BRIEFING ON THE DOWNSTREAM OIL AND NATURAL GAS INDUSTRY

Assistant Director Rodela I. Romero

Oil Industry Management Bureau

E-Power Mo Energy 101 for Media

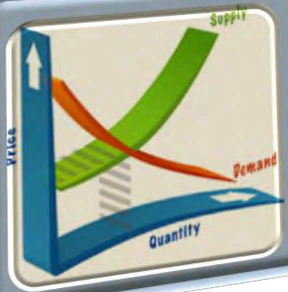
10 October 2018

Grand Xing Imperial Hotel H. Montinola cor. Muelle Loney St., Iloilo City

Outline of Presentation

The Oil Industry Management Bureau (OIMB)

Regulatory Framework/Industry Background



Functions

The Oil Industry Management Bureau (OIMB) Mandate

FORMULATES AND IMPLEMENTS POLICIES, PLANS AND PROGRAMS OF THE DOWNSTREAM OIL AND NATURAL GAS INDUSTRY

OIL INDUSTRY COMPETITION AND MONITORING DIVISION

- OIL SUPPLY MONITORING AND EVALUATION SECTION
- OIL DEMAND AND MARKET COMPETITION MONITORING SECTION
- OIL PRICE MONITORING AND EVALUATION SECTION

OIL INDUSTRY STANDARDS AND MONITORING DIVISION

- PETROLEUM PRODUCTS STANDARDS SECTION
- FACILITIES AND PROCESSES STANDARDS SECTION

RETAIL MARKET MONITORING AND SPECIAL CONCERNS DIVISION

- LIQUID FUELS SECTION
- LPG SECTION

NATURAL GAS MANAGEMENT DIVISION

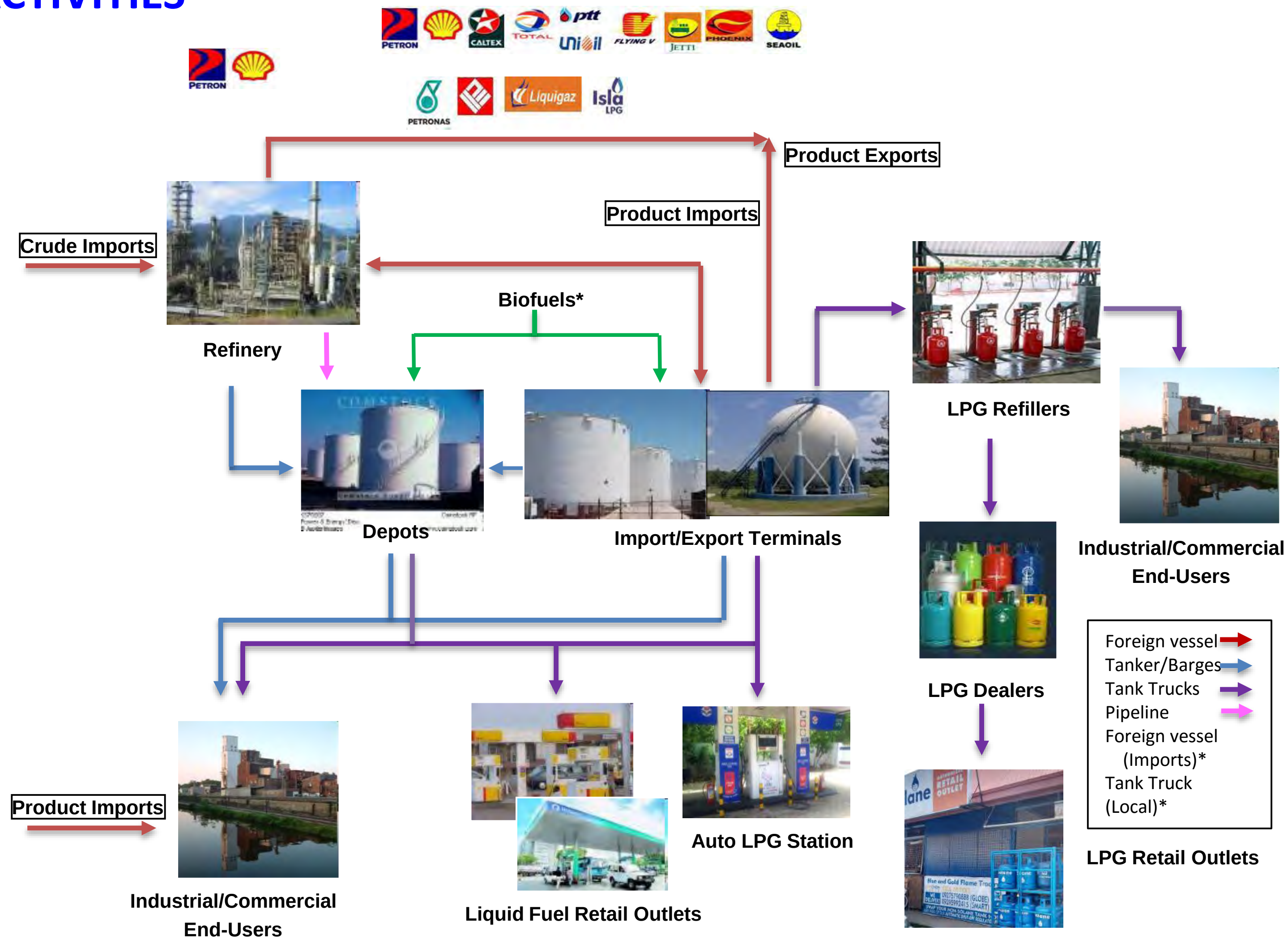
- MARKET DEVELOPMENT AND MONITORING SECTION
- INFRASTRUCTURE AND INDUSTRY DEVELOPMENT SECTION

