48th APEC Expert Group on Energy Efficiency and Conservation

APEC Intensity target and APERC Data Challenges.

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11-13 September 2016, Tarapoto, Peru

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Asia Pacific Energy Research Centre

APEC
Asia-Pacific Economic Cooperation

1. Intensity Target

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APEC Energy Intensity Targe

EMM St Petersburg Declaration of 2012:

"We reaffirm our commitment…to address the economic and ecological challenges facing the APEC region we will promote a lower-carbon economy that strengthens energy security and generates new sources of economic growth, and helps achieve the aspirational **goal to reduce** aggregate **energy intensity** of APEC economies **by 45 percent from 2005 levels by 2035**."

2. Outlook 6 BAU

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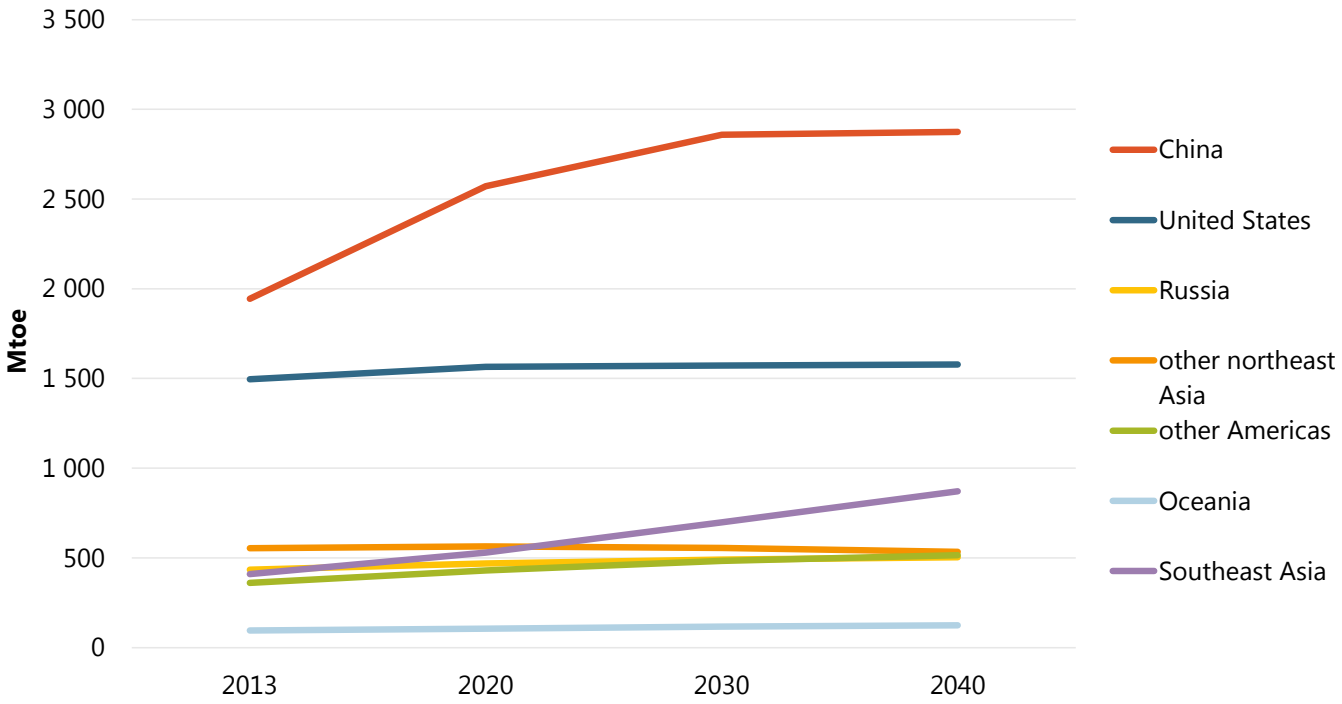
China and US Dominate Demand in APEC

