NOTABLE DEVELOPMENT ON OIL AND GAS IN THE PHILIPPINES

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Demand and Supply Situation

Update for the last five (5) years	2013	2014	2015	2016	2017	Average (2013-2017)
% share to Total Primary Energy Supply Mix (TPES)						
Oil	30.57	30.69	33.57	33.97	33.92	32.55
Natural Gas	6.42	6.46	5.57	5.99	5.57	6.00
Self-sufficiency (%)						
Oil	4.94	5.89	4.15	3.79	3.16	4.39
Natural Gas	100.00	100.00	100.00	100.00	100.00	100.00
Percent Share to Final Energy Demand						
Oil	30.78	31.36	33.47	34.02	33.80	32.69
Natural Gas	6.42	6.42	5.59	6.02	5.64	6.02
Supply/Demand Average Annual Growth Rate (AAGR): 2016 - 2040						
	TPES	**TFEC**				
Oil	4.50%	4.50%				
Natural Gas	6.70%	11.50%				

Highlights of Demand and Supply on Oil and Gas

I. Downstream Oil Sector

SUPPLY

- ***Inventory***

  As of end-December 2018, actual crudes and petroleum products inventory closed at 23,502 thousand barrels (MB) or 50-day supply equivalent; 44 days for crude oil and products in country stocks and 6 days in-transit. This was higher by 15.4 percent from 20,362 MB in December 2017.

- ***Crude Oil Supply***

  Full Year 2018 crude oil import totaled 85,753 MB, an increase of 10.4 percent from 77,641 MB of FY 2017. Majority of the crude oil imports were sourced from the Middle East (86.9%), of which 33.7 percent came from Saudi Arabia (28,880 MB), the top supplier of crude oil into the country.

- ***Petroleum Product Imports***

  Total country's FY 2018 petroleum product imports totaled 97,573 MB, slightly higher by 0.2 percent from 97,415 MB in 2017. The top imported product for the period was diesel oil, though 3.3 percent lower from last year's level.

- ***Crude Run and Refinery Production***

  The country's current maximum working crude distillation capacity is 285.2 thousand barrels per stream day (MBSD). In 2018, refinery utilization of the local refiners was at 82.0 percent vis-à-vis 2017 level of 74.2 percent. Thus, year-on-year local petroleum refinery production output was also up by 13.1 percent. FY 2018 average refining output was at 235.4 MB per day.

DEMAND

- ***Petroleum Product Demand***

  FY 2018 demand of petroleum products totaled 168,805 MB, an increase of 1.4 percent from 166,539 MB in 2017; translated to an average daily requirement of 462.5 MB compared with year-ago level of 456.3 MB.

- ***Petroleum Product and Crude Oil Exports***

  Total country's petroleum products exports as of FY 2018 grew by 16.7 percent from 14,600 MB of FY 2017 to 17,043 MB.

  For crude oil, a total of 1,066 MB from Galoc (Palawan Light) sourced from US, was exported in 2018 yet crude oil export dropped by 24.3 percent from 1,409 MB in 2017.

Highlights of Demand and Supply on Oil and Gas

Philippines

II. Downstream Natural Gas Sector

NATURAL GAS PRODUCTION AND CONSUMPTION

(in million standard cubic feet, mmscf)

Year	Production	Consumption			
		Power	Industrial	Transport	Total
2018	150,804	142,723	3,302	0	145,273
2017	139,209	132,256	2,138	0	117,926
2016	140,516	132,350	2,782	0	135,132
2015	122,541	115,788	2,138	0	117,926
2014	130,351	122,305	3,302	4	125,611
TOTAL	**683,421**	**645,423**	**13,026**	**4**	**658,453**

Natural gas supply is 100 % self- sufficient...

Highlights:

Supply

- The Malampaya gas field is the sole producer and supplier of natural gas, having commenced its commercial operation in October 2001.
- At present, natural gas supply from Malampaya is one hundred percent (100%) self-sufficient in meeting domestic demand.
- From 2014-2018, there is an erratic trend in the production level particularly in 2015 and 2017 as the Malampaya facilities implemented its 30-day PMS.
- Also, in 2015, a Depletion Compression Platform (DCP) was installed adjacent to the existing Malampaya Shallow Water Platform. The DCP maintains the level of gas production to fulfill the commitments of the Service Contractor under existing gas sales agreements to ensure the steady supply of natural gas to power the Luzon electricity grid.
- The average production rate of the gas field is at 450 million standard cubic feet (mmscf) per day, drop in supply is expected to start by 2022 and its concession will expire in 2024.
- The field can still operate beyond the expiry period, but it does not have enough gas for further expansion to provide the future natural gas requirements particularly on the plan to expand the application of natural gas in the non-power sector such as in industrial, commercial, residential and transport sectors.