Regulatory Framework

RA 7638 – DOE Act of 1992	• prepare, integrate, coordinate, supervise, and control all plans, programs, projects, and activities of the Government relative to energy exploration, development, utilization, distribution, and conservation.
RA 8479 - Downstream Oil Industry Deregulation Act of 1998	• ensure a truly competitive market for petroleum products under a regime of fair price, adequate and continuous supply of environmentally, clean and high quality petroleum products
Batas Pambansa 33	• Prohibited Acts/Penalties Involving Petroleum
RA 8749 - Clean Air Act of 1999	• set the specifications for all types of fuel and fuel-related products (Sec.26) • set every two (2) years or thereafter or as the need arises, the specification of ULG and diesels shall be reviewed and revised (Sec. 26)
RA 9367 - Biofuels Act of 2006	• establish technical fuel quality standards for biofuels and biofuel-blended gasoline and diesel which comply with the PNS (Sec. 7c)

Downstream Oil Industry Background

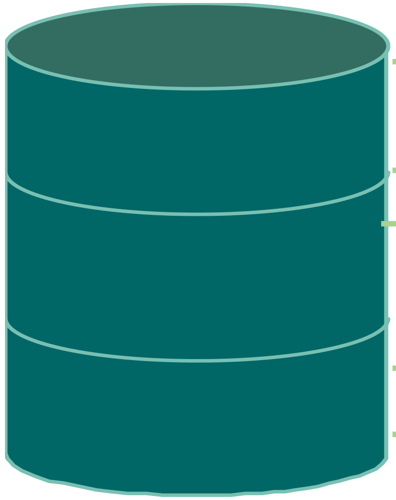
DOWNSTREAM OIL ACTIVITIES



Downstream Oil Industry Background

1H 2018 PRODUCTION/DEMAND MIX

Production (228.6 MBCD)/ Demand (461.99 MBCD) %Mix

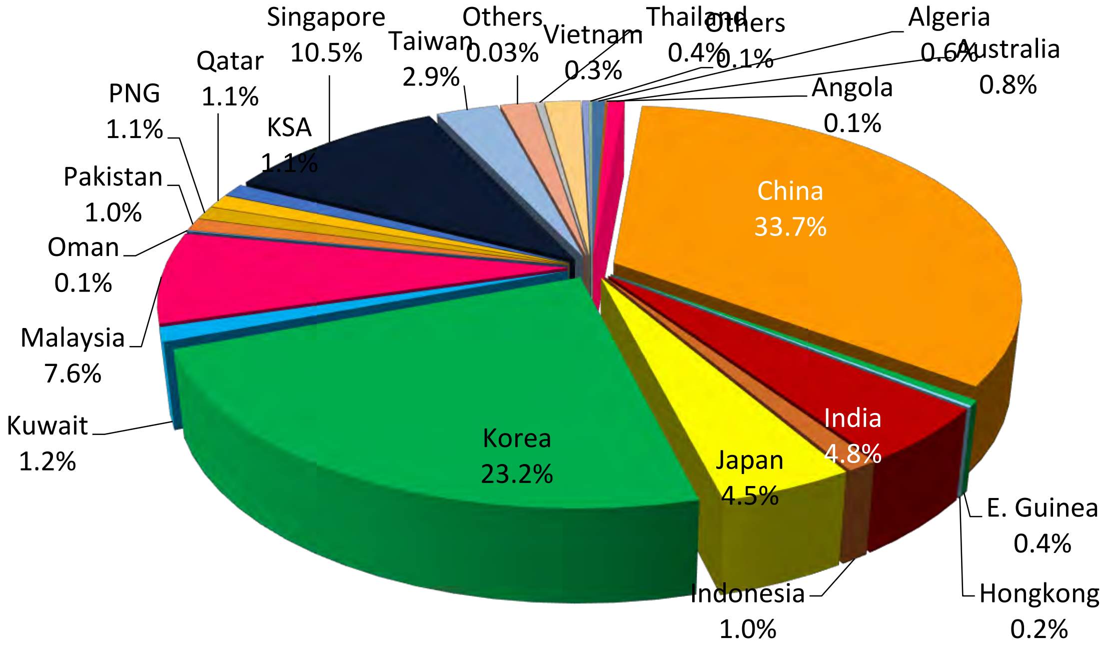


CRUDE

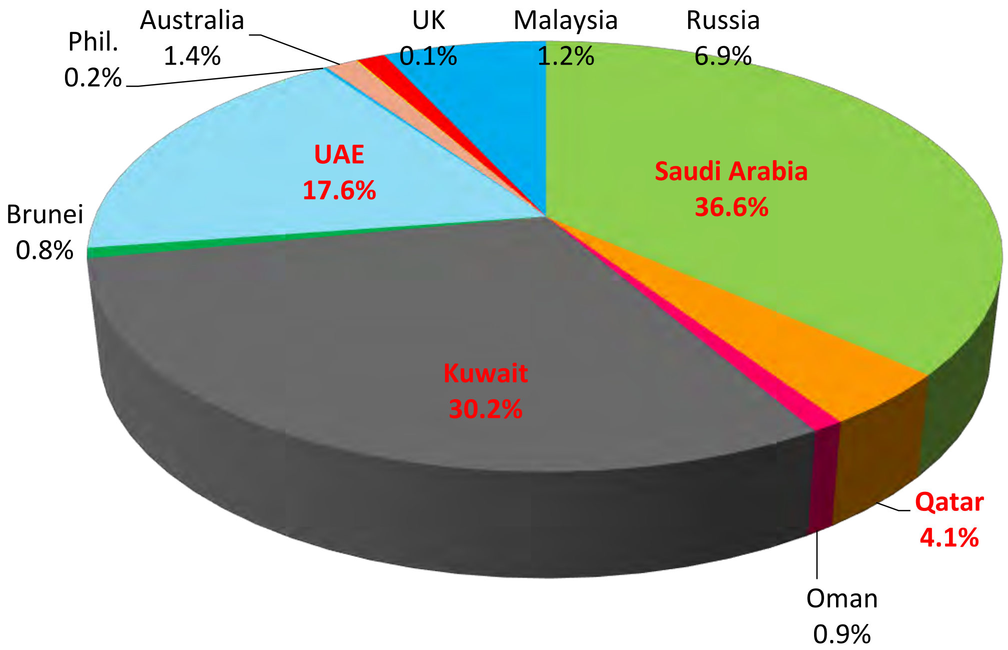
Production	Demand	Product
7.1	11.8	*LPG*
24.2	23.4	*GASOLINE*
9.5	10.5	*AVTURBO/ KEROSENE*
37.9	42.0	*DIESEL*
6.3	5.9	*FUEL OIL*
15.1	6.3	*OTHERS*