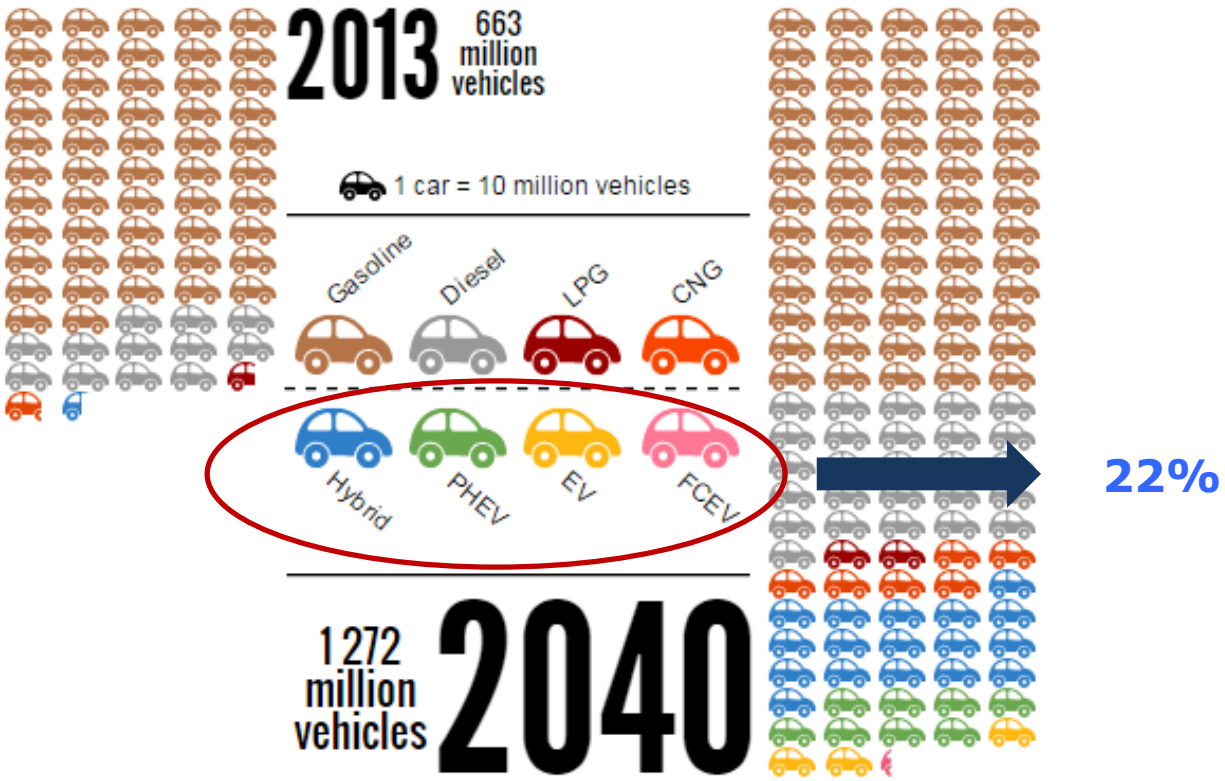
Final energy demand by sub-region



Energy demand for China and South East Asia increases 50% and 110%, respectively.

Note: **Oceania** (Australia, New Zealand and PNG), **Other Americas** (Canada, Chile, Mexico and Peru), **Other Northeast Asia** (Hong Kong, Japan, Korea and Chinese Taipei), **Southeast Asia** (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam)

