



# **Oil and Gas Security Network Forum**

## ***OGSI Progress Report (Newsletter)***

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Asia-Pacific  
Economic Cooperation



## OUTLINE OF DISCUSSION

Background

Progress

Way Forward



## BACKGROUND

- ❖ Newsletter is one of the important projects under one of the pillars of OGSI, the APEC Oil and Gas Security Network (OGSN);

### OBJECTIVE:

- ❖ Generally, the “Newsletter” aims to report on the development of oil and gas security initiatives in the APEC region. The APERC Secretariat will monitor the development by initially establishing a network within the region;
- ❖ The coverage was expanded to include global oil and gas issues;
- ❖ a bi-monthly publication.



# PROGRESS

## Two Issuances

- 1<sup>st</sup> Issue – December 2014
- 2<sup>nd</sup> Issue – February 2015
- 3<sup>rd</sup> Issue – April 2015

## Editorial Board Composition

- APERC
- IEEJ

## Meetings

- Once a month



# 1st Issue

**APERC**  
Asia Pacific Energy Research Centre

December 2014  
Issue No. 1

## APEC Oil and Gas Security Newsletter

### APERC's President Message

Energy security has been a global concern and will remain to pose a great challenge for the APEC region. With foreseen economic expansion of the APEC region, energy demand is expected to speed up and thus securing energy supply would be a serious issue that needs utmost attention and priority. As we all know, oil is and will still be a major fuel particularly for the transport sector and will continue to have significant portion in the primary supply mix. On the other hand, natural gas, being relatively a clean fuel compared with other fossil energy resources, is becoming a popular fuel in the region with increasing share in the supply mix profile of most Economies.

It is in this context that the Oil and Gas Security Initiative (OGSI) has been launched in order to strengthen the preparedness of the APEC economies to emergency situations in oil and/or gas supply. One of the three pillars of OGSI is the Oil and Gas Security Network (OGSN) which consists of those who are in charge of oil and gas security in each APEC economy. As one of the major outputs of the OGSN, a newsletter has been conceptualized and released to provide important information on global developments and insights relating to oil and gas supply security issues to the OGSN members.

The newsletter will be a bi-monthly issue to capture latest events in oil and gas markets including Middle East updates that may have some impacts on supply security of APEC members. It is likewise a venue for sharing of perspectives and experiences as revealed in the interview with experts on oil and gas issues and in featured APEC economy's practices and measures in addressing supply-related threats. We hope that the modest volume of knowledge to be reaped from the newsletter may serve as good reference to aid policy makers and government entities in the region involved in energy supply security to revisit and enhance existing policies, programs and measures to ensure greater supply security and be resilient to any potential supply emergency threats in the future.

But more important than the newsletter is the unceasing collaboration and closer partnership we have built and our common desire to collectively address and deal with the various energy supply security issues that the region may confront in the future. Lastly, let me thank those people who worked hard to put the pieces together for the release of the newsletter, including the experts who devoted a portion of their precious time to be interviewed and featured in the newsletter.



Mr. Takato OJIMI is the President of Asia Pacific Energy Research Centre (APERC).

He served various important posts in Japan's Ministry of Energy, Trade and Industry.

He has had a lot of international working experiences in such organizations as OECD, Trade Directorate and as a diplomat at the Japanese Delegation to the OECD in Paris. He also served as APEC Senior Official representing Japan.

He graduated from Keio University (B.A.) and from Cambridge University, U.K. (M.A.) (Photo courtesy of Mr. Ojimi)

### CRUDE OIL SPOT PRICE



WTI—USD 63.82 (Dec. 12)  
Source : US Energy Information Administration

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- Varied and Evolving Concept of Natural Gas Security
- Crude Oil Spot Price (Wildfire Threat)
- Natural Gas Spot Price (Henry Hub)
- Photo Story

... a prolonged supply disruption would have a substantial impact in the EU with the Eastern Member States and the Energy Community countries.....

### European Commission Gas Security Stress Test

The European Commission has published the results of gas security stress test analyses to determine the resiliency of the EU energy system to potential crisis in the coming months. The stress tests were carried out to 38 European countries (including EU) involving simulation of two supply disruption scenarios. One is a complete halt of Russian gas imports to the EU and the other is a disruption of Russian gas imports through Ukrainian transit route for a period of one or six months.

The tests revealed that a prolonged supply disruption would have a substantial impact in the EU with the Eastern Member States and the Energy Community countries being the most affected. Finland, Estonia, the former Yugoslav Republic of Macedonia (FYROM), Bosnia and Herzegovina, and Serbia would suffer by at least 60 per cent reduction in their gas supply. Even households will also endure the effect of gas supply shortfall with curtailment in their gas usage. In a scenario where European countries work together, instead of relying on national measures, few consumers would be cut off from gas supply and no households would be affected.