Function 1: Industry Competition & Monitoring (Liquid and LPG)

2017 SOURCES OF OIL IMPORTS



PRODUCT IMPORTS
97,530 MB



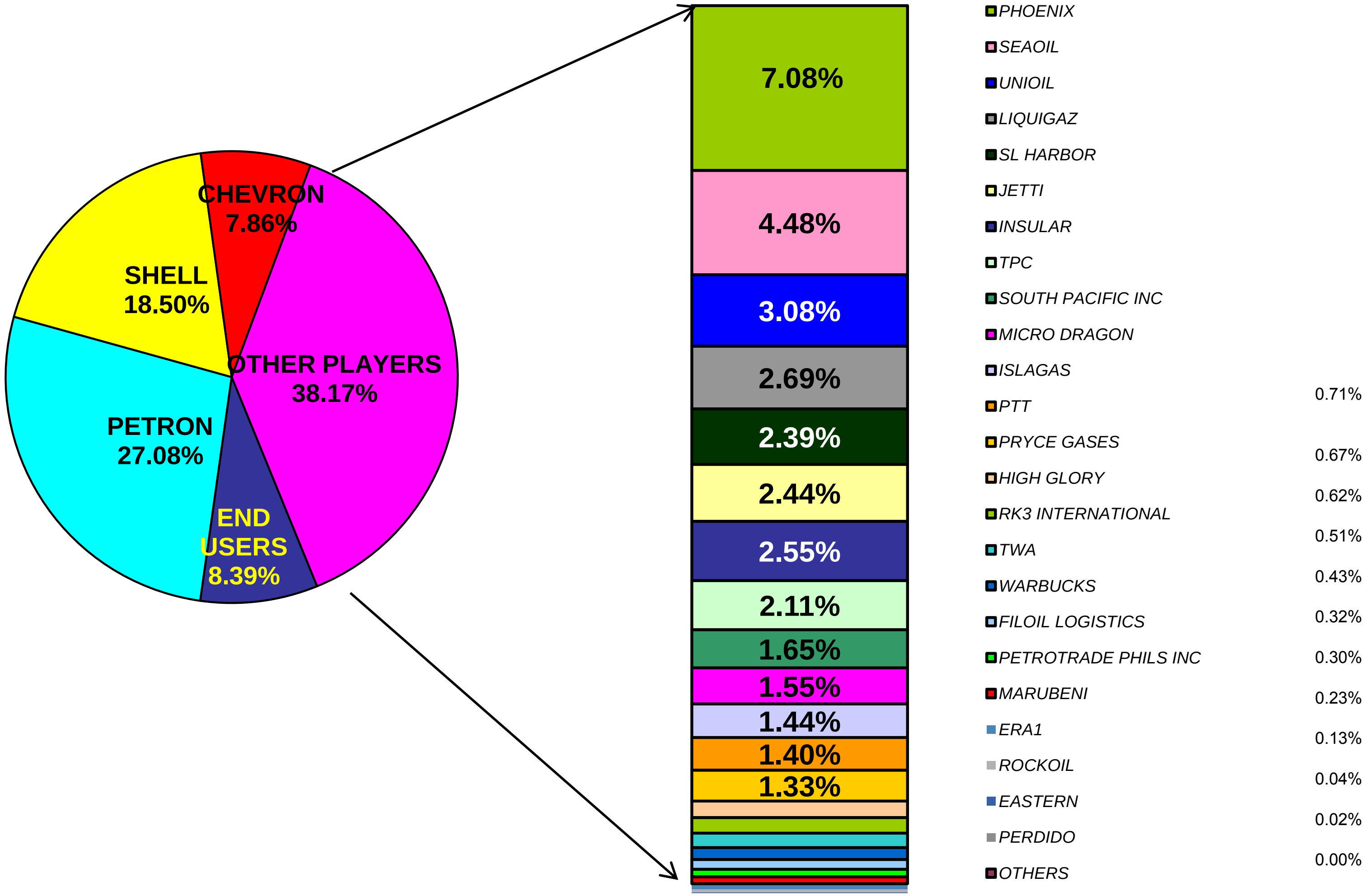
CRUDE IMPORTS
73,943 MB

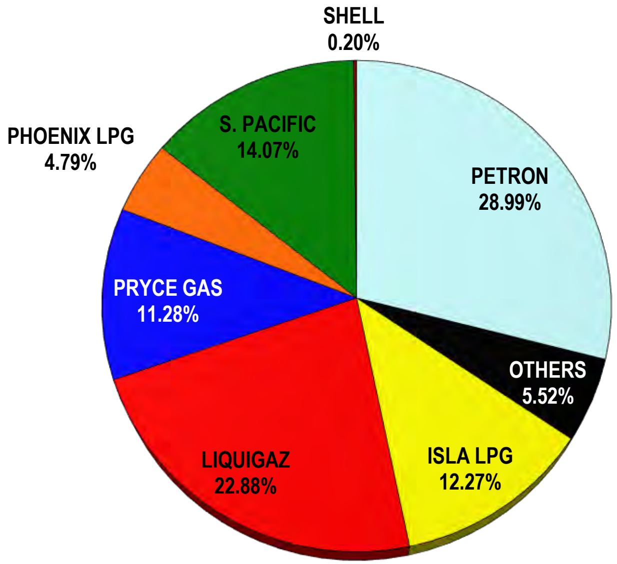
OPEC – 88.5 %
Non-OPEC – 11.5%

•Philippines - shipments from Subic/Clark freeports, sourced from various countries, e.g., Thailand, Singapore, etc.

