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4. Oil and Gas Security Exercises

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4-1. Objective of APEC Oil and Gas Security Exercise

- 2012 APEC Energy Ministers' meeting (Saint Petersburg, Russia, 24-25 June 2012)

  St. Petersburg Declaration – *Energy Security: Challenges and Strategic Choices*

  *"We encourage the EWG and **APERC** to work in collaboration with the International Energy Agency (IEA) and the Association of Southeast Asian Nations (ASEAN) on activities to improve the response to oil and gas emergency situations in the APEC region, including emergency response workshops and exercises."*

- This instruction by energy ministers was confirmed by the 2012 APEC Leaders' Declaration Annex B – *Strengthening APEC Energy Security* (Vladivostok, Russia, 8-9 September 2012)

4-2. Background of APEC Oil and Gas Security Exercise (1)

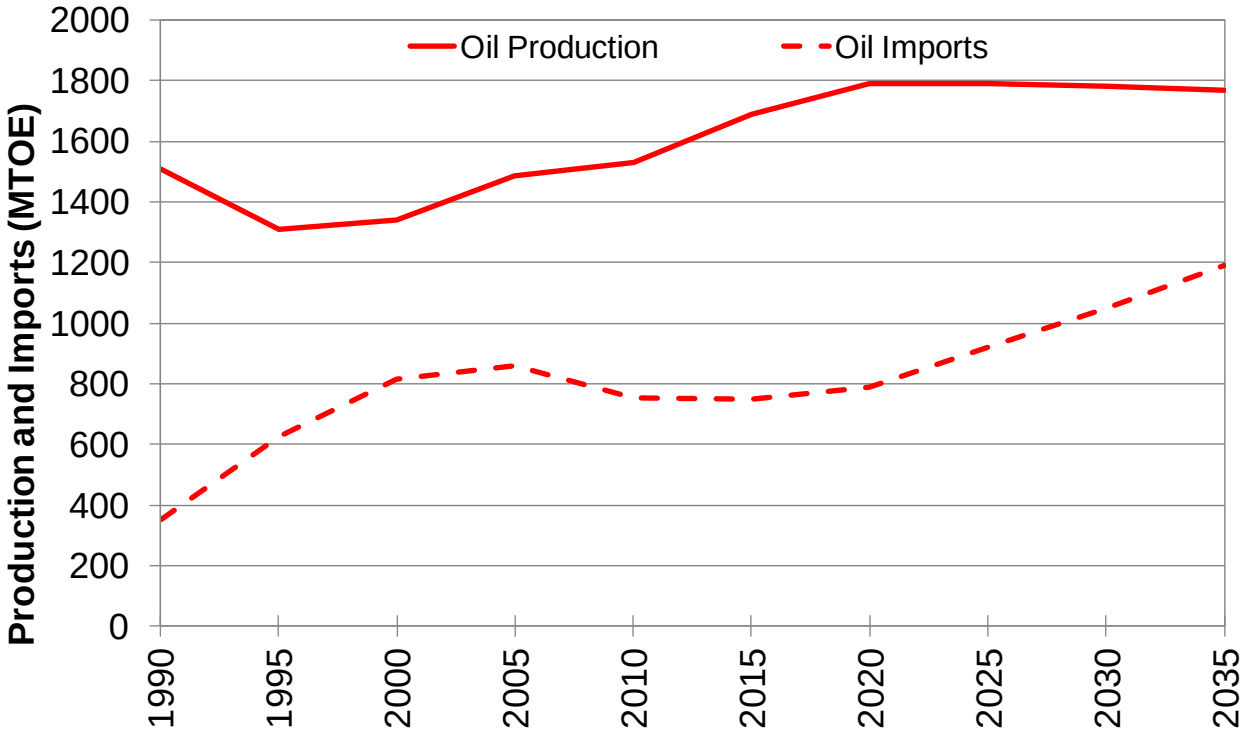
- Energy security has been a serious concern in sustaining economic and social development in the APEC region. Without doubt, it will continue to be an important concern for APEC throughout the 21st century.

- Since the oil crises in the 1970s, energy security has mainly involved securing the supply of oil. Though oil supply security will continue to be an important part of energy security, the increasing demand for imported natural gas in the APEC region poses us a new kind of energy security issue: the supply security of natural gas.