National reports disclosed that EU and neighboring countries have been considering a wide-range of measures to mitigate the impacts of a supply disruption, such as supply diversification, use of reserves and strategic stocks, demand restraint, and switching fuels. However, these measures are considered interventionist channels and are too much focused on domestic concern. A market-based approach should be the guiding principle and that the non-market measures (i.e. the release of strategic stocks, forced fuels switching, and demand restraint) should only be adopted and kick in when the market fails. In a well-functioning market, price signals will attract new deliveries of gas, mainly LNG, and limit demand, while the commercial use of storage will help ensure the demand-supply balance. The report on security stress test likewise contains concrete recommendations on short-term measures for the most vulnerable EU Member States and the neighboring countries.

### LNG Producer-Consumer Conference 2014

The 3rd LNG Producer-Consumer Conference was held on 6 November 2014 in Japan, which was jointly organized by the Ministry of Economy, Trade and Industry (METI) of Japan and the Asia Pacific Energy Research Centre (APERC). Mr. Yoichi Miyazawa, Minister of METI, delivered the opening statement. The conference was also graced with keynote speeches of four ministers from Australia, Canada, India and Qatar, and the Executive Director of the International Energy Agency (IEA).

More than 1,000 attendees participated in the Conference composed of government officials, company executives, and energy analysts from about 50 LNG producing and consuming countries and regions, as well as international organizations. The Conference had four sessions covering the topics on LNG Supply Outlook, LNG Demand Outlook, LNG Market and Trade, and LNG Technology Developments. (next page)

Each session had panel discussions with presentations from senior government officials, business leaders and prominent experts on assigned session's topics.

For more information, please visit [http://aperc/aej.or.jp/publications/presentations/lng\\_conference\\_detail.php?article\\_info\\_id=179](http://aperc/aej.or.jp/publications/presentations/lng_conference_detail.php?article_info_id=179)



### Key Points of the Discussions at the Second Meeting of the Multilateral Joint Study Group on LNG

On 9 September 2014, the second meeting of the Multilateral Joint Study Group on LNG was held in Tokyo. The Study Group was established following a proposal and agreement during the Second LNG Producer-Consumer Conference held in September last year. The purpose of the Study Group is to invite renowned experts from around the globe to discuss the various issues of the LNG market including possible measures to achieve sound market development.

In the meeting, higher LNG price and its impact on demand were discussed particularly on cost competitiveness against other energy resources, which might suppress the growth in demand. Members of the Study Group had expressed varied opinions on the scale of impact. If "diversification of risk by diversifying energy supply structure" will be regarded as the basis of energy security, limited use of natural gas could be an opportunity loss for APEC economies to improve their energy supply security. Natural gas is said to have an advantage in terms of lowest carbon footprint among the fossil fuels, and thus its utilization is one of the ways to realize a low carbon society. However, since higher price may prejudice the efforts to promote and expand the use of LNG, its price must be therefore at an affordable level to consumers. On the other hand, the LNG supply chain would require huge capital and (next page)

### Varied and Evolving Concept of Natural Gas Security

Energy security has been an important policy agenda in many APEC economies. While oil supply security was a critical issue for many importing economies especially in the 1970s, the recent development seems to also focus on natural gas security.

The concept of natural gas security differs significantly, depending on the specific energy challenges an economy faces. For instance, importers concern about physical supply stability at affordable price, while exporters call for security of demand to have a steady gas export flow at a price that would not only encourage new investments, but support overall economic development. The concept also has evolving nature, too.

Indonesia and the U.S. are prime examples of such evolving nature. Indonesia was once the largest LNG exporters in world, but now will import potentially significant amount of natural gas. Thus, the concept of supply security for Indonesia becomes a policy issue, which was not before a concern for the economy. On the other hand, 10 years ago, the U.S. expected massive gas imports to meet its domestic demand. However, with the shale gas evolution, the economy is transforming into a net exporter of natural gas, and therefore security of natural gas supply is not a pressing issue any more. Instead, the U.S. natural gas policy may be more demand-security oriented, especially in the situation where the competitiveness of the U.S. LNG is undermined by higher Henry Hub and lower crude oil prices.

These two examples are varied and evolving. However, it might be useful for policy makers to understand the context and evolving concept of natural gas security.



# 1st Issue

*"It was not easy as it was not hard too".*



Former ASCOPE Secretary in Charge Mr. Rene Bala during the Oil and Gas Security Forum in Tokyo, 2014. (Photo courtesy of Mr. Bala)

Mr. Victorino S. Bala was the Secretary-in-Charge of the ASEAN Council on Petroleum (ASCOPE) from 2009-2014. Before his stint at ASCOPE he was the Head of Research of the Philippine National Oil Company (PNOC) who has had various research projects on alternative energy and spearheaded the creation of the PNOC-Renewables Corporation.

