

APERC Update

EGEEC 56 and EGNRET 55 Joint Meeting

Chinese Taipei -- May 13, 2021

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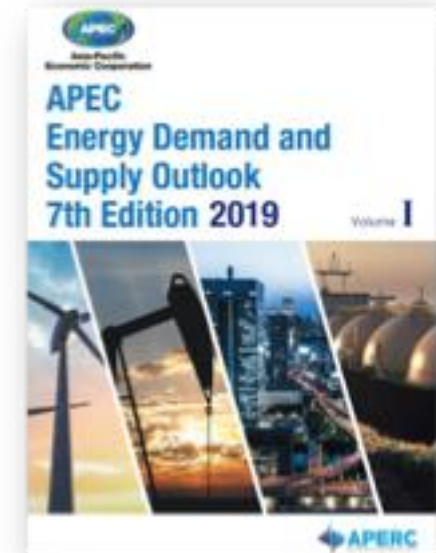


Contents

- Update on APEC Energy Demand and Supply Outlook, 8th Edition (2022)
- Preliminary results for energy intensity in four economies

APEC Energy Demand and Supply Outlook

- Provides projections of energy demand and supply
 - 21 APEC member economies
 - 2019-2050
- Published every three years
 - 7th edition published June 2019
 - 8th edition scheduled for Q2 2022
- Two volumes
 - APEC-wide trends
 - Economy-specific trends (21 chapters)
- Data tables
- For the 8th edition
 - Redesigned analysis workflow
 - EGEDA data



APEC Energy Demand and Supply Outlook, 8th edition

- Provides outlook for two APEC energy-related goals – energy intensity and renewable energy
- Target publication date is 2nd Quarter 2022
- **Key Details:**
 - Projections run through 2050
 - Historical energy balances between 2000 and 2018 are based on [EGEDA energy balances](#)
 - Macro-economic assumptions are constant across scenarios
 - Population: historical data from World Bank WDI, growth rate projections from UN DESA 2019 Population Prospectus
 - GDP: historical data from World Bank WDI, projections from OECD and internal analysis
 - COVID-19 impact on GDP is incorporated in the 2020-2025 timeframe with return to pre-COVID growth rates after 2025
 - Energy units are petajoules (PJ) -- conversion table in Appendix
 - Emissions analysis considers CO2 emissions from combustion in the energy sector, excludes non-energy emissions

Reference Scenario (RS)

Reflects current trends and relevant policies in place or planned. Provides a baseline against which the other scenario can be compared.