- It should also be pointed out that oil supply security and gas supply security are in fact inseparable. On the supply side, oil and natural gas are produced in the same economies or regions, sometimes concurrently. On the demand side, a shortage of gas supply will increase the demand for oil and may invite a shortage of oil supply. And perhaps vice versa.

4-2. Background of APEC Oil and Gas Security Exercise (2)

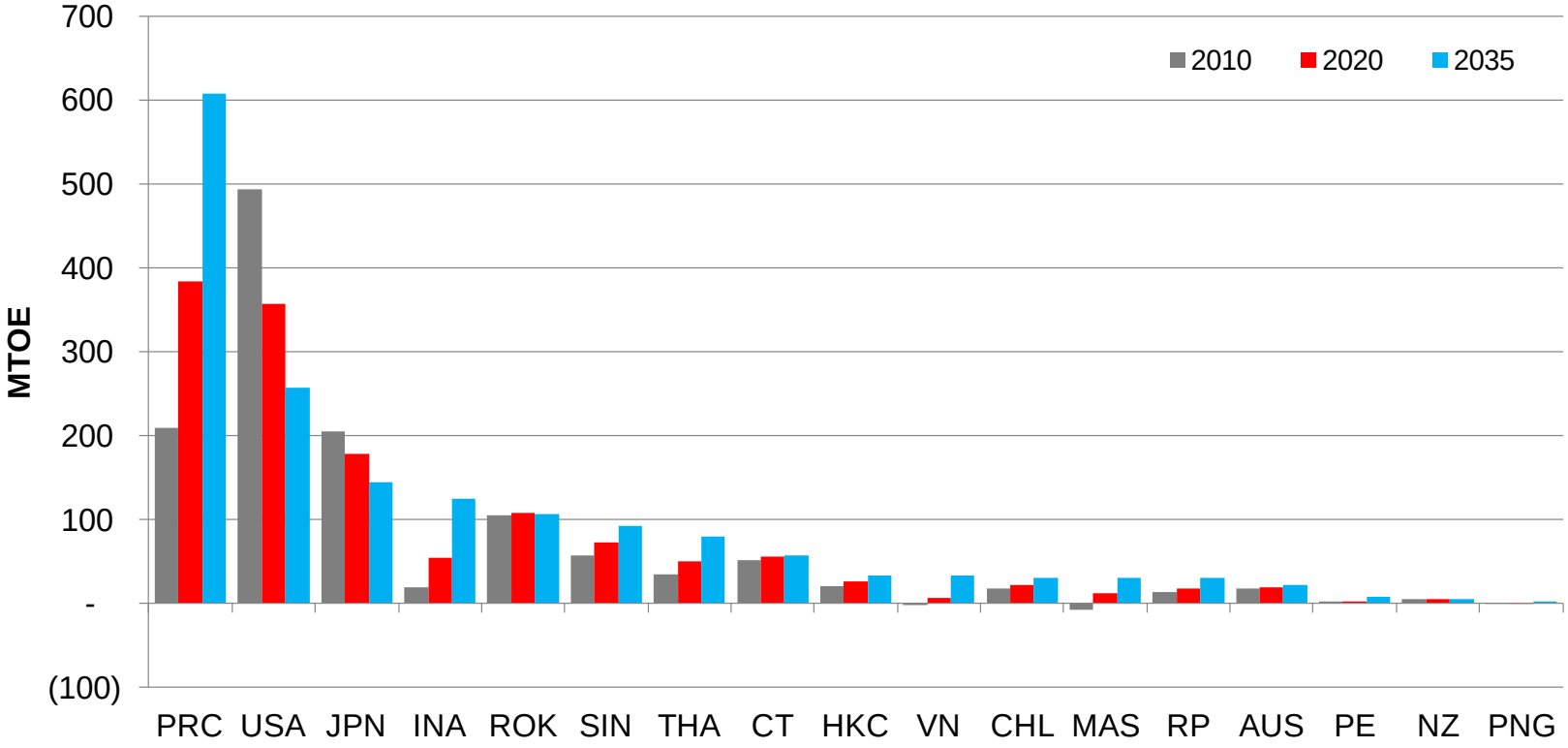
Figure.1 APEC Total Oil Production and Net Oil Imports, 1990-2035



(Source) "APEC Energy Demand and supply Outlook 5th Edition: Vol.1", APERC, 2013, p.113.