The first part of the two-part APERC Secretariat's interview with Mr. Bala is found in this page.

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## Key Points of the Discussions....(from page 3)

That certain price level needs to be maintained to ensure return on investment.

Other point of discussion was on the rapid ongoing changes in the pricing system. In Europe, some analyses showed that Hub-linked pricing has increased to account for more than half of all contracts, while Asia has also started to consider or adopt a hybrid pricing system that combines the oil-linked price with other pricing systems such as Henry Hub price. Hub pricing itself does not necessarily mean lower price. However, it is required to establish price formation to timely reflect market condition as a prerequisite to seek acceptable price range for stateholders, as well as to secure supply chain investment and to have an efficient market. Also tackled was the inefficiency of the LNG market which can be corrected through supply-demand adjustment by way of spot and short-term contracts, swaps and easing, and abolishing the destination restriction on trading. If LNG trading is improved and the market functions efficiently, the stability of natural gas supply and the economic efficiency would likewise be enhanced that further contribute to greater energy security of the APEC region.

LNG is becoming an important energy source in the energy supply mix of some economies in the APEC region. And to further accelerate LNG's contribution in the region's supply mix, issues surrounding its demand and supply should be addressed and resolved. The Study Group hopes that the continuous discussions would somehow promote LNG as a better energy source for the region.

## Interview with Mr. Victorino S. Bala

Mr. Bala considered ASCOPE as his family. He stated, he have known them for almost 10 years and have grown with them, had fun memories: wonderful golf fellowships, deep appreciation of ASEAN cultures & traditions, food & drinks, similarities & differences in languages spoken & written, among others.

As ASCOPE Secretary in Charge, addressed the oil & gas resources in many different ways, such as research & studies, monitoring the supply & demand issues and prices. He participated in various educational and technical fora to share studies, opinions and knowledge.

The following is the Part 1 of APERC Secretariat's interview with Mr. Bala

**APERC**—Was it during your term when APSA was conceptualized? Who initiated the APSA? During the conceptualization of APSA, were there any disagreements (in any form) on the provisions of APSA?

Mr. Bala—On June 24, 1996 in Manila, Philippines, the ASEAN Member Countries signed the ASEAN Petroleum Security Agreement (APSA). This agreement was known as the 1996 APSA.

However, on July 1997, during the 17th ANEM in Bangkok, Thailand had tasked the ASEAN Council on Petroleum (ASCOPE) to review the provisions of APSA.

And, in March 1, 2009, the ASEAN Members States signed the revised APSA in Cham, Thailand.

APSA, throughout the years under review underwent various changes, consultations exchanges on approaches, strategies & language use. It was not easy as it

## Middle East Update

The aerial bombardment campaigns by the US led coalition against "Islamic State (a.k.a. Da'ish)" positions in Iraq and Syria has not succeeded in substantially degrading the offensive capabilities of this extremist organization. Still, it has managed to curtail immediate threats against Iraqi oil production facilities, at least for the moment. There are indications to believe that the Iraqi Army and the coalition forces are gaining momentum towards restoring stability to OPEC's second largest oil producer.

But Da'ish inspired extremism has apparently crossed into Saudi Arabia. Attacks against Shiite residents of Abha by Sunni militants is a wake-up call for the largest OPEC producer. The country's oil-producing Eastern Province has already witnessed heightened level of tension since October 2014 following the issuance of a death sentence against a prominent Shiite jurist/judge for charges of sedition. The Houthi group's political and military stretch in neighbouring Yemen is also an irritant to the Kingdom's security.

The Iranian nuclear file is far from over. The deadline for the interim agreement was extended for another 7 months, but major differences on key issues including Iran's enrichment capabilities remain to hamper a final settlement. Tough political decisions are required on both sides to secure a deal. Still, tension in the region will be containable, as long as the negotiating frameworks is in place.

Despite the down trend in the oil market, Saudi Arabia has shown little interest in curtailing oil production of its own and other members of OPEC. The intention behind this decision is unclear, but a theory that the Saudis are staging a challenge against conventional Russian and non-conventional US oil productions does have a valid point.

was not hard too. ASEAN has to work painstakingly slow but sure and thru consensus.

**APERC**—When will APSA be implemented? Is there anything more you wish to do for the ASCOPE? Would you consider the implementation of APSA your best accomplishment?

Mr. Bala—The concept of APSA works inherently in ASEAN as this has been tested several times before when ASEAN faced oil crisis. The ASEAN culture of sharing exists thru bilateral talks and cooperation.

While APSA technically needs to have the APSA operational manual/guidelines to make it to be a real working tool of cooperation during emergency or oil disruption or crisis. This manual will set the rule or guide on who does what, when, how, with whom, at what costs during time of crisis.

