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# Overview and Updates on the 7<sup>th</sup> APEC Energy Outlook

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# APEC intensity and renewable doubling goals

[We] [a]spire to reduce APEC's aggregate energy intensity by 45 percent by 2035.

--19th APEC Economic Leaders' Meeting, Honolulu, USA, 13 November 2011

We aspire to the goal of "doubling the share of renewables in the APEC energy mix, including in power generation, from 2010 levels by 2030."

--11<sup>th</sup> APEC Energy Ministerial Meeting, Beijing, China, 2 September 2014



## COP21 goal aims to limit global temperature rise

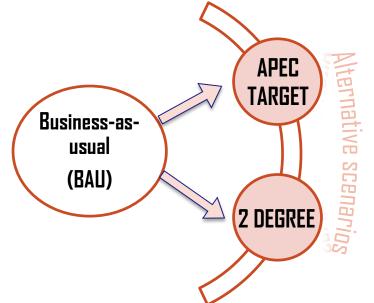
This Agreement...aims to strengthen the global response to the threat of climate change...by...[h]olding the increase in the global average temperature to well below 2°C above pre-industrial levels.

--Paris Agreement, 21st Conference of the Parties of the UNFCCC, 12 December 2015



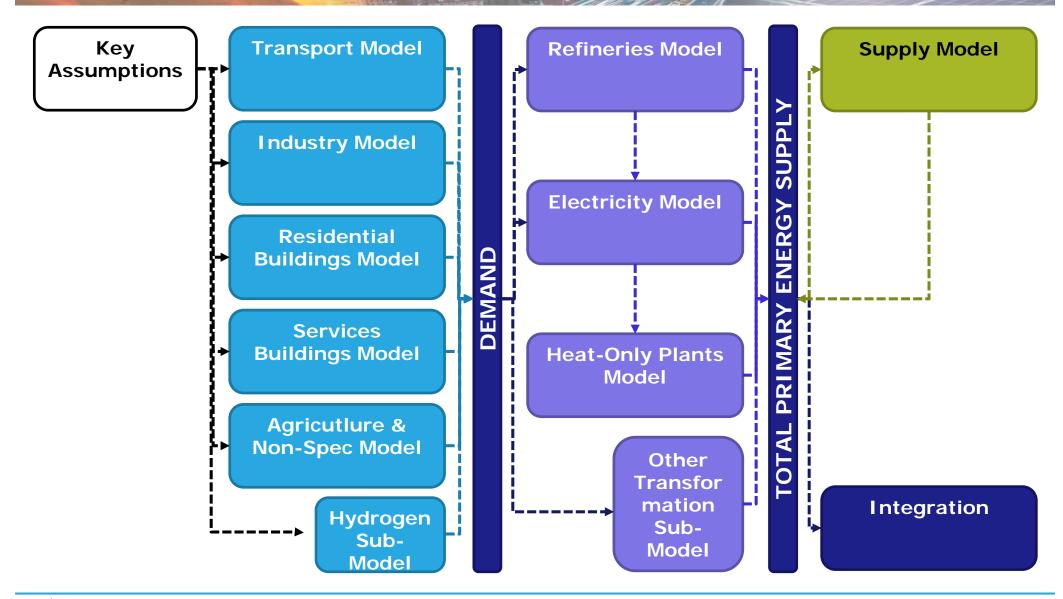
### 7<sup>th</sup> edition extends to 2050, enhances supply

- Extends projection to 2050
- Uses OECD GDP forecasts
- Makes buildings models activity driven
- Distributes renewables to the demand and electricity models
- Adds refinery and supply models as well as an integrating module
- Extends investment calculations to include demand side investment and fuel savings



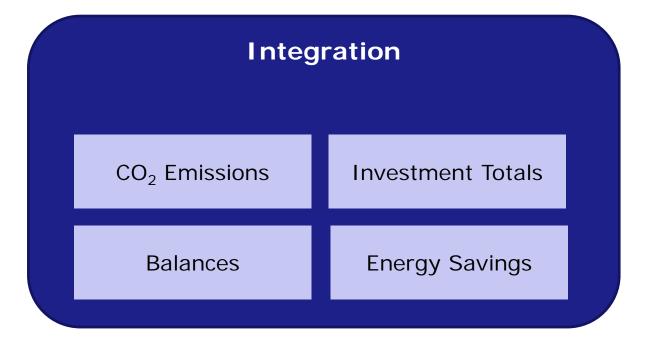


# Modelling structure reflects changes





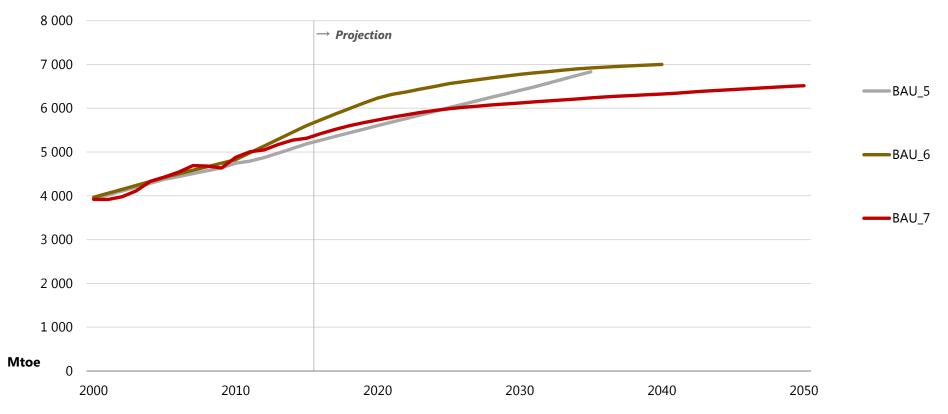
### Integration module was a key change





### Results show similar trends to previous editions

#### Total final energy demand, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> editions, 2000-2050



#### In the 7<sup>th</sup> edition total final energy demand in 2040 is about 675 Mtoe less than the 6<sup>th</sup> edition

Source: IEA statistics 2017 and APERC analysis.



### Volume one outline is similar to the last edition

Executive Summary (7-8 pages)

01\_Introduction (13-14 pages)

02\_Outlook for Energy Demand (20-22 pages)

03\_Outlook for Energy Supply (20-22 pages)

04\_Outlook for Power (20-22 pages)

05\_Achieving APEC Targets (22-24 pages)

06\_Low Carbon Scenario (22-24 pages)

07\_Energy Investments (18-20 pages)

08\_Energy Security (10-12 pages)

09\_Energy Trade (10-12 pages)

10\_Climate Change Implementation: Policy (10-12 pages)



### First chapter drafts have been completed

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019
	2017	2017	2017	2017	2018	2018	2018	2018	
Economy review of assumptions	$\checkmark$								
Model development	$\checkmark$	$\checkmark$	$\checkmark$						
Demand model runs			$\checkmark$						
Power & supply model runs				$\checkmark$					
Economy reviews of model results				$\checkmark$					
Model reruns to respond to comments					$\checkmark$				
Outlines, drafting of chapters					$\checkmark$	$\checkmark$			
Economy & expert reviews of chapter drafts and updates in response to comments							~	✓	
Editing, printing								$\checkmark$	$\checkmark$
Publication									April





# Thank you for your kind attention

### http://aperc.ieej.or.jp/