Demand

- Power generation accounts for 95 percent of the total annual consumption while industrial sector accounts for about 2 percent, the remaining 3 percent is attributed to flaring, own use gas in the platform and line pack in the 504 km underwater pipeline.
- A 14 percent increase in consumption from 2015 level is attributed to the online of additional power capacity of 531 MW in 2016 from the existing 2,871 MW capacity. Natural Gas fired power plants supplied by Malampaya now is at 3,402 MW.
- Utilization of natural gas for the transport sector under a pilot stage was suspended in mid 2014, leaving power generation and refinery the main consumers of indigenous natural gas.

Notable Development on Oil and Gas Policies

I. Oil Policies

PROPOSED POLICY ISSUANCES RELATING TO OIL SUPPLY SECURITY

Short-to-Medium Term			Long-Term
Conduct of a study on the Philippines' Strategic Petroleum Reserve (SPR), and prepare an implementation plan based on the result of the said study, for the establishment of the SPR. *(A Department Order was drafted directing Philippine National Oil Company - Exploration Corporation [PNOC-EC] to conduct the said study)*	Conduct update study aimed to show the importance of a national petroleum reserve for the country, identify option on what kind of facilities can be utilized and where to locate them and show cost estimates and financing possibilities for the government/private entity for the said reserve to be constructed and eventually be operational. *(This is where the Philippines need support from partner economies)*	Conduct of audit on government oil storage facilities and infrastructure is also considered to establish if there are existing government oil storage facilities. *(DOE has started coordinating with the AFP on the matter)*	Steps were also taken to push for a Bill to pass Strategic Petroleum Reserve (SPR) Law. *(Drafting of proposed SPR Legislation was delegated to the DOE Legal Office)*

Notable Development on Oil and Gas Policies

II. Natural Gas Policies

a. Existing Policies

- **DOE Department Circular No. DC2017-11- 0012 or the Philippine Downstream Natural Gas Regulation (PNGR)**
  - ✓ Issued on November 28, 2017
  - ✓ Provided a regulatory framework for the downstream natural gas industry in the Philippines
    - Industry compliance to policies, rules, standards and best practices on siting, design, construction, expansion, modification, operation and maintenance of any gas related projects
    - Industry compliance on
      - ❖ Importation of LNG
      - ❖ Supply and transport of natural gas
  - ✓ Provided transparent guidelines for investors
  - ✓ Provided the creation of liberalize markets and entry of investment through TPA
    - Usher in the development of the natural gas industry
    - Create more industry players

- **Philippine National Standards/DOE QS 011: 2016**
  - ✓ Provides for the quality specification for Natural Gas promulgated on June 20, 2016.

- **Executive No. 30 "Creating the Energy Investment Coordinating Council to Streamline the Regulatory Procedures Affecting Energy Projects" issued on June 28, 2017**
  - ✓ Provided for energy projects amounting to at least US$70 million to be classified as Energy Projects of National Significance (EPNS)
  - ✓ Mandated the streamlining of permitting process of all government agencies under the Energy Investment Coordinating Council (EICC) to act on proposal within 30 days, otherwise, the proposal is deemed approved.

- **Republic Act 11032 "the Ease of Doing Business and Efficient Delivery Act" issued on 28 May 2018**
  - ✓ Provided a standardized deadline for government to process transactions on the following:
    - Simple transactions - 3 days
    - Substantial transactions - 7 days
    - Highly technical transactions - 20 days

Notable Development on Oil and Gas Policies

I. Natural Gas Policies

b. Planned Policies

Short-Term	Long-Term
• Establishment of an Inspector's Manual	• Passage of the Natural Gas Bill
• Development of HSSE Standards, Codes and Practices	• Implementing Rules and Regulations of the Natural Gas Bill
• Development of PNS on LNG Facility and Safety Rules	• Rules/Codes of the Third Party Access to LNG Facility and Pipeline
• Advocate the Passage of the Natural Gas Bill	• Development of PNS on Other Natural Gas Facilities and Safety Rules

APEC Cooperation

Conduct collaborative studies and activities in the following areas:

- Study and eventual operationalization of Strategic Petroleum Reserve
- Effect of oil supply and price in the implementation of IMO requirements in the Maritime Industry
- Compendium of Safety code and best safety practices in the operation and maintenance of LNG Receiving facilities in APEC economies
- Pricing Mechanism for LNG in APEC market
- Map out best practices in oil and natural gas regulations in APEC economies

Thank You !