APSA is an ASEAN instrument. An ASEAN tool of cooperation during emergency. It is an instrument of cooperation that is uniquely ASEAN, in character & spirit. ASCOPE was only a cooperating ASEAN body to do its share in the conduct of review and implementation of APSA. ASCOPE being an expert body on oil & gas matter.

In ASEAN, works is done on a collectively & consensus ways.

APSA is a great work of ASEAN. But of course, with the help & advise of our international cooperating partners like IEA, APERC, etc.... (To be continued)

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## Photo and Photo Story



The *Min Rang* tanker berthed at Tangguh liquefied natural gas (LNG) plant in Indonesia. Indonesia is the second largest natural gas producer in Asia. Source: BP 2014

## NATURAL GAS SPOT PRICE



Henry Hub—USD 3.42 (Dec 12)

Source: US Energy Information Administration

## Diversification of Oil Supply and Asia-Pacific Oil Trade

It has been long said that the core principle of energy security is diversification. While crude oil supply to Asia remains dominated by Middle East, there is a clear sign of steady increase of new non-Middle Eastern crude oil supplies to Asia in recent years.

In China, for instance, while the share of non-Middle Eastern crude oil imports has remained at around 50.0% in the last decade, its import volume from non-Middle Eastern producers has significantly increased by 2.4 times, from 1.22 million barrels per day (b/d) in 2004 to 2.94 million b/d in the first half of 2014. Japan has also increased its non-Middle Eastern crude oil imports from 0.47 million b/d to 0.62 million b/d during the same period. Supply growth from Far Eastern Russia and Latin America in particular has contributed to the increased supply to China and Japan. India, although the country is not an APEC economy, has also raised its import volume from non-Middle Eastern oil supply, particularly from Latin America. And even in the last five years, India's non-Middle Eastern crude imports almost doubled from 0.85 million b/d in 2008 to 1.59 b/d in 2013, mostly coming from Africa and Latin America. Asian oil market has now become a place where crude oil supply from all over the world meets.

What causes this change? There are a couple of reasons. First, the presence of Asian market has increased in the world oil market. Asia's oil demand has consistently expanded, while the US and European markets have been shrinking. Any incremental oil supply, regardless of its origin, will need to find a market in Asia. Second, the share of transportation cost to total procurement cost has fallen.

In the early 2000s, transportation cost was about 8.0% to 10.0% of total crude oil acquisition cost. Now, it is below 5.0% because, while oil price level has increased, tanker tonnage has a surplus balance and the freight rate has become lower. Non-traditional long-haul crude oil transportation from non-Middle Eastern countries to Asia is now less of a barrier. Third, shale oil revolution has changed the world crude oil trade flow. The increased domestic crude oil supply of the U.S. is pushing out from its domestic market the traditional crude oil supply (coming from Western Africa and Latin America) to go somewhere else and increasingly directed towards the Asian market. All these factors have a structural nature rather than a cyclical phenomenon, and thus it is likely that Asian crude oil import continues to be more diversified.

Further, there is a growing expectation that new supplies from the east side of Pacific Ocean may also be available that would increase non-Middle Eastern crude oil supply. There may be a new crude oil supply from the U.S. if the existing regulation for crude oil export will be lifted; from Canada, if transportation infrastructure to the Pacific coast is developed; and, from Mexico, if the ongoing reform in its oil and gas sector will bear fruits and raise its crude oil production and exports.

It is needless to say that such enhanced diversification improves energy security for crude oil importers in Asia, and at the same time, finding a new export outlet in Asia also help Canada and Mexico to expand their export markets. More active cross-Pacific crude oil trade is mutually beneficial to both sides of the ocean and will certainly solidify economic ties in Asia Pacific region.

## Asia Pacific Energy Research Centre

The Asia Pacific Energy Research Centre (APERC) was established in July 1996 in Tokyo following the directive of APEC Economic Leaders in the Osaka Action Agenda. The primary objective of APERC is to conduct researches to foster understanding among APEC members of regional energy outlook, market developments and policy.

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# 2<sup>nd</sup> Issue

**APERC**  
Asia Pacific Energy Research Centre

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## APEC Oil and Gas Security Newsletter

### Positive and Negative Impacts of Rapid Oil Price Drops

Crude oil prices have been declining since mid of last year. Dr. Ken Koyama, Chief Economist and Managing Director of the Institute of Energy Economics, Japan (IEEJ) made an analysis on the rapid oil price drops in his article for the December 2014 issue of IEEJ's Special Bulletin: A Japanese Perspective on the International Energy Landscape (198) entitled "Positive and Negative Impacts of Rapid Oil Price Drops". The following is an excerpt from this article.

He mentioned that oil prices are unlikely to turn upward unless 1) OPEC (the Organization of the Petroleum Exporting Countries) decides on an emergency production cut in response to an excessive price fall; 2) excessive oil price drops cause social and economic destabilization in major oil producing countries to disrupt oil supply; or 3) an unexpected accidents or geopolitical risks bring about oil supply disruptions.

