications in January 2023



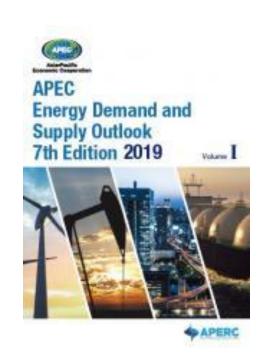
## Regular APEC energy data collection (2)

- □ Regular **quarterly** and **monthly** data collection continues.
  - Monthly JODI Oil and JODI Gas are submitted one month after the end of the month
  - Quarterly supply data are submitted 4 months after the end of the quarter
- □Low response rate on the energy efficiency indicators template, energy prices and CO<sub>2</sub> emissions
  - No available end-use energy consumption (heating, cooling, lighting, etc.)
     data in many non-IEA member economies
  - The secretariat requests IEA member economies to submit the templates submitted to IEA
  - Seventeen economies submitted energy prices data but only 9 of these submitted 2019 data
  - Not all economies have official CO<sub>2</sub> emissions data



## Regular APEC energy data collection (3)

- □APERC is now using APEC data that is produced by EGEDA as the baseline for the 8<sup>th</sup> APEC energy outlook
- Outlook will use petajoules (PJ) instead of million tons of oil equivalent (mtoe)
- □EGEDA also used PJ in data analysis from the 2018 energy statistics publications





### **APEC Energy Overview 2021**

- □ APEC Overview 2021 was released in October 2021.
- Work on APEC Overview 2022 has started
- Data tables have been provided to APERC researchers for the individual economy reports



### APEC ENERGY OVERVIEW 2021



## 19th APEC workshop on energy statistics

- **□Schedule:** 28-30 June 2021, online
- □**Objective:** To discuss the importance of energy efficiency indicators for energy policy analysis and sharing of experiences on end-use energy consumption data collection/estimation
- □ A joint training workshop with IEA
- □ Rationale: Most non-OECD APEC member economies cannot fill-in the energy efficiency indicators template
- □ A total of 74 persons from 15 economies were registered, including APERC participants
- □EGEEC and APSEC participated



## 20<sup>th</sup> APEC workshop on energy statistics

- ☐ To be held in **July 2022** (planning for an in-person or hybrid workshop)
- □ Part 2 of APEC-IEA collaboration on energy efficiency indicators project
- □Aims to provide non-IEA member economies with methodologies/models in estimating end-use energy consumption in the industry, buildings and transportation sectors



### **EGEDA's training courses in energy statistics**

### □ Planned courses (2021)

- Short-term (2 weeks)
- Middle-term (8 weeks)
- Special training course for Viet Nam (5 days)

### **☐** Implemented course

- Five-days online training course on energy statistics (November 29 to December 3, 2021)
- 32 persons from 8 economies participated
- Objective: To provide staff who work on energy statistics with a complete understanding of the aspects of good energy statistics



### EGEDA's training courses in energy statistics (2)

### Planned courses (2022)

- ☐ Short-term (2 weeks, **July**)
- ☐ Middle-term (8 weeks, **July-August**)
- ☐ Special training course for Viet Nam (5 days, **August**)
- ☐ If travel is still prohibited, a one-week virtual training will be held in lieu of the above
- Objective: To provide staff who work on energy statistics with a complete understanding of the aspects of good energy statistics



### EGEDA's online training course in 2021

### **Agenda**

- Definition of energy products and flows
- Calorific values and conversion of units
- Preparation of energy balance tables
- Calculating energy efficiency indicators
- Calculating GHG emissions
- Sharing of experiences in data collection by member economies



## 32<sup>nd</sup> EGEDA meeting

- □ Held on 12-13 October 2021 hosted by China
- 18 member economies participated
- □ EGNRET, EGEEC, IEA, IEF and IRENA
- ■Agenda:
  - Report on APEC activities, data collection, tracking APEC energy goals, JODI and energy efficiency indicators
  - APERC research activities
  - Report on collection of district cooling data
  - Proposed data collection on hydrogen production and utilization
  - Updates in IRENA's renewable energy statistics
  - EGNRET and EGEEC updates
  - Upcoming events
  - Election of EGEDA chair and appointment of vice-chair



