

**NATURAL GAS SITUATIONER REPORT**  
**FULL YEAR 2018**

***OVERVIEW***

The Philippines continued to be self-sufficient in natural gas with 100% of its production coming from offshore Malampaya gas field. Volume of gas supplied by Malampaya to power and industrial sector accounts for 150,804 mmscf reflecting 8.33 percent increased against the year ago level of 139,209 mmscf. Power generation accounted for the highest share in usage of 98 percent and the remaining 2 percent for industrial sector.

This year, natural gas contributes 29.64 percent of the Luzon generation mix alongside other energy sources such as coal, oil, hydro, geothermal and other renewable energy sources like wind, solar & biomass.

Remarkably, there is a volume disparity of 5,531 mmscf between what has been supplied from the Malampaya gas field against the actual recorded demand. The difference can be attributed to flaring, gas heating, venting and purging of natural gas at the platform, onshore-gas-Plant (OGP) facility , own use power plants, and linepack in the 504 km natural gas pipeline.

**Table 1. Natural Gas Supply and Demand**  
**Full Year 2018-2017**  
**(in mmscf)**

	Quantity		Inc./ (Dec.)	% Change	Percent Share	
	2018	2017			2018	2017
Supply :	150,804	139,209	11,595	8.33	100%	100%
Malampaya gas field	150,804	139,209	11,595	8.33	100%	100%
Demand :	145,273	134,511	10,762	8.00	100%	100%
Power	142,723	132,256	10,467	7.91	98%	98%
Industrial	2,550	2,255	295	13.08	2%	2%

**PRODUCTION**

Aggregate domestic natural gas production during the year 2018 stood at 150,804 mmscf reflecting an increase of 8.33 percent compared to the previous year's actual of 139,209 mmscf. Increase in the volume of supply was the result of the Malampaya's production availability of 98.5 percent with an average daily gas production to customers of 399 mmscf/day. Also, there was no maintenance activity conducted by the operator in the platform during the year

## **CONSUMPTION**

Total natural gas utilization for the year 2018 was recorded at 145,273 mmscf, registering an 8.00 percent rise from last year's actual volume of 134,511 mmscf. The overall increase in volume of utilization was due to the full operation of the five natural gas power plants and the refinery located in Batangas.

### ***Power Sector***

Aggregate demand of natural gas in the power generating sector for 2018 was reported at 142,723 mmscf against the 2017 volume of 132,256 mmscf or a percentage change of 7.91 percent.

Ilijan Power Plant Block 1 and 2 implemented its major inspection in January to April 2018 and twenty seven (27) days reserve shutdown was implemented in Unit 1 and 2 of Avion Power Plant for the first semester of the year. All of the five (5) natural gas fired power plants have reported the conduct of their respective maintenance activity, despite an increased in utilization has been reflected due to the full operation of these plants throughout the year 2018.

### ***Industrial Sector***

Pilipinas Shell Refinery's total gas consumption for the year 2018 accounted for 2,550 mmscf against 2,255 mmscf in 2017 actual, indicating 13.08 percent rise in utilization. The recorded increase was brought about by high gas off-take despite the refinery used LPG to fuel its turbine and furnaces throughout the year 2018.

## ***SUPPLY AND DEMAND OUTLOOK FOR FULL YEAR 2019***

### **SUPPLY**

#### ***Domestic Production***

Domestic production of natural gas for the year 2019 is seen to drop by 6.33 percent or 141,255 mmscf, compared from the 2018 volume of 150,804 mmscf. Reduction in supply is primarily due to the scheduled five - (5) day maintenance shutdown at the Malampaya Platform to be implemented in October this year. This maintenance schedule affects the operation of all natural gas power plants including PSPC refinery. Maintenance activities for all natural gas fired power plants including the refinery are expected to be implemented during 2019. This will also impact on the nomination on the volume of natural gas from the Malampaya gas field.

### **DEMAND**

Projected demand of natural gas for 2019 will reach at 135,003 mmscf against the 2018 level of 145,273 mmscf or a plunge by 7.07 percent. The decline is attributed to the reduction in volume of nomination of natural gas in lieu of the 5-day scheduled shutdown in the Malampaya facilities as well as the implementation of the maintenance activities of the respective consumer of natural gas.

### ***Power Sector***

Natural gas consumption for the power generation sector for full year 2019 is projected at 132,498 mmscf or 7.16 percent lower than the 2018 level of 142,723 mmscf. The decline in utilization of power generation is attributed to the implementation of major maintenance program of the respective natural gas power plants such as Kepco Ilijan, Sta. Rita and San Lorenzo within the year coupled with the implantation of the 5-day scheduled maintenance activities in the platform. However, the natural gas fired power plants will still operate using an alternate fuels such as diesel and condensate.

### ***Industrial Sector***

The industrial sector's projected demand for 2019 totaled to 2,505 mmscf reflecting a 1.76 percent dip from the previous year's actual utilization of 2,550 mmscf. The decrease in utilization by the refinery is the impact on the implementation of the five - days maintenance shutdown at the Malampaya platform facility and PSPC refinery is expected to implement its maintenance activities this year.

Table 2, provides the supply and demand projections for the year 2019.

***Table 2. Projected Natural Gas Supply and Demand, 2019  
( in mmscf)***

	<b>FY 2018</b>	<b>FY 2019 Projected</b>	<b>Inc / (Dec)</b>	<b>% Change</b>
<b>Supply:</b>	<b>150,804</b>	<b>141,255</b>	<b>(9,549)</b>	<b>(6.33)</b>
<b>Production:</b> Malampaya gasfield	150,804	141,255	(9,549)	(6.33)
<b>Demand:</b>	<b>145,273</b>	<b>135,003</b>	<b>(10,270)</b>	<b>(7.07)</b>
Power	142,723	132,498	(10,225)	(7.16)
Industrial	2,550	2,505	(45)	(1.76)