He indicated in his analysis that the positive impacts of the oil price drop include those on the world economy. Oil price drops cause an income transfer from oil producing countries to consuming countries with higher propensity to consume, becoming a factor to invigorate the world economy. In oil consuming countries, oil price drops bring about an increase in disposable income to raise consumption (from levels under higher oil prices). In Japan and other countries that are heavily dependent on oil imports, positive impacts will be more remarkable.

However, there are also clearly negatives impacts on some areas and he mentioned them as follows. First, weakening oil prices will seriously affect oil producing countries (net oil exporter) that heavily dependent on oil revenue and lack economic capability to resist low oil price. Second, weak oil prices will deteriorate companies and industries involved in the oil/gas upstream sector, exerting adverse economic effects. Third, weak oil prices will exert negative impacts on oil and gas investment plans and future production capacity in line with such impacts on the oil/gas upstream sector. (next page)

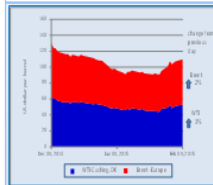
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- Crude Oil Spot Price (WTI and Brent)
- Natural Gas Spot Price (Henry Hub)
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#### CRUDE OIL SPOT PRICE



**WTI—USD 52.99 (Feb. 13)**

Source: US Energy Information Administration

*....can import crude oil from much larger number of countries and can secure a stable supply of oil products.*

#### NATURAL GAS SPOT PRICE



**Henry Hub—USD 2.62 (Feb. 13)**

Source: US Energy Information Administration

#### Positive and Negative Impacts... (from page 1)

Lastly, falling oil prices will affect relative energy prices and make business conditions more uncertain and complicated for future investment and energy choice decisions; given that crude oil prices have played a role as benchmark for various prices in the international energy market.

For a detailed report on this article you may visit <http://eneken.iej.or.jp/data/5963.pdf>.

#### "Refining at Home" – Implications to Oil Supply Security

Growing oil product imports and its increasing oil import bill have urged ASEAN countries to expand their respective refining capacities. Indonesia's state-owned PERTAMINA announced in December last year that it has agreed in its memorandum of understanding with Saudi Aramco, Sinopec and JX to renovate their five existing refineries. In Viet Nam, Petro Viet Nam is currently constructing its second refineries in Dung Quat with Kuwait Petroleum, Idemitsu, and Mitsui Chemical, while Thailand's PTT and Saudi Aramco have obtained the Vietnamese government's approval to build a new refinery in Binh Dinh.

It is needless to say that investing in a new refinery project is always a challenging task. Due to tighter oil product specifications, an advanced upgrading plants besides topping unit needs to be built even in ASEAN countries and the initial capital investment tends to be larger. Even if a new refinery could be built, refining business often experiences a tough business environment and its refining margin has been chronically low. This time however, it is expected that refining capacity will likely to remain in the surplus balance in the Asian market in the near future.

Yet building refining capacity provides several oil supply security benefits. First and foremost is that, having an established refining capacity provides an importing country more import supply options. If an importing country has a refinery, it can import crude oil from much larger number of countries and can secure a stable supply of oil products. Having a refinery helps to ease price fluctuations of domestic oil product market because international oil product market tends to be more volatile than that of crude oil. Not to mention the fact that the size of domestic oil product market is much smaller than that of crude oil market. Domestic refining capacity also ensures that proper quality of oil products are distributed in the domestic market.

These benefits are not easy to be quantified. Given the current refining capacity surplus in Asian market, continuing to import final products may sound a reasonable idea. Ensuring a stable supply, however, often requires maintaining a certain level of redundancy and thus, entails costs. Finding an optimal balance of such security arrangement and economic rationality will remain a big challenge for oil refining investments.

#### Middle East Update

The instability of the Middle East and North Africa (MENA) region has been expanding. It is not only the ISIS atrocity originating in Iraq and Syria that is most worrying. The surge of the militant groups in Libya, the takeover of the capital by one of the rebel groups in Yemen and the brutal advancement of radical extremists in Nigeria could all pose a threat to the stable energy supply to any economy. It's not only because these countries are energy producers, but also these incidents are inspiring radical extremists in many different countries.

What the Charlie Hebdo incident in Paris has shown to us is that radical extremism is not confined to the region where violence is evident anymore. The threat can be transmitted to the other parts of the world undetected through "returnees" from the battlefields or "lone wolves" who are incited by the radical ideology propagated with firms and statements spread by extremists. Although energy supply has not been directly affected by these terrorists so far, each government should be even more prepared today for any kind of escalation that could lead to energy supply disruption. Such cases may include attacks against oil and gas installations not only in the MENA region but also against pipelines and oil or LNG tankers that transit across the region and beyond.