Net-zero Scenario

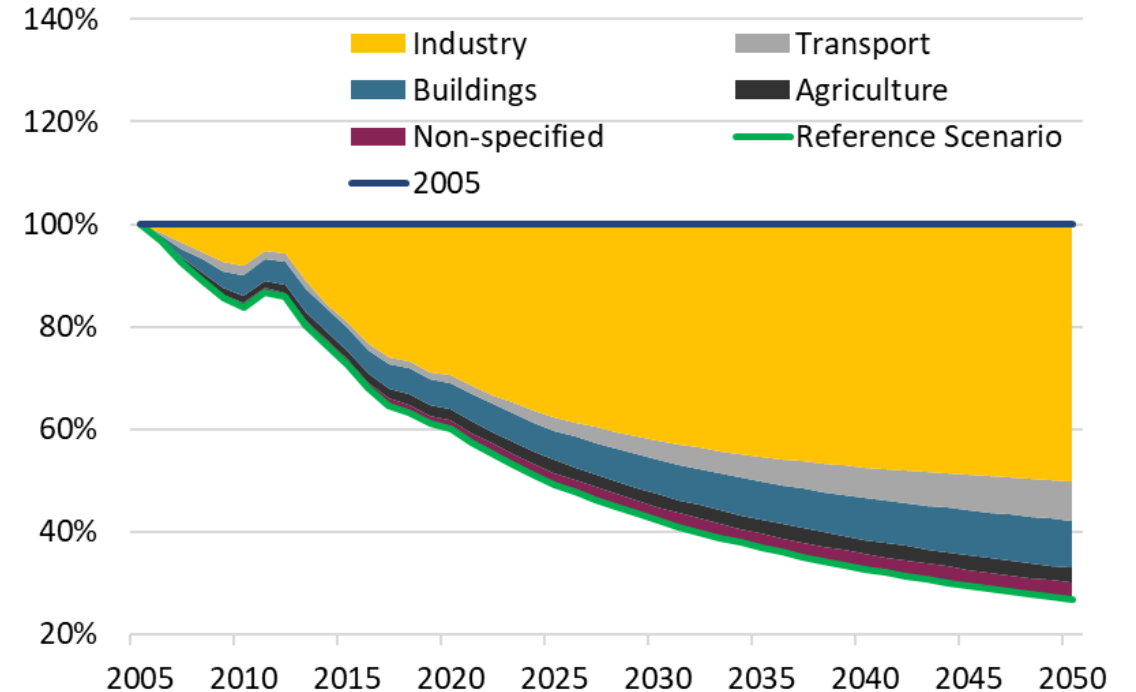
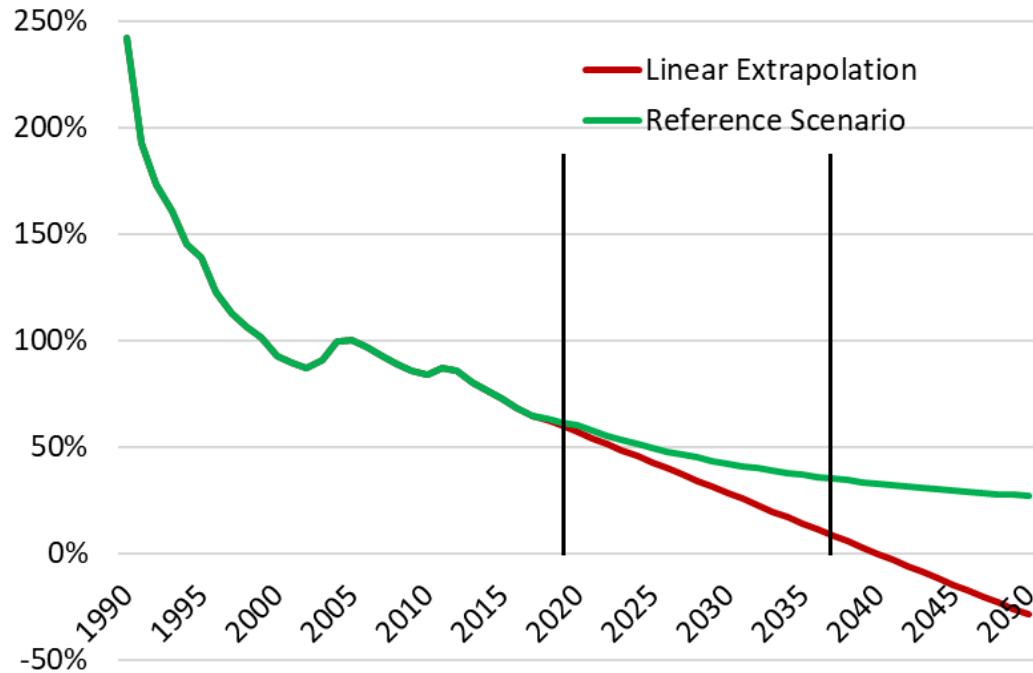
Hypothetical energy sector net-zero pathway for each APEC economy through 2050.

