

EGNRET 50th Meeting @ Honolulu, Hawaii 19-23 March 2018

APERC Presentation: Activity Updates

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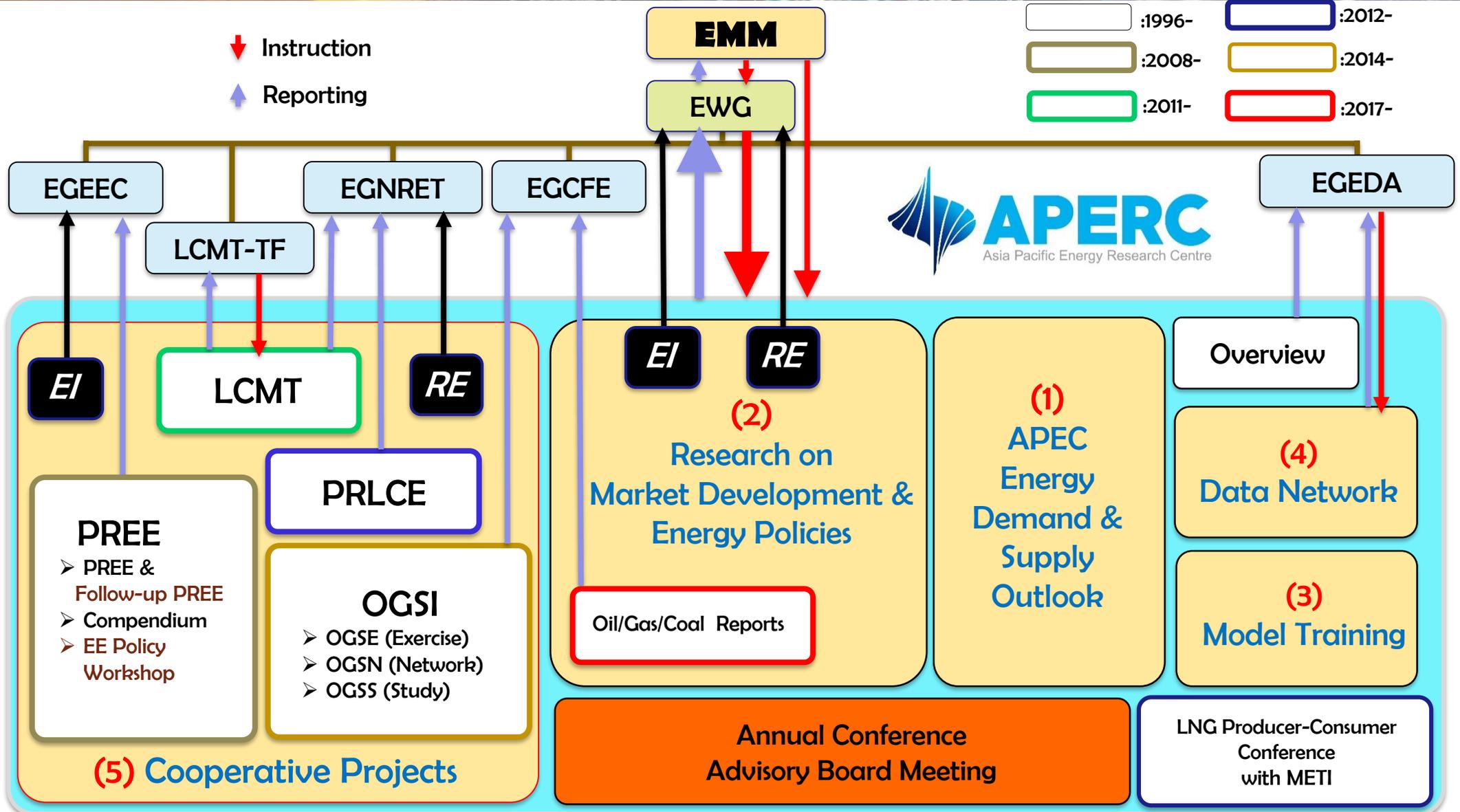
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1. APERC: Activity updates from the 49th EGNRET
2. Current progress of the 7th Outlook for Energy Demand and Supply in APEC
3. Estimation of bioenergy supply potential in APEC