Vehicle stock by technology

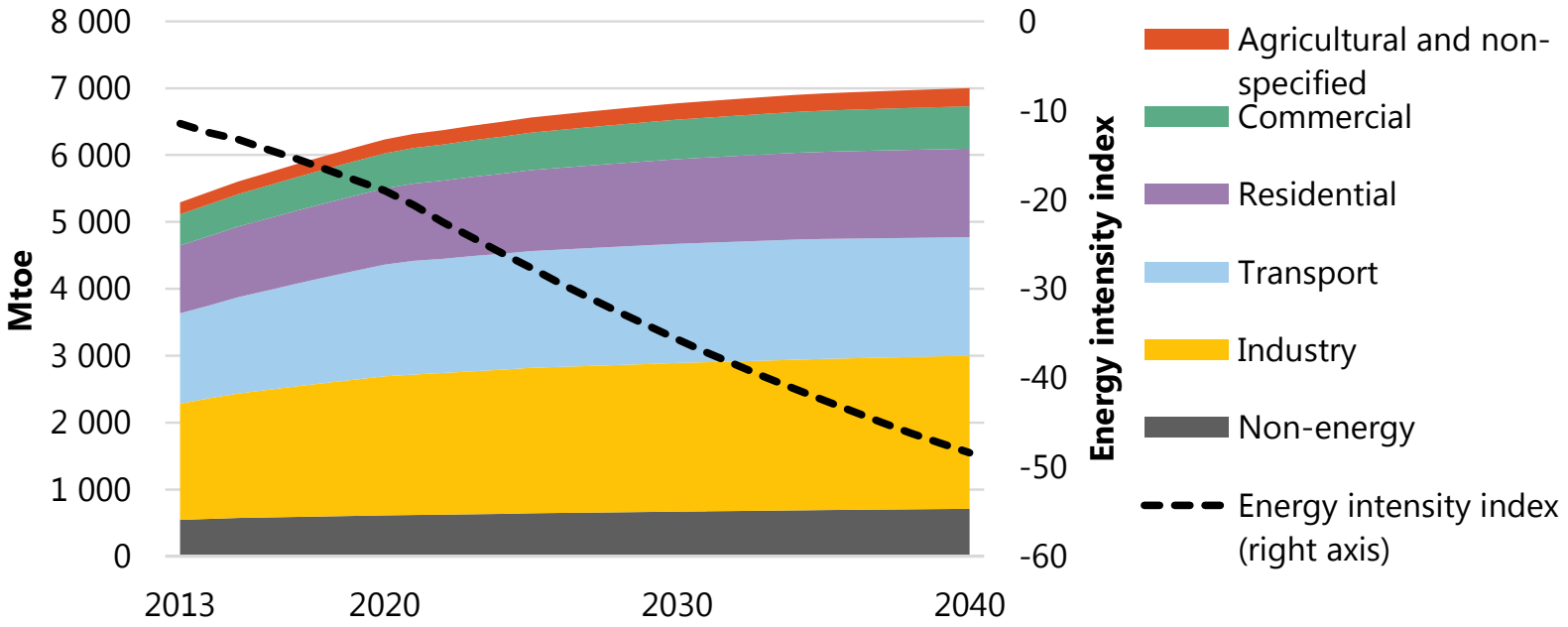


Vehicle stock doubles with more than 400 million vehicles added in China and Southeast Asia;

Share of efficient vehicles rise from 1% in 2013 to 22% by 2040.

Outlook for APEC Energy Demand

Final energy demand in APEC



Final energy demand rises 32% from 2013 level by 2040. APEC's energy intensity reduction target of 45% cannot be met by 2035 in the BAU scenario.

3. Outlook 6 IES

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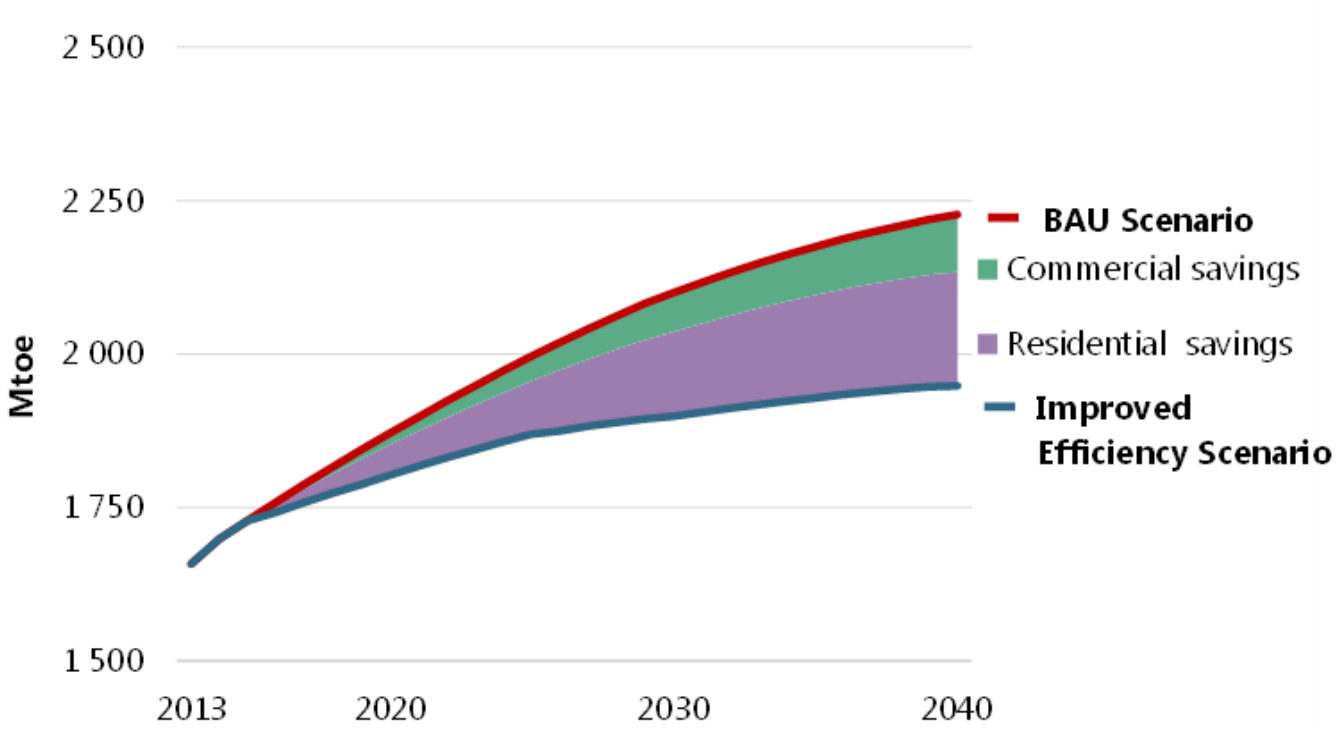
Buildings provides 30% of the savings