Key future milestones

- June/July 2021: **EWG Review** of preliminary results for Reference and Net-zero scenarios
- Sept/Oct 2021: **EWG review** of report chapter drafts
- February 2022: Seek **EWG endorsement**
- 2nd Quarter 2022: Publish report

China – Energy Intensity

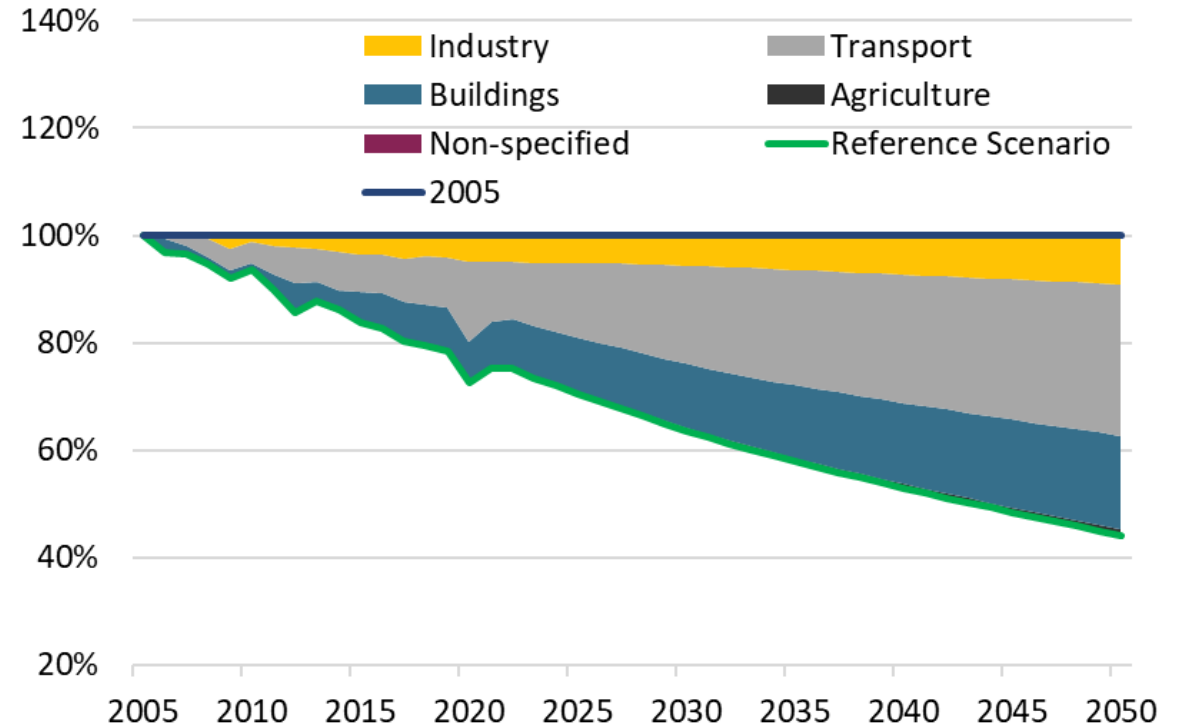
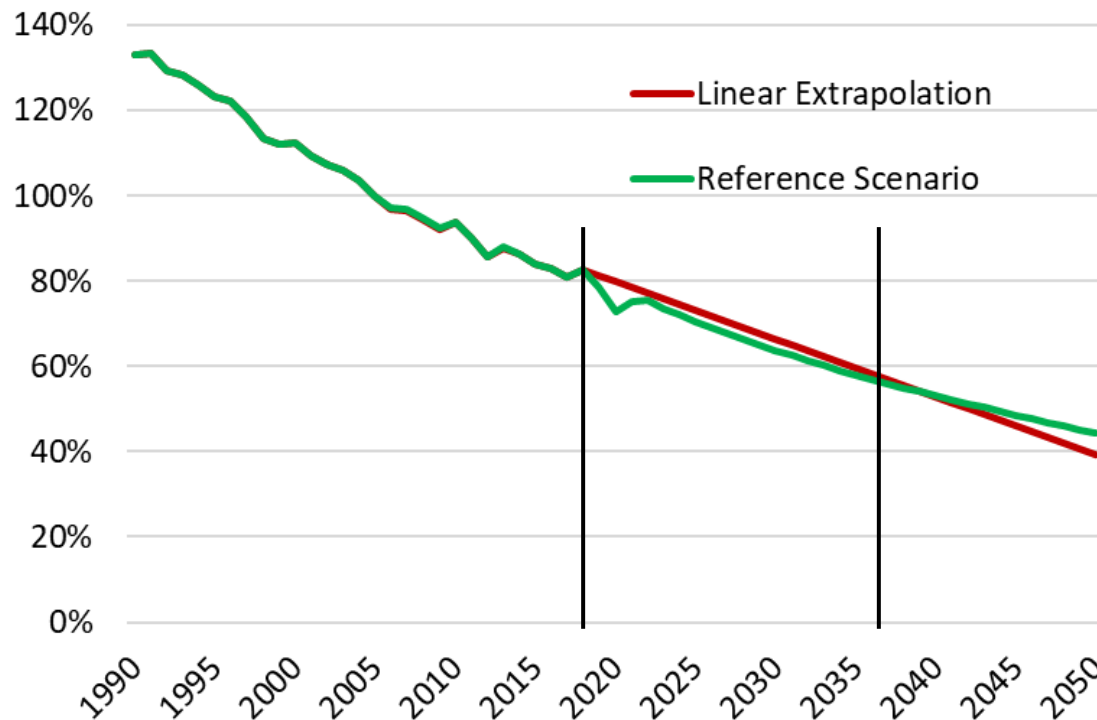
100% = 2005 energy intensity level