1. APERC's activity updates from the 49th EGNRET

APEREC'S FUNCTIONS AND TASKS



APERC's activity updates

November 2017	OGSE in Peru (Lima)
November 2017	EGEDA 29 in Canberra, held by ESTO
November 2017	APERC workshop in Wellington (EWG 54)
November 2017	Publish the final report PRLCE of PNG on APERC's website
December 2017	LCMT policy review in Krasnoyarsk, Russia
December 2017-present	Preparing the APEC Energy Overview with economy's doubling goal updates
March 2018	OGSN forum in Tokyo
March 2018	EGCFE in Tokyo for oil and gas



2. The 7th edition of APEC Outlook



Current progress of modelling

To do list for the 7 th Edition	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018 – Q1 2019	2019
Economy review of assumptions	✓							
Model development	✓	✓	✓					
Demand model runs			✓					
Power & supply model runs				✓				
Economy reviews of model results				✓				
Model reruns to respond to comments					✓			
Outlines, drafting of chapters					✓	✓		
Editing, printing							✓	
Publication								April

Content of the 7th edition: will come in two volumes

1. Introduction
2. Outlook for Energy Demand
3. Outlook for Energy Supply
4. Outlook for Power
5. Achieving APEC goals: Improved Efficiency and High Renewables
6. Low Carbon Scenario
7. Energy Investments
8. Energy Security
9. Energy Trade
10. Climate Change implementation: Policy
11. Annex I and II: Methodology, Assumptions and Tables.

**Volume I: APEC
energy supply
and demand**

**Volume II:
Economy reviews**

Renewable contents will be covered in Vol. 1, Chap. 3 and 5

1. Introduction
2. Outlook for Energy Demand
3. Outlook for Energy Supply
4. Outlook for Power
5. Achieving APEC goals: Improved Efficiency and High Renewables
6. Low Carbon Scenario
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**Volume I: APEC
energy supply and
demand**