Buildings sector energy savings by sub-sector, 2013-40

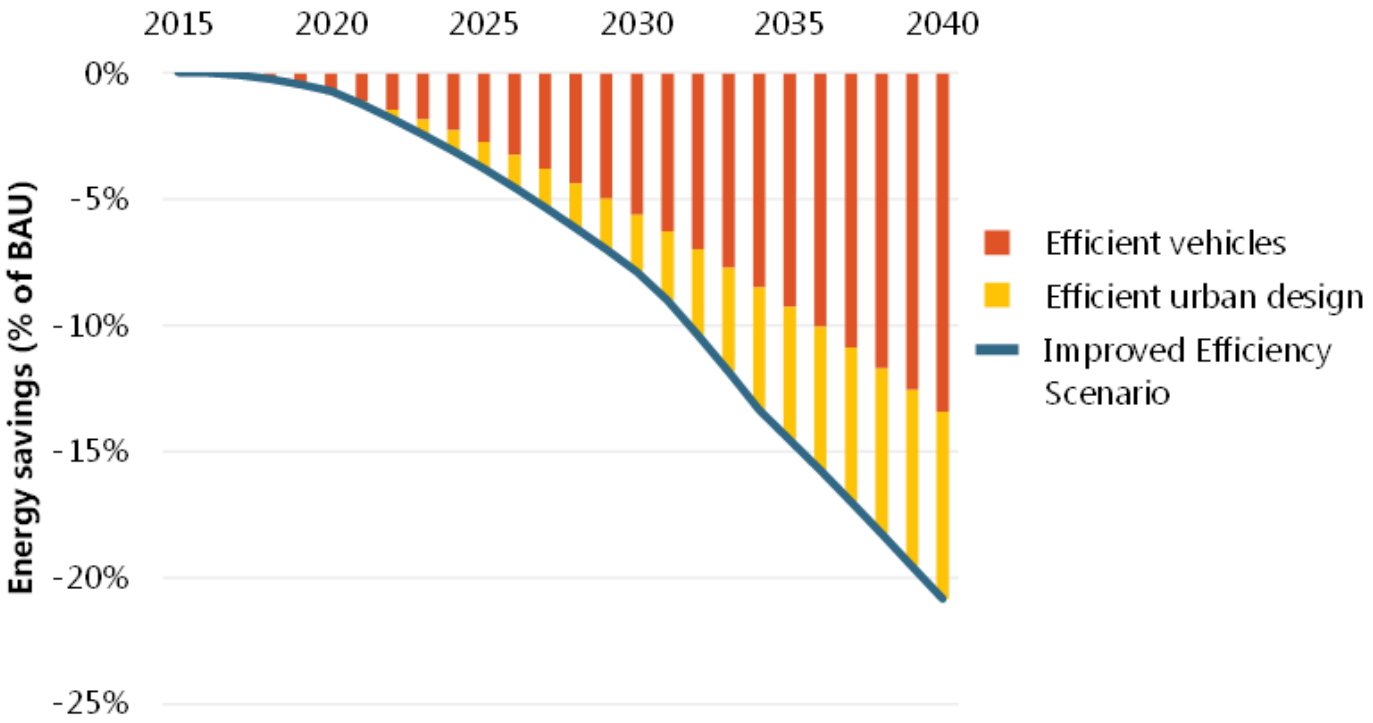


Unlike industry and transport, buildings energy demand does not peak in the IES, although growth is very small at end of the period