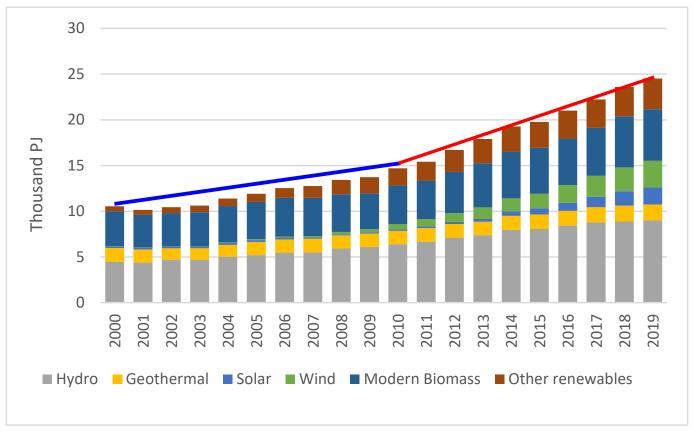
## 33rd EGEDA meeting

- □To be hosted by the Philippines on 26-29
  October 2022
- Planning for an in-person meeting but preparing for virtual and hybrid meetings too
- □Third day is planned to be an APERC event presenting the 8<sup>th</sup> APEC energy outlook
- □In addition to the usual items in the agenda, meeting will discuss finalization of **hydrogen** data collection template; **energy efficiency indicators**, further **cooperation with EGEC and EGNRET**



# Tracking the APEC renewable energy doubling goal

#### Primary energy supply

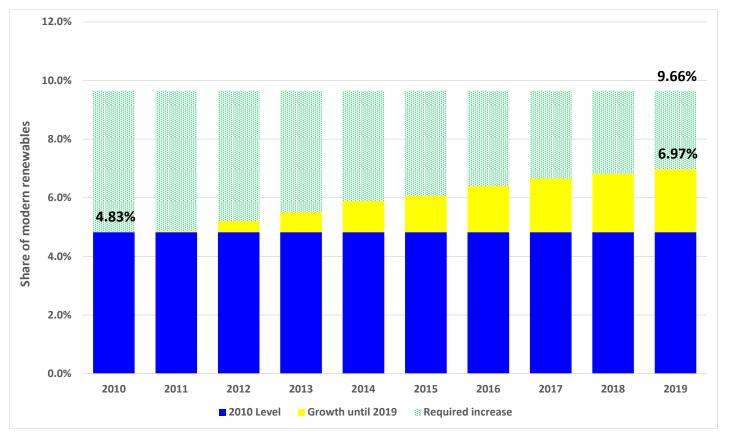


- Renewable energy supply increased by 39% from 2000-2010 and by 67% from 2010-2019
- The growth rate was faster in 2010-2019 than in 2000-2010
- Solar, wind and other renewables were the fastest growing sources from 2010-2019



# Tracking the APEC renewable energy doubling goal (2)

#### Primary energy supply

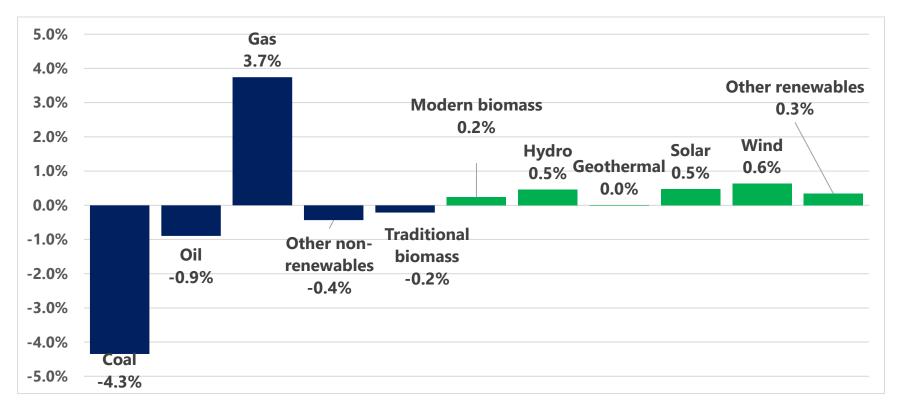


- The share of renewable energy increased by 2.14% from 2010-2019; for 45% of the time to 2030, the share increased by 44.5% only
- From 2019-2030, this share should be increased by 2.69% more to achieve the goal.