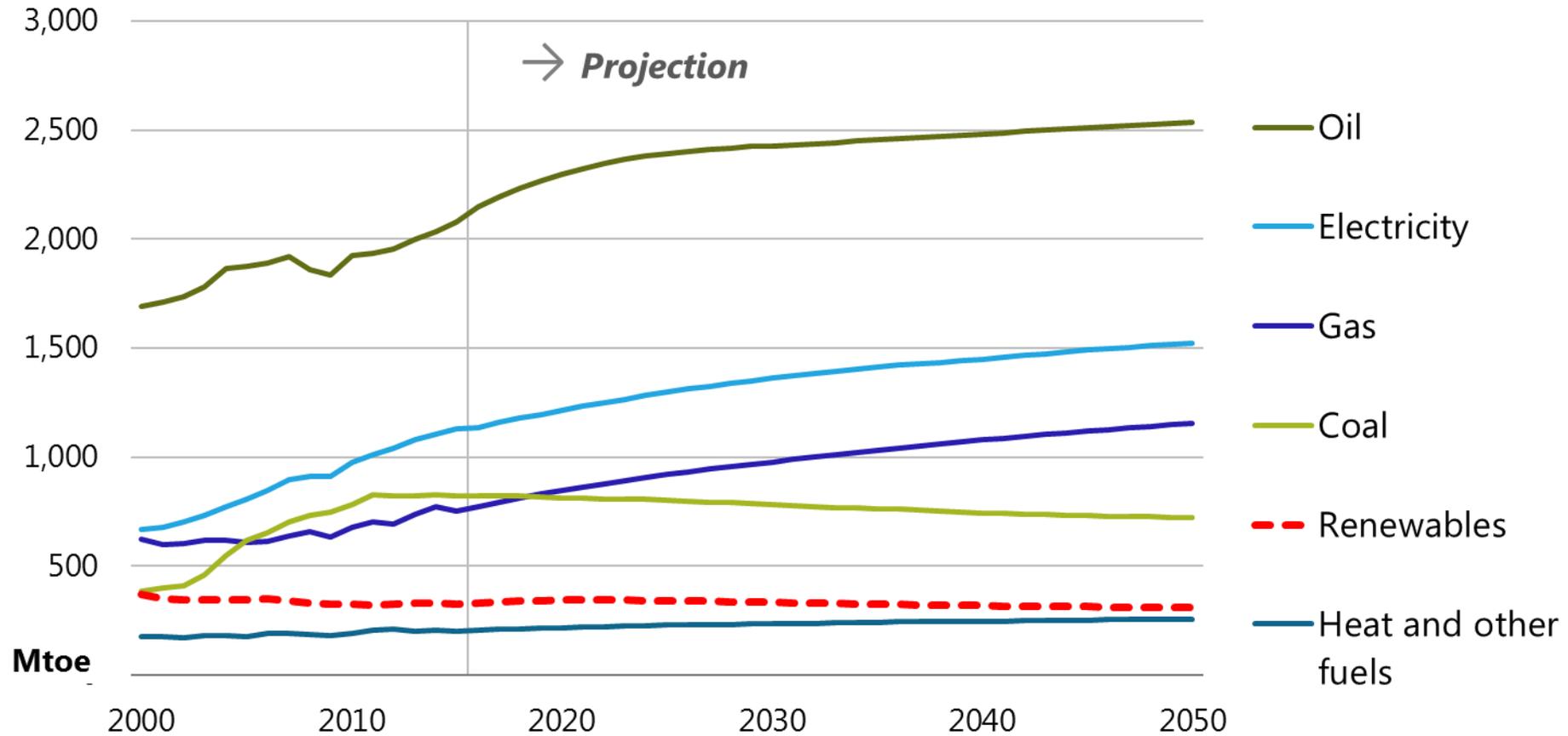
**Volume II:
Economy reviews**

Renewables modelling updates for 7th Edition

- Two alternative scenarios and projection up to 2050
- Integrate renewable energy analysis into Demand (Buildings, Industry, and Transport) and Power models
- Expand list of renewable technologies in Demand and Power models
- Improve daily load curves analysis to quantify impacts of variable renewables in power
- Assess direct renewable use (for heating and cooling applications)
- Estimate detailed renewable potential by economy and by sector