Downstream Oil Industry Background

1H 2018 TOTAL PRODUCTS / LPG MARKET MARKET SHARE



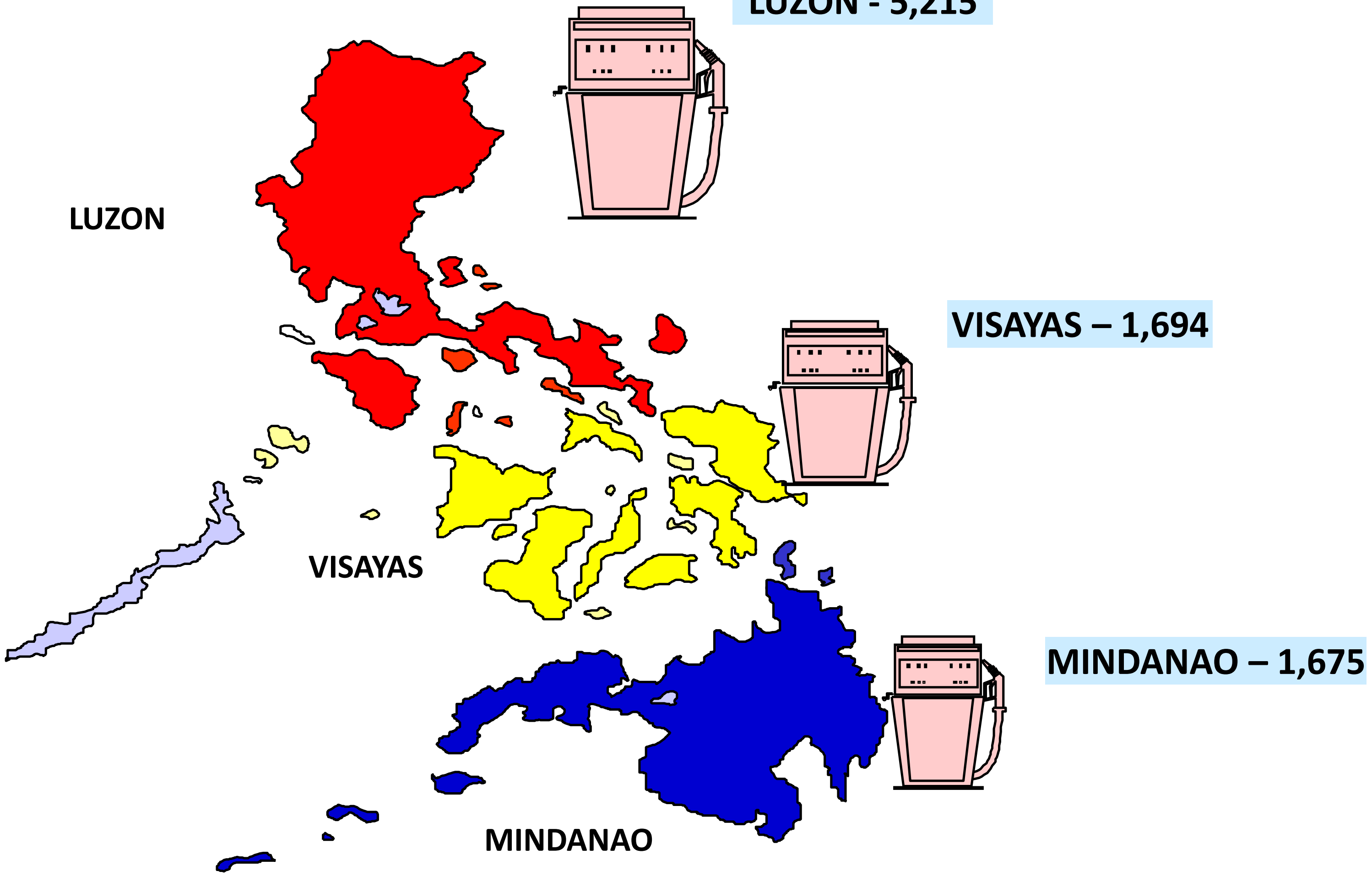


Total Country

9,829.75 MB

Downstream Oil Industry Background

NEW PLAYERS' RETAIL OUTLETS



Flying V	330
Total Phils.	202
Seaoil	270
Eastern	34
Jetti	69
Galaxi	20
Filoil	115
USA88	12
PTT	70
Unioil	38
Phoenix	343
Rephil	12
Independent	1,506
TOTAL	**3,036**

***as of December 2016**

Total (1996) = 3,060
Total (1999) = 3,297
Total (2002) = 3,746
Total (2005) =3,369
Total (2008) = 3,737
Total (2011) = 4,114
Total (2012) = 4,997
Total (2013) = 6,088
Total (2015) = 6,264
Total (2016) = 6,834
Total (Q2 2018) = 8,584

Downstream Oil Industry Background

TAXATION: THE TRAIN Law

IMPACT OF EXCISE TAX ON PETROLEUM PRODUCTS PRICES (PER R.A. 10963)

Product	Pre-TRAIN Law			1ST TRANCHE - JAN 2018				
							2018 Total	
	Excise Tax	12% VAT	Total	Excise Tax	12% VAT	Total	Excise Tax	With 12% VAT
	Peso/liter							