Sources: APERC analysis and IEA (2015a

Transport provides 29% of the savings

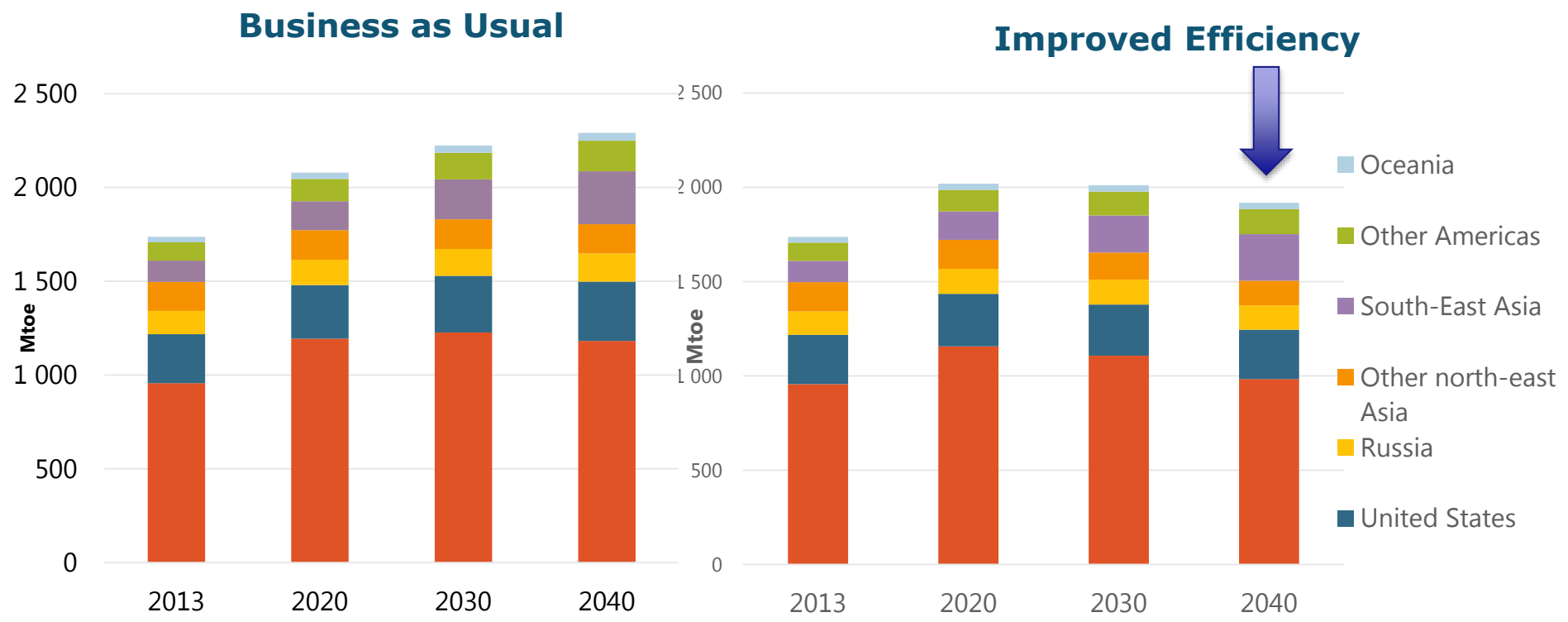
Road transport energy savings, 2015-40



Transport energy demand peaks in 2025 at 1 695 Mtoe.