Total demand for renewables slightly decreases

Final energy demand by fuel in BAU

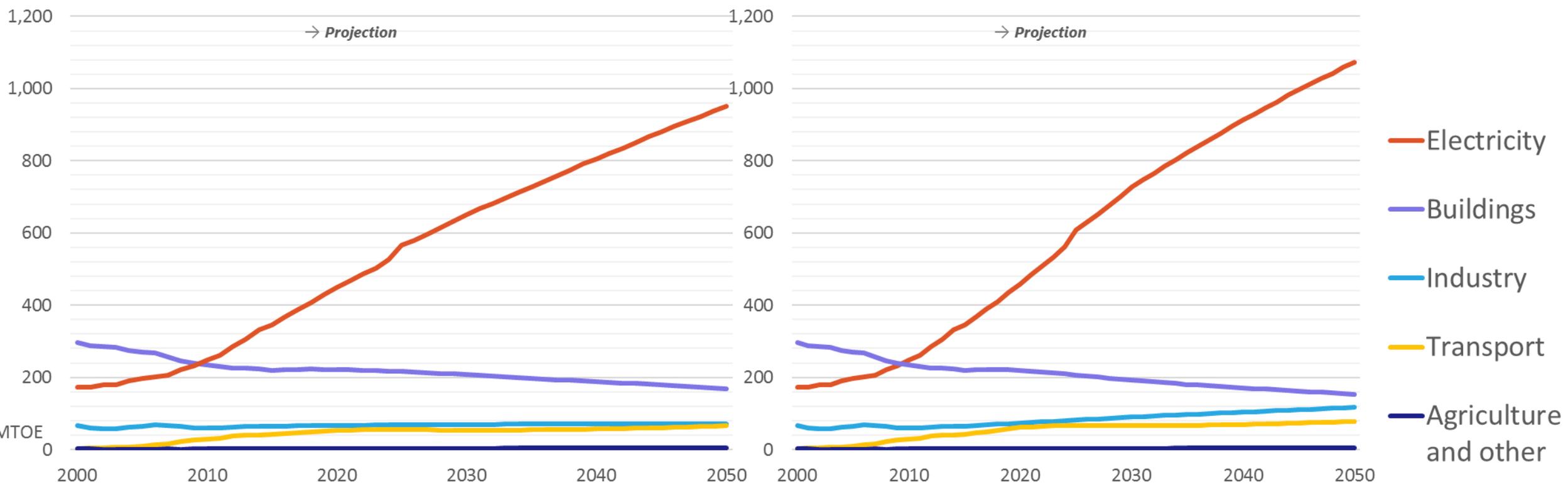