#### Interview with Mr. Victorino S. Bala (Last Part of 2 Parts)

APERC—Who among the member country of ASCOPE will benefit the most in the implementation of APSA?

Mr. Bala—The concept and the intentions of APSA is for the benefit of all ASEAN Member States. This is like an all for one, and one for all, energy cooperation.

APERC—Is an APSA-type arrangement applicable to APEC region as a whole?

Mr. Bala—Yes, and APSA-like arrangement & cooperation can be established in APEC. And we recommend that APERC takes the initiative on this. Though it may not be an easy task but it would be fruitful and beneficial to all. But let us not re-invent the wheel. Templates are all over and available. It is a matter of putting the right things in its right places. As there are challenges & opportunities along the way. We have to understand different cultures for decision making, trading mechanism, supply & demand, among others.

APERC should look into this initiative even though oil prices are low for the moment.

APERC—During your term, were there cases that you have confronted with threats of possible supply disruption in any of the member country of ASCOPE? Please explain briefly what were the causes of such possible supply disruption? Were these cases due to global oil and gas markets volatility, natural calamities, or geopolitical instability, among others? (next page)

#### Iraq petroleum infrastructure



#### Iraq Petroleum Infrastructure

Iraq has the fifth largest proved crude oil reserves in the world and it is the second largest crude oil producer in OPEC. Source: Country Analysis Brief, Iraq US-Energy Information Administration (EIA), January 30, 2015

*....each government should be even more prepared today for any kind of escalation that could lead to energy supply disruption, such as attacks against oil and gas installations ....*

# 2nd Issue



Mr. Bala together with APEC President Oji during the 11th Oil and Gas Security Forum, April 2015 in Tokyo.

*"To President Takato Ojimi thanks for your inspiring leadership and for being a wine (label) lover & connoisseur."*

## Interview with Mr. Bala... (from page 3)

**Mr. Bala**—None. We experienced various kind of threat but those threat became manageable. The effects of the Middle East geopolitical crisis impact on the supply & prices instability in the region but our internal mechanisms work.

**APEC**—As APFA is not yet being implemented, when you were confronted with these threats, how did you address the supply (or potential) disruption? Please explain briefly. Does ASCOPE or that member country in particular have any oil and gas supply contingency plan in place? If yes, would you mind describing briefly the salient points of the contingency plan?

**Mr. Bala**—The bilateral & multilateral arrangements between and amongst ASEAN Member States are operating quite well.

Vulnerability affects all in many different forms and qualifications.

**APEC**—We appreciate very much your participation and being one of our experts during the conduct of the APEC Oil and Gas Security Exercises (OGSE) in 2013 (1st and 2nd forum, Bangkok and Jakarta Exercises). What is your impression about the OGSE? Do you think the exercises were in Bangkok and Jakarta were important and useful especially for the Southeast Asian members in dealing with emergency situation on oil and gas? Do you have any advice on how APEC can improve more to disperse the task that the APEC Leaders/Ministers bestowed on us? Do you think we should continue this kind of exercise?

**Mr. Bala**—The APEC/APEC initiative on Oil & Gas Security Exercises are truly outstanding and excellent in substance & form. I have learned a lot. Indeed, I have to congratulate President Takato Ojimi and his key officials & staff for making this initiative a great success and making the ASEAN a beneficiary of these exercises.

We want this template duplicated or replicated in the future APFA exercises. As I have been suggesting to APEC that you conduct this kind of exercises too in other APEC Member Countries... perhaps on a different region because APEC is composed of different regions with different economies and interests. And in here we can learn & study the level of energy cooperation needed to establish an emergency protocol.

We should understand that this could be very different from APFA. **APEC**—Any happy moments during your term as Secretary in Charge? Any regrets?

**Mr. Bala**—In ASCOPE, memories, friendships, fellowships, good relations and love. **APEC**—In ASCOPE, happy moments are everywhere, anytime with everybody.

I love ASCOPE, and I hope ASCOPE loves me... too! ha, ha, ha... **APEC**—Any final words? (next page)

## Interview with Mr. Bala... (from page 4)

**Mr. Bala**—Thanks APEC/APEC for the rare opportunity and experiences and learning moments on OGSE.

To President Takato Ojimi thanks for your inspiring leadership and for being a wine label lover & connoisseur.

And Dr. Irie for being cool and supportive smart and alert at all times.

Thanks to you all hardworking APEC people... Virang, Pak Andriya, Michael, and for all the cherry blossom experiences.

We hope we can meet, work, together again in the future.

## Editor's Note:

Mr. Bala's term as Secretary-in-Charge (SIC) of ASCOPE ended in November 2014. **Nguyen Chanhchun from Thailand** is the newly appointed SIC of ASCOPE and hopefully will also be featured in one of the issues of the APEC-Oil newsletter.

