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# ***APEREC Report to the EWG***

**The 33rd Meeting of APEC Energy Working Group  
Auckland, New Zealand  
28-29 March 2007**

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Asia-Pacific  
Economic Cooperation

# *Outline*

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- **Current Research Studies**
- **Proposal for New Research Studies**
- **APERC Annual Conference**
- **Contributions to the International Workshops**

# ***APERC's Current Research Studies***

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## **Research Projects (2006/07)**

- Urban Transport Energy Use in the APEC Region
- A Quest for Energy Security for the 21<sup>st</sup> Century
- Understanding International Energy Initiative

# *Urban Transport Energy Use in the APEC Region*

## ■ Objectives

- Evaluation of urban transport energy use by creating indicators
- Analysis of policy/economic measures to curb gasoline consumption growth

## ■ Findings

- Accessibility to rail/subway is the key to offset the growth in gasoline consumption.
- Development of rail/subway infrastructure would have to be supported by proper governance in order for its efficient operation.
- Rails generally use less energy than buses and cars do for a unit of passenger km.
- However, rails do not necessarily use less energy than buses and cars for a unit of passenger km when we consider energy requirements to produce electricity.

## ■ Implications

- Policy-makers could consider to establish a location-specific urban transport energy policy as an option for the enhancement of energy security.
- Policy coordination needs to be enhanced.
- Various policy goals need to be realigned and harmonised.



# *A Quest for Energy Security in the 21<sup>st</sup> Century*

## ■ Objectives

- To identify bottlenecks for energy supply in the APEC region.
- To analyse existing measures to enhance energy supply security.
- To draw policy implications for the enhancement of energy security.

## ■ Findings

- Fossil fuels, such as oil, natural gas and coal, will remain important dominant fuels throughout the 21st century, and alternative energy sources such as bio-fuels are becoming more important particularly to substitute oil in the transport sector.
- Other renewable energies, such as wind and solar, are very promising; however, their potential to provide significant contributions to the overall energy mix depends heavily on incentives given for broaden development.

## ■ Implications

- Energy policy needs to be formulated to combine both demand and supply side approaches.
- Energy security strategies and measures need to be formulated through taking into account of economy specific situations such as level of energy import dependency, availability of domestic resources, and the size of economy.



# *Understanding International Energy Initiative*

## ■ Objectives

- To provide scope and classification of international energy initiatives in the APEC region by purpose and means to reach them
- To identify driving forces for actors/stakeholders to participate in international energy initiatives

## ■ Findings

- Human resources are critical component for initiatives as capacity building required continuously, while political demand is fast and positive results
- Benefits and cost should be accounted precisely for all parties, as initiatives has voluntary nature, while often deal with intellectual property and commercially/national sensitive information issues

## ■ Implications

- Key factors affecting initiatives success are: political consensus among actors, commercial viability, and social support; both on international and domestic level



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# *Proposal For FY 2007 Themes of Research Studies*

***Proposal for 2007:  
Theme of Research Studies***

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- **Energy Efficiency in the APEC Region**
- **Understanding International Energy Initiatives – Phase II**
- **Economy Review of China**
- **Urban Transport Energy Use in the APEC Region – Phase II**



# *Energy Efficiency in the APEC Region*

## Background

- Rising energy prices
- Growing concerns for energy security and environment

## Objectives

- APERC will choose the areas of focus from the followings.
  - To analyse sub-sectoral trends in energy efficiency improvement
  - To understand energy efficiency policies in the APEC region
  - To assess the technological potential for energy efficiency improvement
  - To assess feasibility of energy efficiency projects

# *Understanding International Energy Initiatives – Phase II*

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## **Background**

- Current International Negotiations/collaborations are not moving as fast as desired
- UNFCCC, GMS, APEC EWG Initiatives, NEAREST, NEA Pipeline Natural Gas, .....

## **Objectives**

- To help understand cross-cutting issues for APEC Energy Cooperation
- In-depth analysis of selected international energy initiatives
- To propose efficient as well as effective energy initiatives
- To consider establishing an energy and environmental initiative for APEC



# *Economy Review of China*

## **Background**

- Rising energy demand
- Increasing energy import dependency

## **Objective**

- To understand historical trends in China's energy consumption, production, export and import, and energy policies,
- To analyse key factors affecting China's energy trends, and to understand what are the main driving forces shaping the China's energy policy,
- To address China specific issues at economy level, sub-regional level and sub-sector level, and
- To analyse the impacts of China's energy development on the APEC region in terms of energy trade, investment, energy efficiency, and environment.



# *Urban Transport Energy Use in the APEC Region – Phase II*

## **Background**

- Escalating energy prices and growing concerns for energy security
- Rising urban population
  - Changes in lifestyle – leading to increase transport energy use

## **Objective**

- To provide policy-makers with the available transport options
- To consider optimal mix of vehicles, buses and rails that can meet mobility requirements in rapidly developing cities of Asia
- To assess potential for alternative fuel use in urban areas



# ***APERC Annual Conference***

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**A two-day conference was held to present the outcomes from the ongoing studies, and to solicit comments from the member economies and expert speakers.**

**Also, APERC presented the proposals on new research studies, and invited comments/recommendations from participants.**

- **Date: 14-15 February, 2007**
  
- **Agenda**
  - **Session 1: Introduction**
  - **Session 2: Urban Transport Energy Use in APEC**
  - **Session 3: Energy Security in APEC**
  - **Session 4: Understanding International Energy Initiatives**



## ***Contributions to the International Workshops***

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- The ASEAN Regional Energy Policy and Planning- Sub Sector Network Meeting, Bangkok, Thailand
- The WEC-ADEME Workshop, Bangkok, Thailand
- Lecture at the Seoul National University, Seoul, Korea
- APERC-KOGAS Workshop, Seoul, Korea
- APEC/IEA Joint Seminar on China and India: Energy Insights from the Asia-Pacific, Sydney, Australia
- International Petroleum Stockpiling Symposium, New Orleans, Louisiana, USA
- Annual Meeting on IAEE, Wellington, New Zealand
- Stanford International Development Conference: Energy and Sustainable Development, California, USA



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