- Large difference between Reference Scenario results and the linear extrapolation of the 2005 – 2018 energy intensity trend
- Energy intensity improvements overwhelmingly concentrated in the industry sector

United States – Energy Intensity

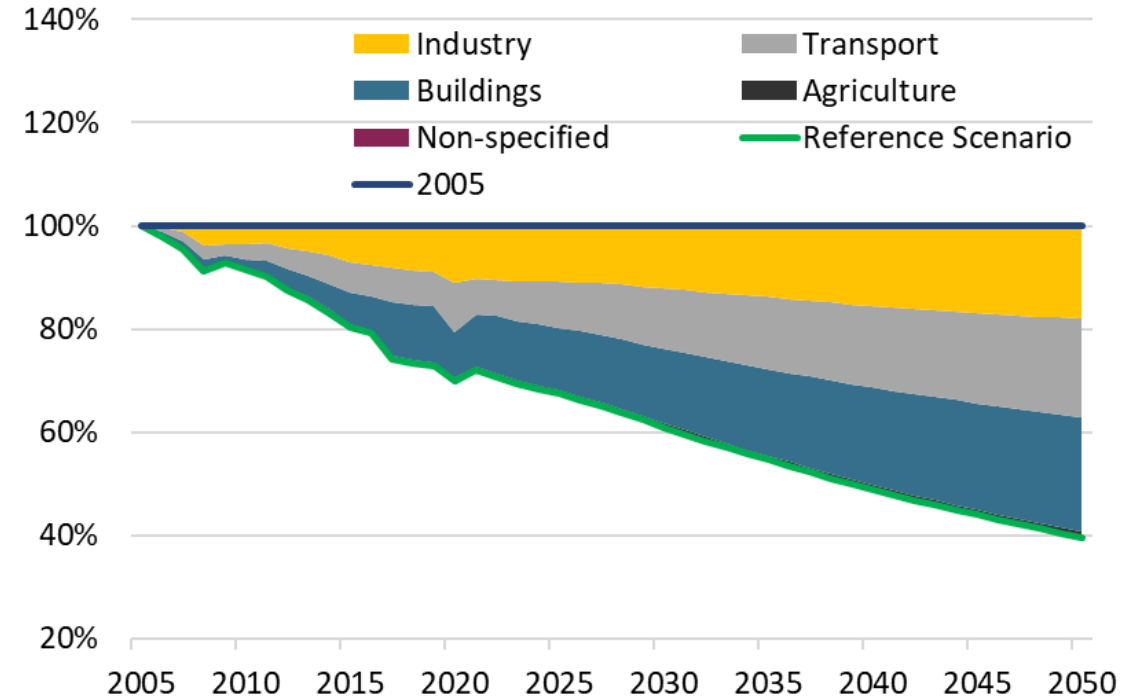
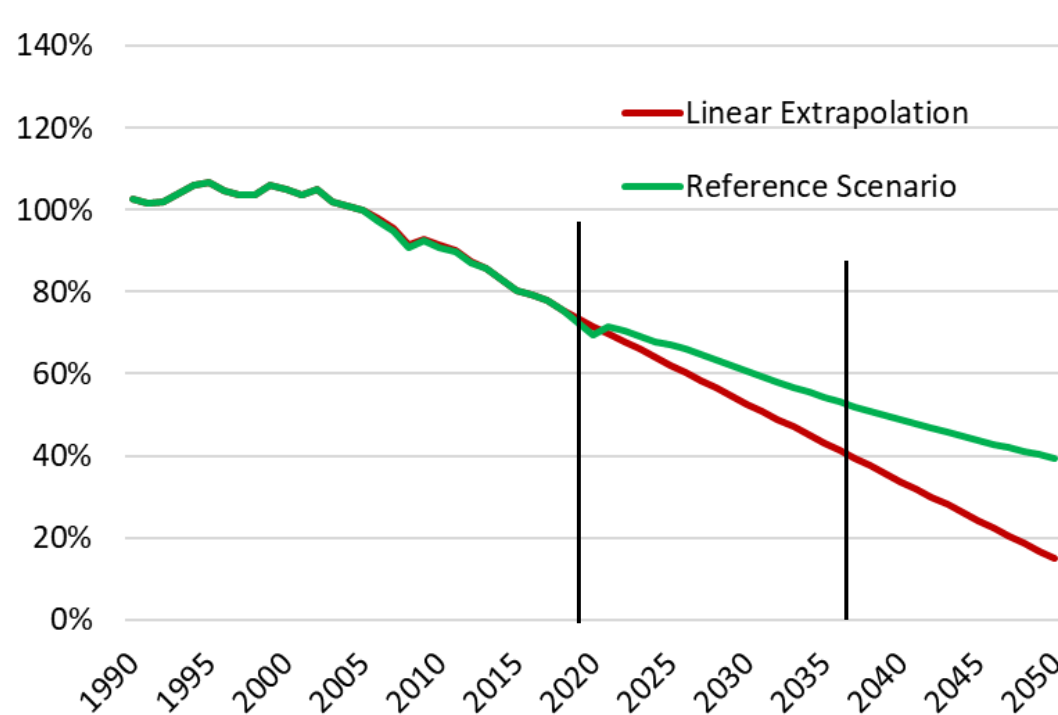
100% = 2005 energy intensity level



- Linear extrapolation of 2005 – 2018 energy intensity trend is a close approximation of Reference Scenario results
- Energy intensity improvements in 2035 are concentrated in the transportation sector (53%) followed by buildings (33%)