4-2. Background of APEC Oil and Gas Security Exercise (3)

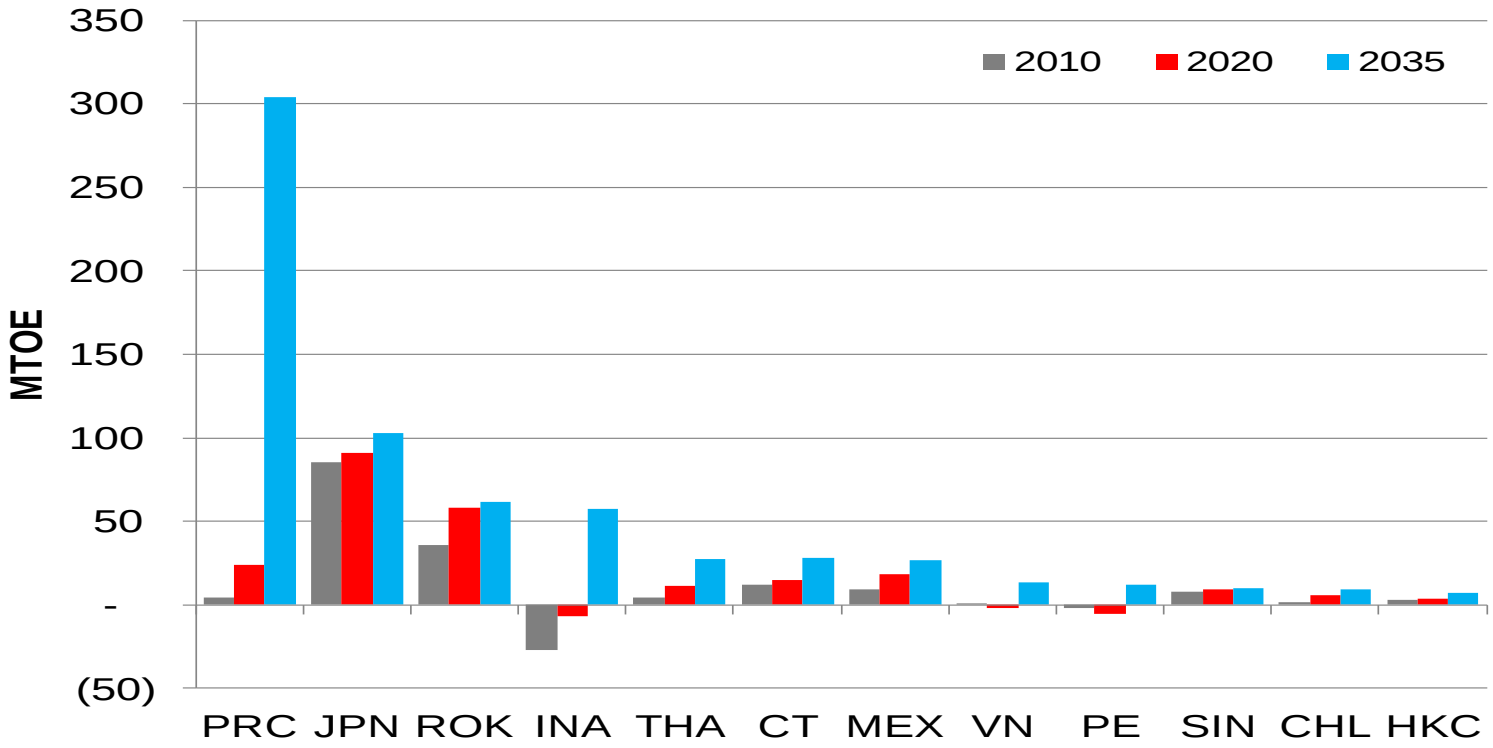
Figure 2. Projected Net Import of Oil for Net Oil Importing Economies



(Source) "APEC Energy Demand and supply Outlook 5th Edition: Vol.1", APERC, 2013, p.120.