Gasoline	4.35	0.52	4.87	2.65	0.32	2.97	7.00	7.84
Avturbo	3.67	0.44	4.11	0.33	0.04	0.37	4.00	4.48
Kerosene	0.00	0.00	0.00	3.00	0.36	3.36	3.00	3.36
Diesel	0.00	0.00	0.00	2.50	0.30	2.80	2.50	2.80
Fuel oil	0.00	0.00	0.00	2.50	0.30	2.80	2.50	2.80
LPG (motive fuel)	0.00	0.00	0.00	2.50	0.30	2.80	2.50	2.80
LPG, P/kg	0.00	0.00	0.00	1.00	0.12	1.12	1.00	1.12

Product	2ND TRANCHE - JAN 2019					3RD TRANCHE - JAN 2020				
				2019 Total					2020 Total	
	Excise Tax	12% VAT	Total	Excise Tax	With 12% VAT	Excise Tax	12% VAT	Total	Excise Tax	With 12% VAT
	Peso/liter									
Gasoline	2.00	0.24	2.24	9.00	10.08	1.00	0.12	1.12	10.00	11.20
Avturbo	0.00	0.00	0.00	4.00	4.48	0.00	0.00	0.00	4.00	4.48
Kerosene	1.00	0.12	1.12	4.00	4.48	1.00	0.12	1.12	5.00	5.60
Diesel	2.00	0.24	2.24	4.50	5.04	1.50	0.18	1.68	6.00	6.72
Fuel oil	2.00	0.24	2.24	4.50	5.04	1.50	0.18	1.68	6.00	6.72
LPG (motive fuel)	2.00	0.24	2.24	4.50	5.04	1.50	0.18	1.68	6.00	6.72
LPG, P/kg	1.00	0.12	1.12	2.00	2.24	1.00	0.12	1.12	3.00	3.36