Japan – Energy Intensity

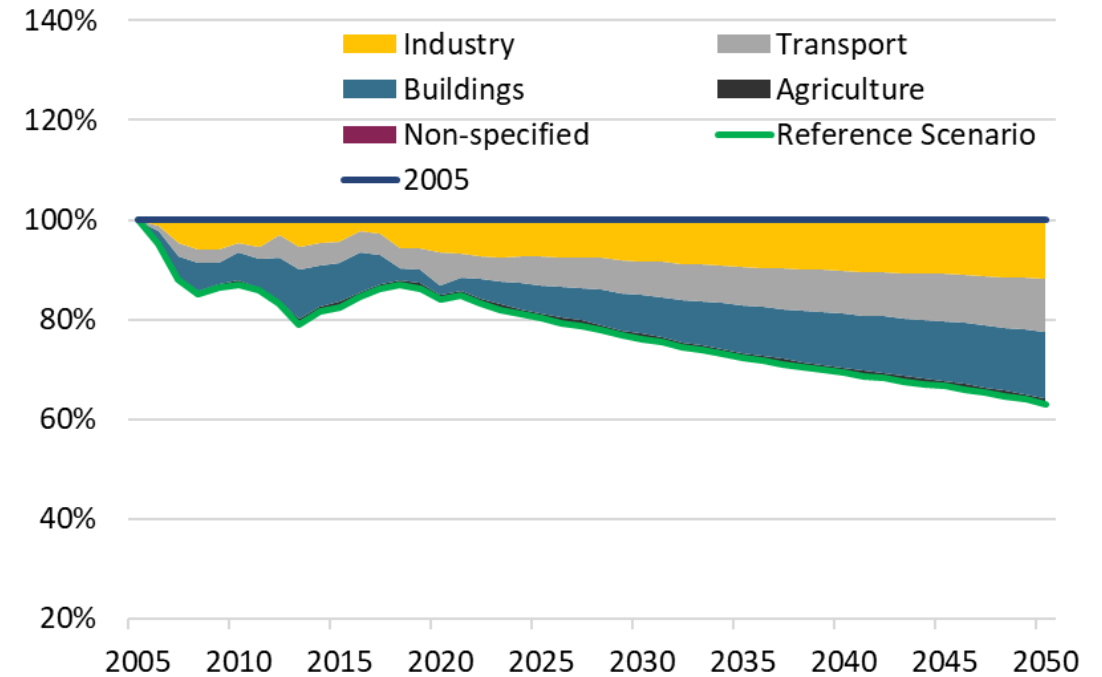
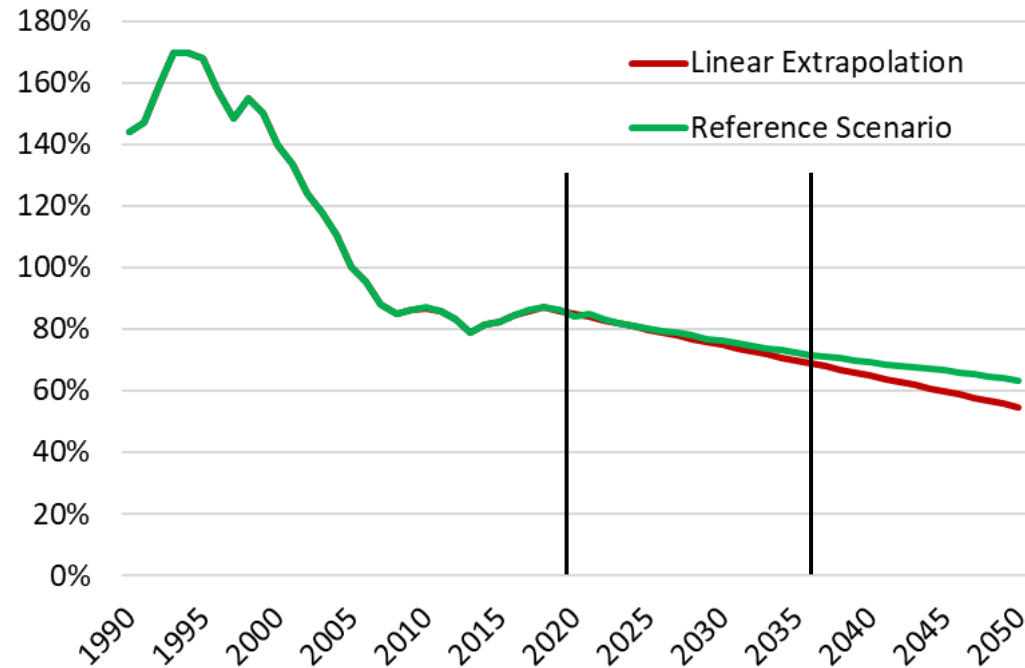
100% = 2005 energy intensity level



- Large difference between Reference Scenario results and the linear extrapolation of the 2005 – 2018 energy intensity trend
- Energy intensity improvements are relative balanced between three sectors

Russia – Energy Intensity

100% = 2005 energy intensity level



- Linear extrapolation of 2005 – 2018 energy intensity trend is a close approximation of Reference Scenario results
- Energy intensity improvements are relative balanced between three sectors



Thank You

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