## Malampaya Deep Water-to-Gas Power Facility Shutdown

The Malampaya Deep Water-to-Gas Power Facility in Palawan, Philippines will proceed with its month-long maintenance shutdown in March this year despite the tight power supply situation expected in the summer of 2015.

The Malampaya consortium led by Shell Philippines Exploration B.V. (SPE), Chevron Malampaya LLC, and the state-owned Philippine National Oil Co. Exploration Corp. is scheduled to shut down the facility starting 15 March to 13 April 2015 (30 days) as part of the preparation for the third phase of its expansion program. One of major maintenance activities to be undertaken will be the coupling of the existing platform to the new platform, which currently being constructed in Subic, Zambales province (about 3-hour drive from Manila).

The gas field, which is located 60 kilometers northwest of Palawan Island, has about 2.7 trillion cubic feet of natural gas reserves and \$5 billion barrels of condensate found some 3,000 meters below sea level. Off-takers from the Malampaya field are the Ilijan and First Gas power facilities (Sila and San Lorenzo) which have combined total installed and dependable capacities of 2,861 MW and 2,760 MW, respectively, about one-third of Luzon grid's power supply. The shutdown could have adverse impact on Luzon grid's power supply, as well as on the cost.

The Philippine Department of Energy (DOE) has made a request to the Malampaya consortium for possible deferral of maintenance schedule in one or two months. However, the consortium could not afford to move the month-long shutdown as the scheduled maintenance is time-specific, which is based on completion timelines of the gas platform installation and other activities at the field. (next page)

...shutdown could have adverse impact on Luzon grid's power supply...

## Photo and Photo Story

The Malampaya Gas Platform Off-shore of Palawan

Discovered in 1992 and inaugurated in October 16, 2002, The Malampaya Deep Water Gas-to-Power Project supplies gas to fuel the Philippine three combined cycle gas turbine (CCGT) power plants with a combined capacity of 2,760 MW, comprising about 19 percent of the country's total installed capacity in 2002.

Source: DOE, Philippines  
Photo: Shell Philippines



## Malampaya Deep Water-to-Gas Power ... (from page 5)

During the Malampaya shutdown, the Ilijan Gas-Fired Power Plant will be operating using biodiesel but running at limited capacity of 820 MW (instead of 2,271 MW). Meanwhile, Sila (2,000 MW) and San Lorenzo (530 MW) Gas-Fired Power Plants will be running at their normal operating capacities using condensate as an alternate fuel. The government will be closely monitoring the situation to ensure that power supply will not be affected during the maintenance. Refueling of new committed power projects and power plants for upgrading and rehabilitation will be prioritized. Other measures to be considered include Interruptible Load Program (ILP) and energy demand management, among others. The government will intensify promotion/campaign on energy efficiency and conservation to realize higher energy saving and restrain demand in public institutions/facilities, residential customers and large users, such as commercial establishments. ILP is a mechanism allowing large customer and distribution utilities with embedded generating capacities to shed-load from the grid during peak hours by operating their generating facilities for various.

## Ukraine's Energy Security, More Than Gas Issue

Not many countries are facing rapid and major changes in energy security in the same way as Ukraine. Ukraine is currently facing the biggest crisis ever—a decrease in coal supply. Most media attention has been drawn to the country's problem of gas supply, which can be settled with money because gas may be supplied properly as long as payment is made to Gazprom. Ukraine's coal supply issue is more serious compared (page 7)

## Ukraine's Energy Security... (from page 6)

with its gas supply issue. Most of the coal used for power generation in Ukraine is produced around Donetsk in the eastern Ukraine and transported by railway. However, the continued confrontation with pro-Russian separatists in this area has hindered the production and transportation of coal. There are no prospects for converging the independence movement to a steady state, therefore, it is unclear when the coal supply will be normalized. Since 40% of electricity supply (as of 2012) in Ukraine depends on coal, the lack of coal has a substantial impact on the operation of electricity generation. While Ukraine is trying to manage to maintain its coal supply by imports, it is unlikely to dramatically increase the import volume in a short time because the ports and railways should be improved, and the power generation facilities should be converted in order to meet the burning characteristics of coal which vary depending on the quality. In the short term, Ukraine has no choice but to offset the shortage of coal-fired power generation with gas-fired power generation which is in good shape in terms of capacity. However, this short-term measure increases the burden on the payment of gas imports.

...Ukraine's coal supply issue is more serious compared with its gas supply issue.

Based on such circumstances, the government of Ukraine is aiming to maintain and expand nuclear power generation, which is another main source of the country's power supply. Nuclear power generation is recognized as non-emission energy and expected to increase their energy self-sufficiency. It is not surprising if they raise expectations on nuclear power generation when its domestic coal supply is uncertain.