4-2. Background of APEC Oil and Gas Security Exercise (4)

Figure 3. Projected Net Import of Gas for Net Gas Importing Economies



(Source) "APEC Energy Demand and supply Outlook 5th Edition: Vol.1", APERC, 2013, p.125.

4-3. Work Plan on APEC Oil and Gas Security Exercises

- **The 1st Security Forum,** a kick-off meeting, will be held on 18~19 April 2013 in Tokyo.
- **Scenarios** for the security exercises will be developed by APERC with the cooperation of outside experts.
- The 1st case study is expected to be **a joint exercise by Southeast Asian APEC economies** in September 2013 possibly in Bangkok, **Thailand** [TBC].
- The 2nd case study of the security exercises is expected to be **Indonesia** in October 2013 in Jakarta [TBC].
- **The 2nd Security Forum,** a wrap-up meeting, will be held in Spring 2014 in Tokyo.
- **A Final Report will be submitted to the APEC Energy Ministers' Meeting to be held in 2014.**

4-4. Preliminary Survey by APERC

- APERC is now preparing Preliminary Survey to be presented at the 1st APEC Oil and Gas Security Forum on Thursday 18 April, 2013. The aim is to highlight the APEC's Region's vulnerability and high dependency on oil and gas imports from outside the APEC region.

- The following is a tentative content.
  - APEC Oil Production in 2010
  - APEC Net Oil Import/Export in 1990-2010
  - APEC Oil Import Flow in 2011
  - APEC Net Imports from outside the APEC Region
  - APEC Oil Supply Chokepoints
  - APEC Oil Stockpiling in 2011
  - APEC Natural Gas production
  - APEC Pipeline Natural Gas Trade in 2011
  - APEC LNG Trade in 2011
  - APEC LNG Import Flow in 2011
  - APEC LNG Supply Chokepoints
  - APEC Oil and Natural Gas Supply Matrix

4-5. The 1st APEC Oil and Gas Security Forum (1)

- The 1st Forum would be held as a kick-off meeting for the Oil and Gas Security Exercise on Thursday, 18 April 2013 in Tokyo, followed by a Site Visit to an LNG receiving terminal near Tokyo on Friday 19th April 2013.

- The major purpose of The 1st APEC Oil and Gas Security Forum 2013 is to share and assimilate available information on the domestic system for emergency preparedness in each APEC economy.

- **Attendance:**

Experts from IEA, ACE, ASCOPE, HAPUA, ERIA, US, Korea and Japan
Japan's METI officials
APERC (President and researchers)
Delegates from APEC economies

4-5. The 1st APEC Oil and Gas Security Forum (2)

Tentative Schedule

Day 1. (Thurs. 18 April 2013) (Including Q&A), At Tokyo Prince Hotel

09:00-10:00 **Opening Session** (APERC President & METI)

10:15-12:00 **Session 1**: The Oil and Gas Emergency Experience and Preparedness in Developed Economies (IEA, US, Korea and Japan)

12:00-13:30 **Special Lunch Session** (JIME Center)

13:30-15:30 **Session 2**: The Oil and Gas Emergency Experience and Preparedness in Southeast Asian APEC Economies (ACE, ASCOPE, HAPUA, ERIA, Thailand and Indonesia)

15:30-16:30 **Session 3**: APEC Oil and Gas Security Exercises (APERC, Thailand and Indonesia)

18:00-20:00 Reception

Day 2. (Fri. 19 April 2013)

09:00-14:00 Site Visit to Tokyo Gas Ohgishima LNG Terminal (near Tokyo area, accompanied by APERC staff)

4-6. The 1st APEC Oil and Gas Security Exercise (1)

＜Tentative Planning＞

- The 1st Exercise (case study) is expected to be a joint exercise by Southeast Asian APEC economies in September 2013 possibly in Bangkok, Thailand.

- As a joint exercise, participation by 7 ASEAN/APEC economies: Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand, Viet Nam is expected.

4-6. The 1st APEC Oil and Gas Security Exercise (2)

Attendance:

- Experts from IEA, ACE, ASCOPE, HAPUA, ERIA, US, Korea and Japan
- Participants from host economy, Thailand
- Participants from other participating economies: Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, and Viet Nam.
- METI officials
- APERC (President and Researchers)

Tentative Schedule

- 2 days Exercise and 1 day Site Visit

4-7. The 2nd APEC Oil and Gas Security Exercise

＜Tentative Planning＞

- The 2nd Exercise (case study) would be hosted by Indonesia in October 2013.

