



# **EGEDA Update**

APEC Energy efficiency indicators template collection

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### Milestone



December 2014

Introduction of Energy Efficiency template

December 2015

Sent Questionnaire & User Manual

March – April 2016

Collection of Questionnaire from APEC economies

May – June 2016

Data evaluation

November 2016

Reported progress in 28thEGEDA

June 2017

Questionnaire revised per agreement in 28th EGEDA

Analyze TRENDS OF energy consumption and how to improve energy efficiency;

 Detailed information on energy demand (end-use) data are important for policy makers and energy analysts.

## **Components (1)**

### Energy data – by sector by fuel

#### **Commercial sector**

- Space Heating
- Space Cooling
- Lighting
- Other Building Energy Use
- Non-Building Energy Use

### **Transport sector**

- Road transport
- Railways
- Domestic Aviation
- Inland waterways

#### **Residential sector**

- Space Heating
- Space Cooling
- Water Heating
- Cooking
- Lighting
- Refrigerators / Freezers
- Other kitchen facilities
- Laundry facilities
- Television/PC and other Home entertainment
- Other Appliances
- Total Energy Use in Residential Sector

### **Industry sector**

- Food products and textiles
- Wood and wood products
- Paper and paper products
- Chemicals, basic pharmaceuticals, petrochemicals
- Non-metallic minerals
- Basic metals
- Fabricated metals
- Motor vehicles, trailers etc
- All Other manufacturing
- Mining and Quarrying
- Construction



**Agriculture, Fishery and Forestry** 

# Components (2)

### **Activity data**

#### **Services**

- Gross value added by subsector
- Floor area by type of activity (e.g. heating or cooling, lighting)

#### Residential

- Population
- Number of occupied dwellings
- Floor area by type of activity (e.g. heating or cooling, lighting)
- Appliance stocks

### Industry

- GDP
- Gross value added by sub-sector
- Physical unit of production (e.g. tons of cement, clinker, crude steel, pulp and paper)

### **Transport**

- Vehicle stocks (by type, by mode, by fuel type)
- Passenger-km (Passenger)

- Tonne-km (Freight)
- Vehicle-km

#### **Others**

 Value added (Agriculture, Fishing, Construction, Mining and Quarrying, Manufacturing, Waste and water, etc)

Sources: IEA EEI Manual, EGEDA

Decomposition method allows us to separate structural shifts or activity shifts, understanding better true trends in energy consumption as well as trends in economic activity that influence energy consumption in APEC.



# **EEI <u>Template</u>**



# Challenges

- Details are not provided
  - ☐ Energy data
    - End-use consumption data are not available for some APEC member economies
  - ☐ Activity data
    - Sub-sector GVAs (industry and services)
    - Household activity (floor area, dwellings)
    - Transport activity data )Vehicle stocks, etc)
- Low submission rate
  - ☐ Frequency same as annual data



# Facts from 19th APEC Energy Statistics Workshop

- ☐ Data are available somewhere
  - Strong government support in improving data collection (Australia; Hong Kong, China; Japan; New Zealand and United States)
  - Strong collaboration and networking in collecting data (Hong Kong, China;
    New Zealand; Chinese Taipei and United States)
- ☐ Challenges can be addressed
  - Conducting surveys to collect accurate data (Australia; Hong Kong, China; Japan; the Philippines; Chinese Taipei and United States);
  - Data sharing agreement (Australia; Hong Kong, China; Japan; New Zealand)



# **Proposed solution**

- ☐ Increase/initiate collaboration with other statistics agencies
  - Establish a working group within agencies
  - Memorandum of agreement
  - Data exchange agreement
- Collaboration with EGEEC members in data collection





# Thank you for your kind attention

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