# Tracking the APEC renewable energy doubling goal (3)

#### Primary energy supply

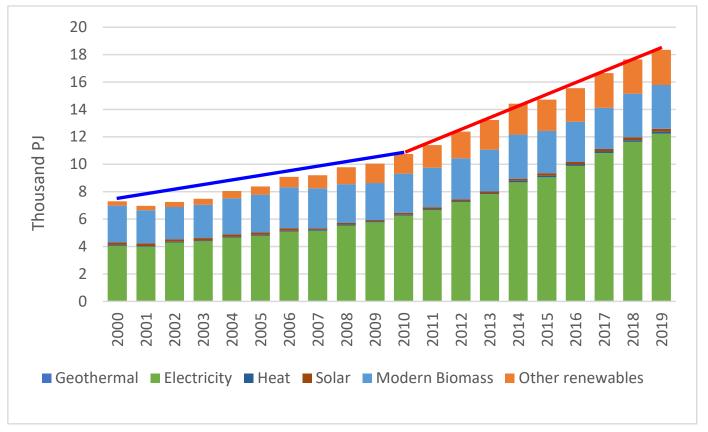


The decreases in the shares of coal, oil, other non-renewables and traditional biomass were compensated by the increases in natural gas and modern renewables



# Tracking the APEC renewable energy doubling goal (4)

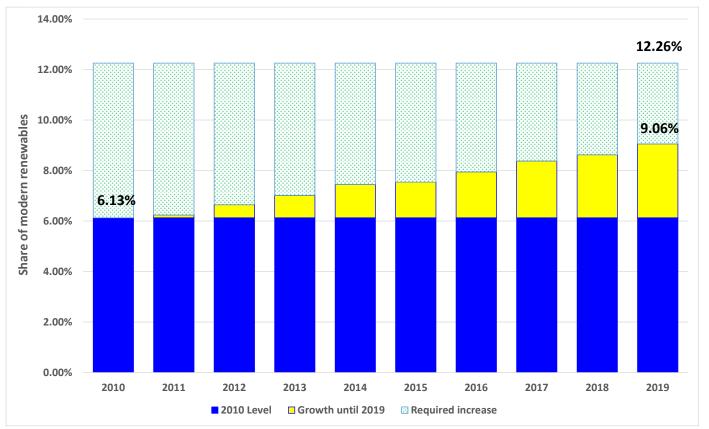
#### Final energy consumption



- Consumption of renewable energy increased by 47% from 2000-2010 and by 71% from 2010-2019
- Like the energy supply, final energy consumption also grew faster in 2010-2019 than in 2000-2010
- Consumption of electricity from renewable sources is calculated based on the share of electricity from renewable energy to total power generation

# Tracking the APEC renewable energy doubling goal (5)

#### Final energy consumption

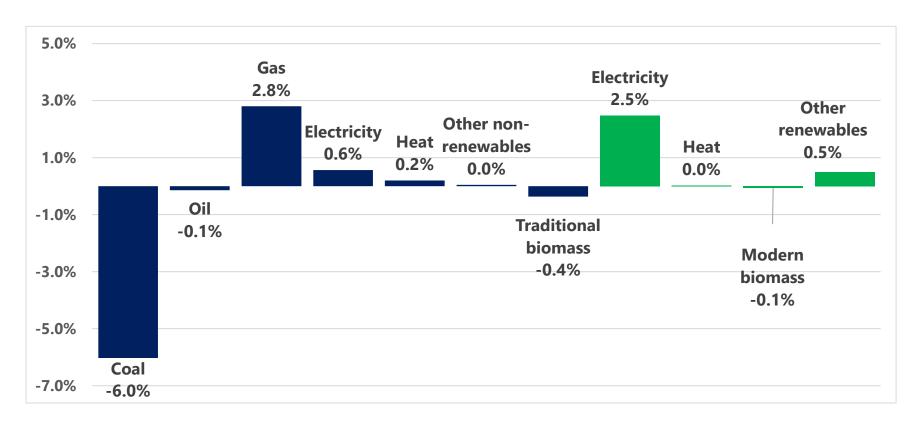


- The share renewable energy increased by 2.93% from 2010-2019 or 47.8% of the goal.
- APEC still has to increase RE share by 3.20%