Attendance:

- Experts from IEA, ACE, ASCOPE, HAPUA, ERIA, US, Korea and Japan
- Participants from host economy, Indonesia
- METI officials
- APERC (President and Researchers)

Tentative Schedule

- 2 days Exercise and 1 day Site Visit

4-8. Methodology for Exercise (1)

＜Tentative Agenda＞

Day 1. AM

- APERC will explain the whole schedule for the exercise (case study).

- The host economy will present the result of the preliminary study on how to respond to a stoppage of, or large decrease in, oil and/or gas supply, for whatever reason, including how the electricity sector, and industry, agriculture, commerce and transport sectors will respond depending upon the degree and duration of the stoppage or large decrease.

- Questions and answers, and discussions of the result of the host economy's study

(The external review team may change or revise the scenario prepared for the exercise, if required.)

4-8. Methodology for Exercise (2)

Day 1. PM

The external review team will explain how to proceed with the exercise. The first stage of the exercise (case study) will be carried out:

a) The external review team will present the first stage of the prepared scenario to the officials in charge of overall demand and supply coordination from the energy department of the host government.

b) Based upon the presented scenario, the officials in charge of overall demand and supply coordination will convey relevant information to other officials in the energy department, organizations or companies in the energy industry and relevant government departments (hereinafter the “other stakeholders”).

c) The officials in charge of overall demand and supply coordination will ask the other stakeholders for responses.

4-8. Methodology for Exercise (3)

Day 1. PM(Continued)

d) The other stakeholders will consider how to respond by using knowledge gained through the preliminary study, and report back to the officials in charge of overall demand and supply coordination.

e) The officials in charge of overall demand and supply coordination will decide how to respond and instruct the other stakeholders to implement the response.

f) The other stakeholders will implement the necessary measures and report back to the officials in charge of overall demand and supply coordination.

g) The officials in charge of overall demand and supply coordination will evaluate the implementation of the necessary measures.

- Members of the external review team will observe the exercise (a–g) separately and make tentative comments after the first stage of the exercise.

4-8. Methodology for Exercise (4)

Day 2. AM

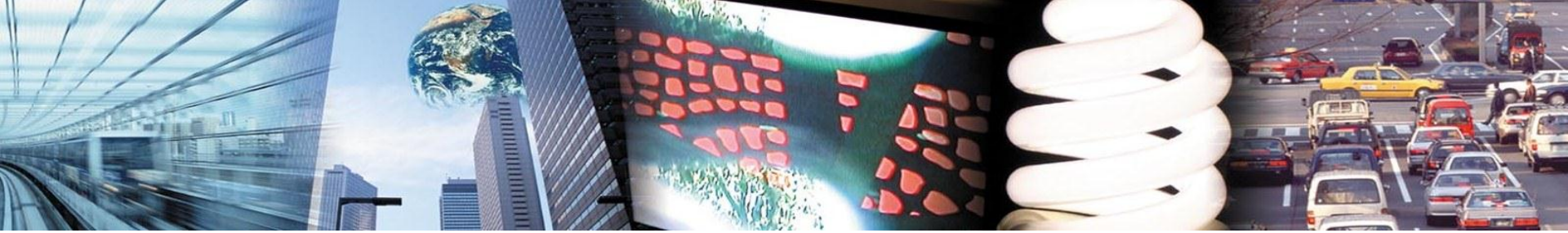
- The second stage of the prepared scenario will be presented to the host economy. The stakeholders of the host economy will reconsider the necessity to revise or change responding measures.
- Members of the external review team will observe the discussion among the stakeholders of the host economy.

Day 2. PM

- The external review team will present their evaluation of the exercise as a whole.
- Questions and answers, and discussions on the evaluation of the exercise.
- Discuss and identify future tasks.

Day 3.

If possible, the host economy may arrange a site tour for the external review team after exercise. Possible destinations for the site tour would be facilities relevant to oil and gas security, such as import facilities, pipelines and domestic distribution facilities.



Thank you for your kind attention

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