In the face of an energy security crisis, Ukraine has launched a variety of structural reforms. Ukraine's attempt to build a competitive market like Europe denies the current status of oligopoly with state-owned enterprises and company practices completely. Ukraine is also trying to reduce the burden on national finance and promote energy saving by abolishing subsidies for energy prices, but it can be easily imagined that they face public criticism as citizens' income level is not so high. Opposition is inherent in every reform; the greater the change, the stronger the opposition. If Ukraine wants to put through such painful reforms, a strong leadership is necessary to remove existing constraints.

Energy reform in Ukraine has only just begun. We wish that the reform will be the best for Ukrainian people and other countries should take this opportunity as learning lessons from Ukraine as well as reexamining their own energy issues seriously.

## Asia Gas Market Forum

While the Ministry of Economy, Trade and Industry (METI) and Asia Pacific Energy Research Centre (APERC) organized the 3rd LNG Producer-Consumer Conference in November 2014 in Tokyo, the 3rd Asia Gas Market Forum was held in Beijing on 27th December 2014. The forum was initiated mainly by Chinese national oil companies such as China National Petroleum Corporation (CNPC), China Petrochemical Corporation (SINOPEC), and China National Offshore Oil Corporation (CNOOC), both of which are similar in a sense that Asia Petroleum of LNO included both Japanese and Chinese companies to establish respective platforms to discuss the potential and challenges of Asian gas market. Asia Gas Market Forum was first held in Shanghai, China in 2012 and then in Delhi, India in 2013. The 3rd forum attracted about 270 attendees, comprising of gas producers, importers, research institutes including APERC and The Institute of Energy Economics, Japan (IEEJ) and consultants.

The discussions in Beijing could be summarized in three points. Firstly, participants shared a view on weaker market balance of natural gas in Asia. While many presenters argued weaker than expected demand for LNG in Asia, it is increasingly clear that the supply capacity will grow much faster than the demand. Secondly, lower oil and most likely, natural gas prices will undermine the feasibility of new upstream investment of natural gas. Lower oil prices will push down oil-related LNG prices which by itself is weakening for Asian gas importers. However, lower oil-related prices could be a challenge for the US LNG projects whose products are priced in relation to the US energy mix since. Thirdly, market players are aware of the need to replace old-generation pricing for natural gas for Asia. While many presenters are skeptical about the establishment of Asian benchmark price of natural gas in near future, the possible LNG gas and abolishing deviation clause in term LNG contracts could pave the way to achieve more liquid gas market in Asia.

## Upcoming Event: The 1st APEC Oil and Gas Security Network Forum

The Asia Pacific Energy Research Centre (APERC) will organize the "1st APEC Oil and Gas Security Network Forum" on April 23-24, 2015 in Kitakyushu City, Japan. The forum is part of the "APEC Oil and Gas Security Initiative (OGSI)" conceptualized and launched last year.

The main purpose of this forum is to gather and share information and experiences relevant to

emergency responses on oil and gas supply disruption. The forum will also serve as a venue to form a network of working level officials in the APEC economies and experts from international/regional organizations. The participants will also visit the Shirashima Oil Storage Base, a floating oil storage facility which is the first of its kind in the world. It is located about 8 km off the coast of Kitakyushu and has been in operation since 1996 as one of Japan's national oil storage base projects.



## Asia Pacific Energy Research Centre

The Asia Pacific Energy Research Centre (APERC) was established in July 1996 in Tokyo following the directive of APEC Economic Leaders in the Osaka Action Agenda. The primary objective of APERC is to conduct researches to foster understanding among APEC members of regional energy outlook, market developments and policy.

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## WAY FORWARD

### Interview

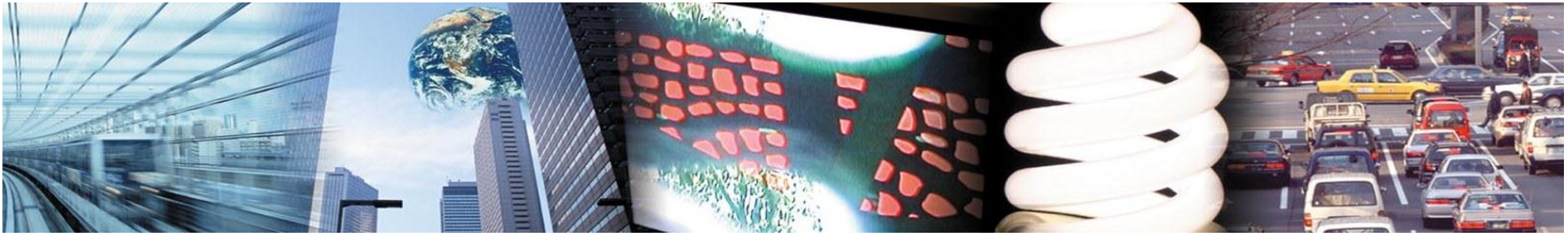
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