Model run on March 13

Renewables demand across sectors

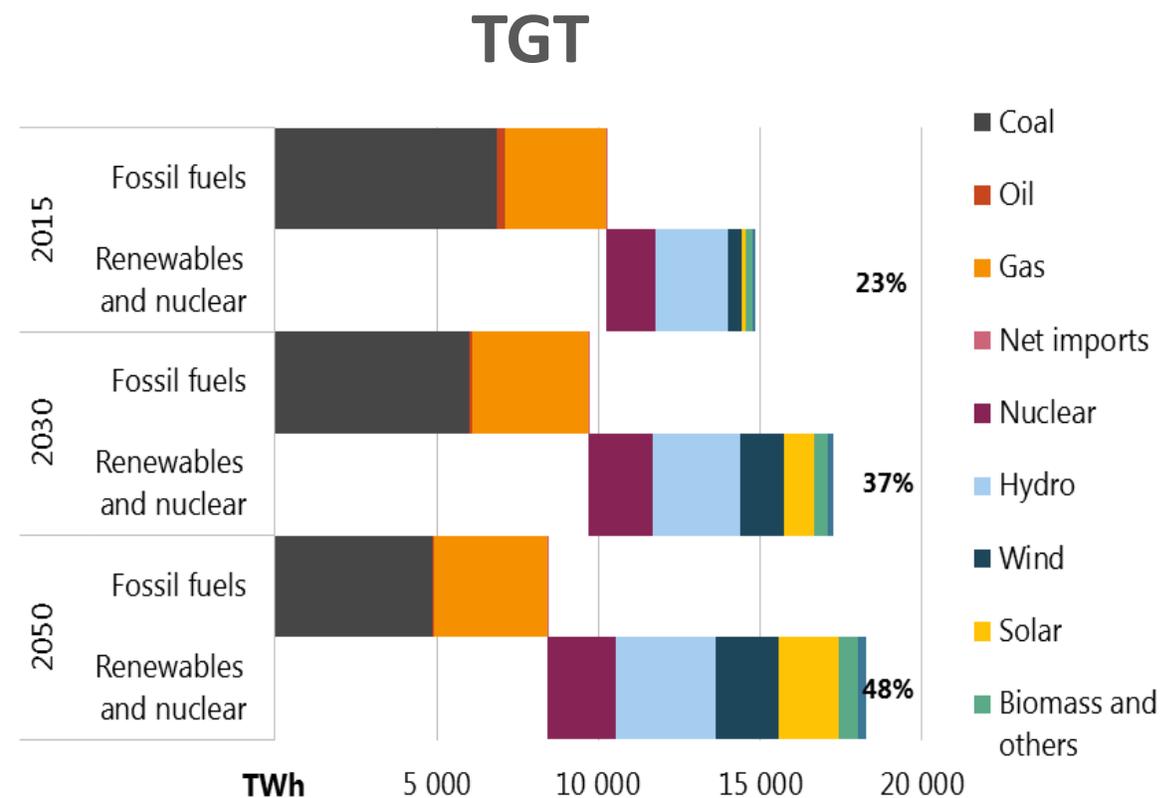
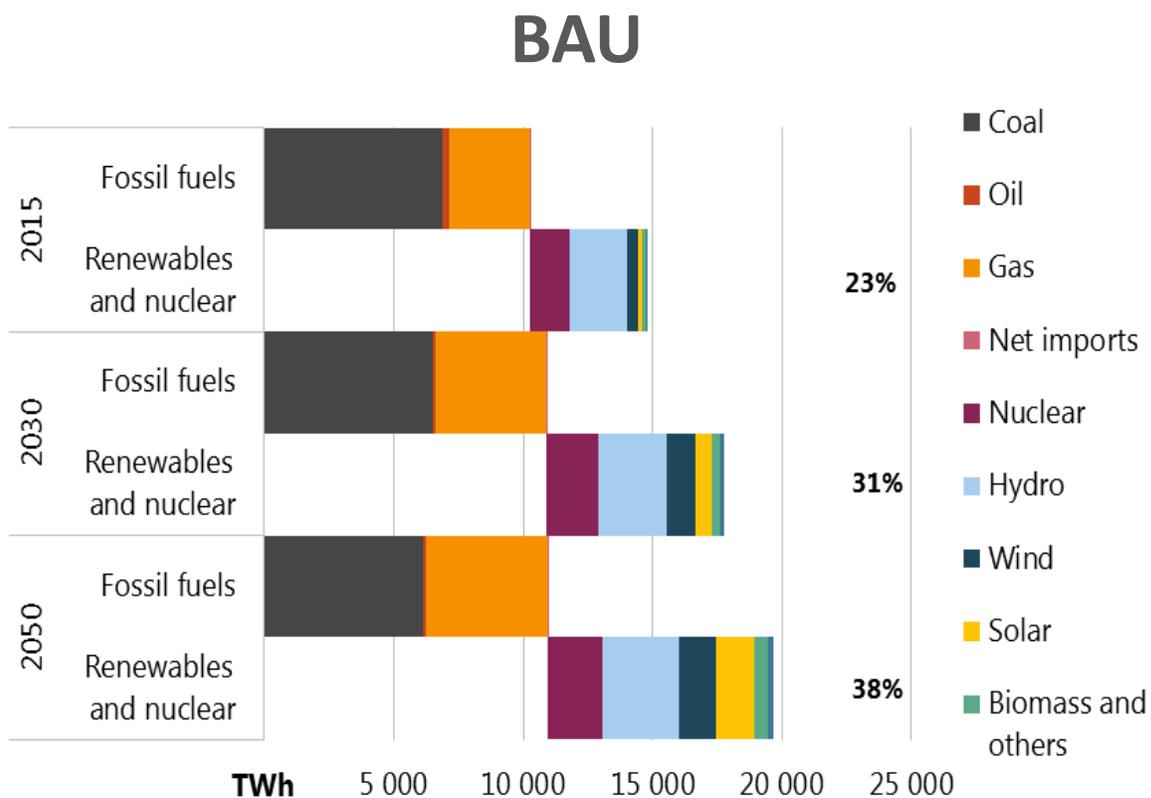
BAU