Industry saves 372 Mtoe or 16%

Industry final energy demand in the BAU and IES, 2013-40



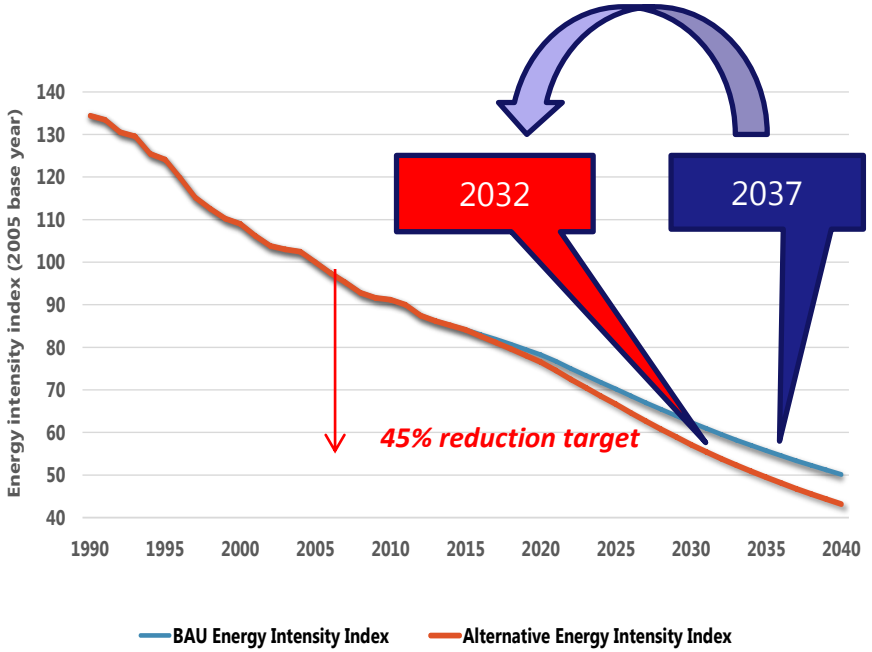
Strong energy demand-GDP growth decoupling in industry, where 79% output growth is fuelled by only 10% energy demand growth

Note: Excludes non-energy use.
Sources: APERC analysis and IEA (2015a)

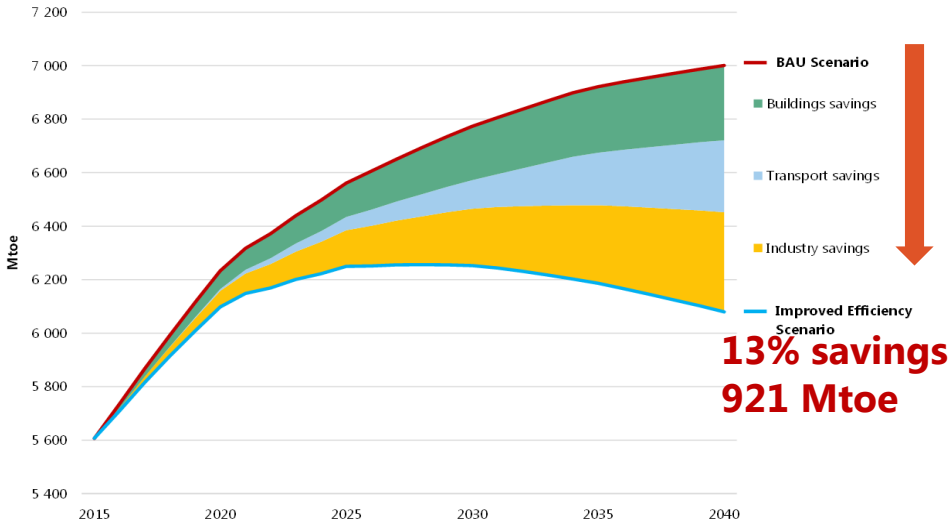
Total savings of 13% or 921 Mtoe

APEC's target can be met by 2032 under the Improved Efficiency Scenario

APEC Energy Intensity target



Overall results



Total savings of 921 Mtoe equivalent to the combined current demand of Russia, Japan and Korea. Causing demand to peak by 2025

4. Intensity Monitoring

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Future Intensity reporting at EGEE&C

- At EGEE&C 46 in Cebu APERC was requested to update EGEE&C on this goal.
- APERC will look to provide this update at the second meeting of the year from 2017.
- In the past APERC has used IEA data
  - Requests to use APEC data
- APERC is Currently assessing the feasibility of using APEC data for this.
- Checking for differences
- And arising issues.

Thank you for your kind attention

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

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