# Tracking the APEC renewable energy doubling goal (6)

#### Final energy consumption

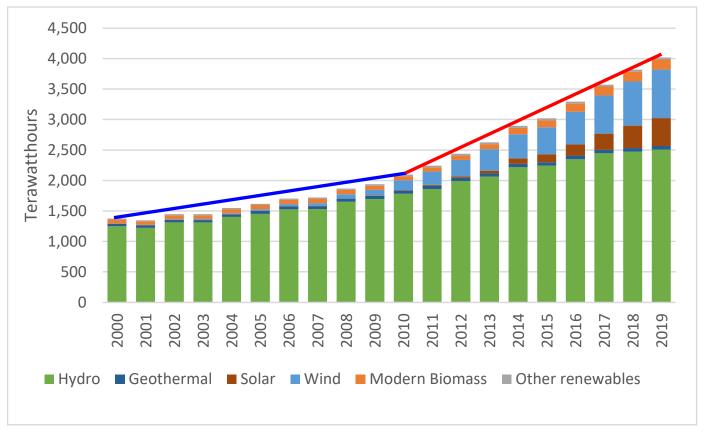


 The decreasing shares of coal and oil were compensated by the increasing shares of natural gas, electricity and heat and other renewables.



# Tracking the APEC renewable energy doubling goal (7)

#### Power generation

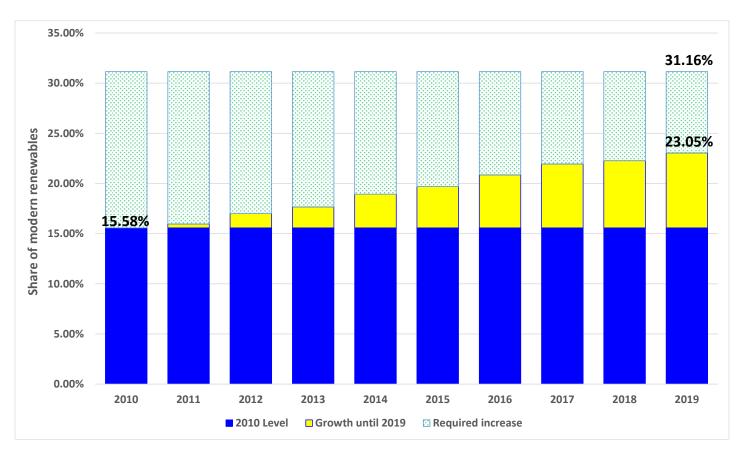


- Power generation from renewable sources increased by 52% from 2000-2010 and by 92% from 2010-2019
- Like energy supply and final energy consumption, renewables grew faster in 2020-2019 than in 2000-2010
- Solar, wind and biomass became the new sources of growth from 2010-2019



# Tracking the APEC renewable energy doubling goal (8)

#### **Power Generation**

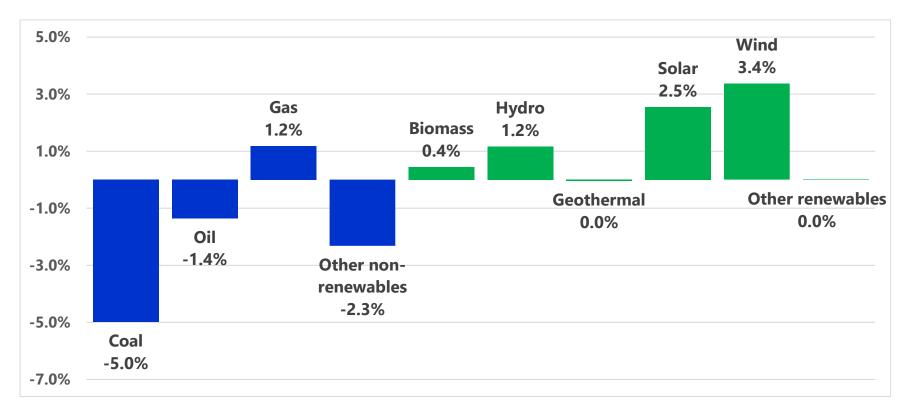


- The share of renewable sources in power generation increased by 7.47% from 2010-2019.
- The share should be increased by 8.11% more to achieve the goal



# Tracking the APEC renewable energy doubling goal (9)

#### **Power Generation**



 The decreasing shares of coal, oil and other non-renewables were compensated by the increasing shares of natural gas and renewable sources



## **Closing thoughts**

- □Nine years from the base year or 45% of the time to 2030, the share of renewables in energy supply increased by 44.5%
- □ In final energy consumption, the share of renewables increased faster by 47.8% brought about by higher penetration of renewable energy in power generation which increased even faster by 48.0%
- □The 8<sup>th</sup> APEC outlook analysis shows that the renewable doubling goal can be achieved
- □APEC member economies should sustain the momentum from 2010-2019 to achieve or surpass the goal





## Thank you for your kind attention.

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