TGT



Model run on March 13

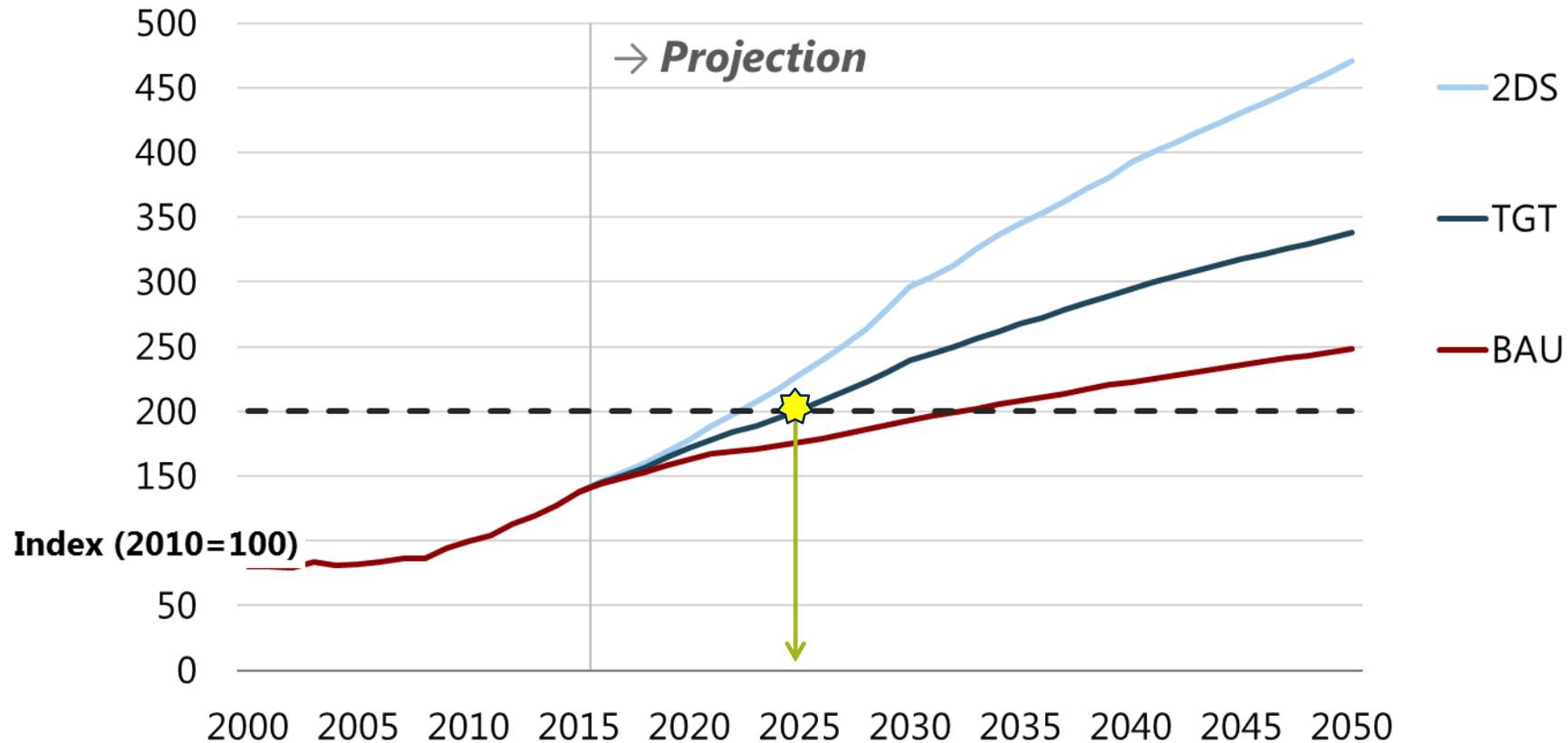
BAU vs. TGT in Power: the share of renewables can rise up to 48%



Model run on March 13

Doubling goal could be met by 2033 in BAU and 2025 in TGT

Renewable Doubling Goal Index by FED, 2000-2050



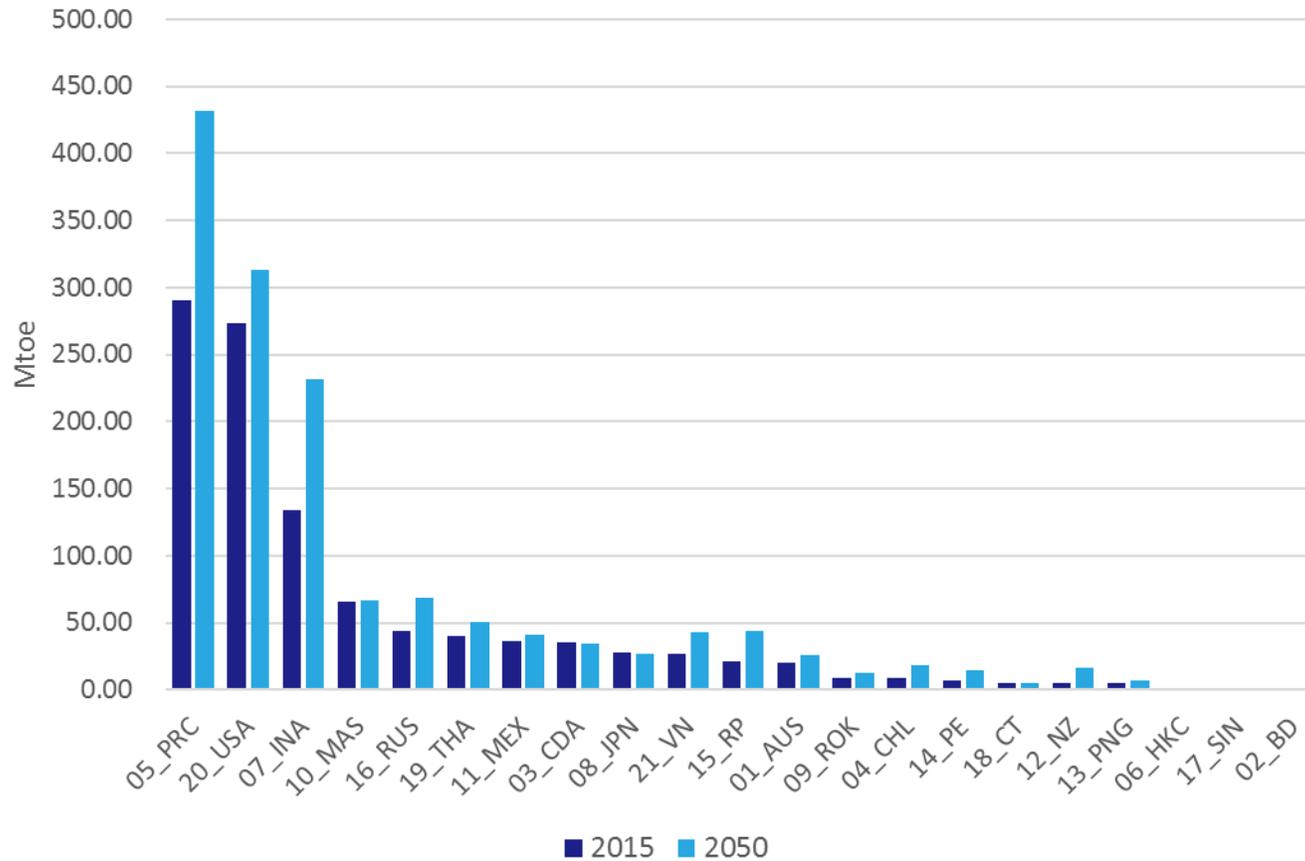
Model run on March 13



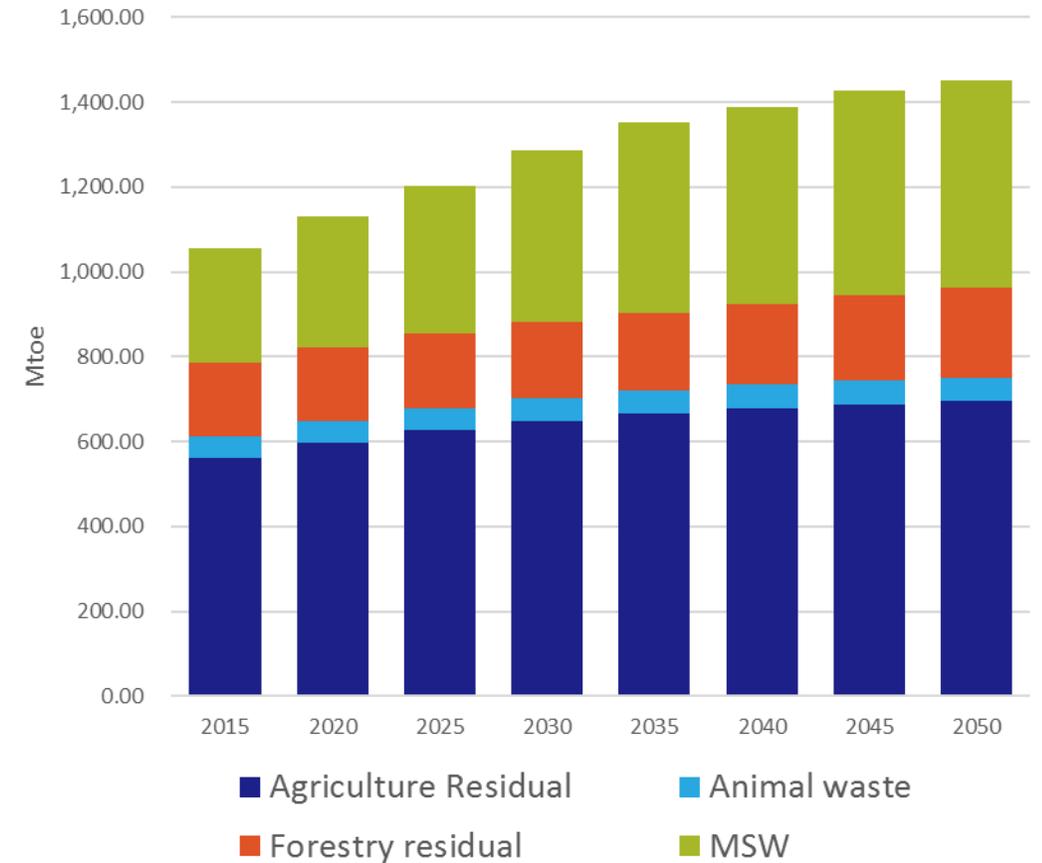
3. Bioenergy potential in APEC

APEC has about 1 Gtoe of biomass from waste potential

Biomass Potential by Economy, 2015 and 2050



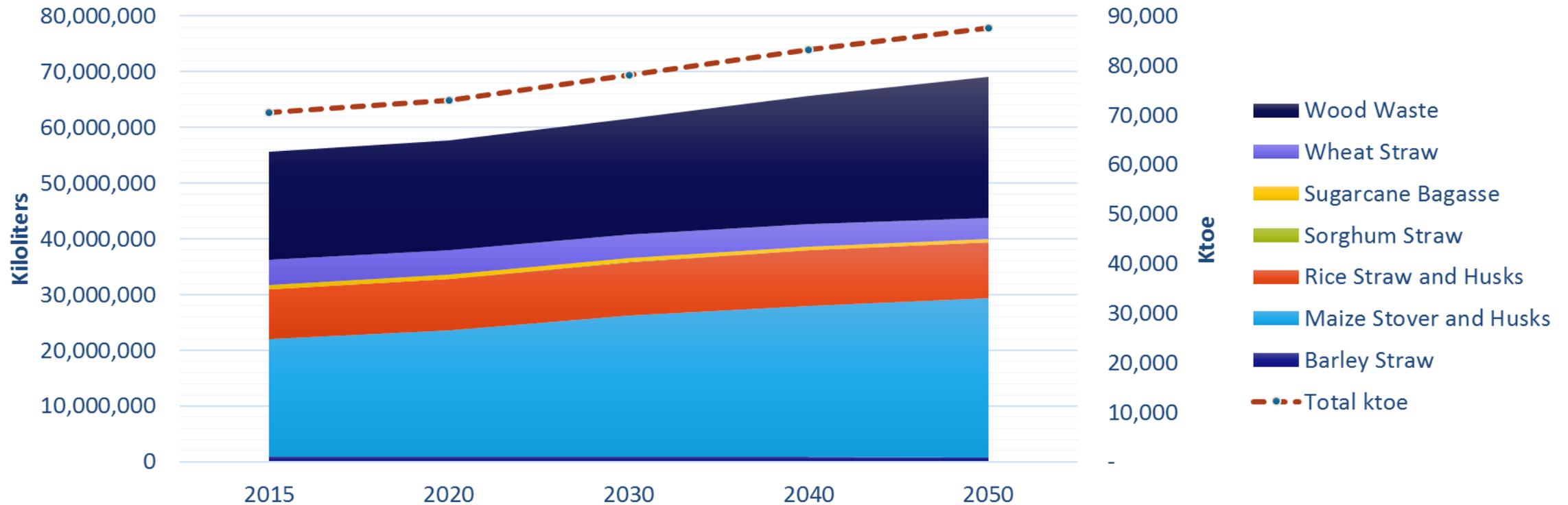
Total APEC



Model run on March 13

APEC 2nd gen potential is 60Mtoe, reaching 80Mtoe in 2050

APEC Biofuel 2nd generation potential



Second generation biofuels are those biofuels produced from cellulose, hemicellulose or lignin; such as cellulosic ethanol (IEA Bioenergy Task 39, 2009)

Model run on March 13



THANK YOU VERY MUCH

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