Function 1: INDUSTRY COMPETITION & MONITORING (Liquid and LPG)

PLAYERS & INVESTMENTS

Areas for Investments

Oil Refinery

- Capacity Expansion
- Upgrading/Modernization

Infrastructure Improvement

- Transport
- Retailing
- Refilling/Marketing
- Terminalling
- Bunkering

Number of Players with Investments (2017)

ACTIVITY	NUMBER OF PLAYERS		INVESTMENTS (Bn PhP)	
	FY 2010	FY 2017	FY 2010	FY 2017
Liquid Fuel Bulk Marketing	126	229	14.13	19.08
Fuel Retail Marketing	14	12	9.26	14.31
LPG Bulk Marketing	12	11	7.38	16.57
Bunkering	20	19	2.61	2.61
Terminalling	9	13	4.67	8.82
Refining *	2	2	6.7	118.3
Grand Total	**181**	**284**	**82.80**	**241.08**

Function 1: INDUSTRY COMPETITION & MONITORING (Liquid and LPG)

INCENTIVES

Income tax holiday

Exemption from taxes and duties on imported spare parts

No local taxes on the sale of petroleum products

Function 1: INDUSTRY COMPETITION & MONITORING (Liquid and LPG)

OIL PRICE MONITORING

International Content

- Product Cost (i.e. FOB MOPS, $/bbl)
- Freight Plus
- Ocean Loss
- Exchange Rate

Local Content

- Taxes (i.e. Excise Tax, VAT)
- Biofuel (i.e. Ethanol, CME
- Industry Take

Function 1: Industry Competition & Monitoring (Liquid and LPG)

HISTORICAL PRICES – WHAT COULD HAVE CAUSED THE MOVEMENT?

GASOLINE	Iloilo				
DETAILS	July 2018	January 2016	Adjustment in US$	Adjustment in PHP	% Share of Adj.
FOB MOPS, $/bbl	81.12	47.10	34.02	1617.49	78.04%
FREIGHT PLUS, $/bbl	2.82	2.17	0.65	31.09	1.50%
OCEAN LOSS (0.5% of CIF)	0.42	0.25	0.17	8.24	0.40%
Total Import Cost	84.36	49.51	34.85	1656.82	79.94%
EXCHANGE RATE	53.42	47.54	5.88	415.80	20.06%
Peso Landed Cost. P/bbl	**4,506.83**	**2,353.76**		**2,072.62**	**100.00%**
Peso Landed Cost. P/liter	25.51	13.32		12.19	77.68%
EXCISE TAX	7.00	4.35		2.65	16.89%
VAT	5.38	3.58		1.80	11.48%
ETHANOL	3.88	4.82		(0.95)	-6.04%
Total Cost before Industry Take	**41.76**	**26.07**		15.69	100.00%
Industry Take	**10.81**	**12.88**		**(2.07)**	**-13.19%**
PUMP PRICE	**52.57**	**38.95**		**13.62**	**86.81%**

Function 1: Industry Competition & Monitoring (Liquid and LPG)

HISTORICAL PRICES – WHAT COULD HAVE CAUSED THE MOVEMENT?

DIESEL	Iloilo				
DETAILS	**July 2018**	**January 2016**	**Adjustment in US$**	**Adjustment in PHP**	**% Share of Adj.**
FOB MOPS, $/bbl	86.41	37.47	48.95	2326.94	82.21%
FREIGHT PLUS	1.47	2.05	(0.58)	(27.41)	-0.97%
OCEAN LOSS (0.5% of CIF)	0.44	0.20	0.24	11.50	0.41%
Total Import Cost	88.33	39.71	48.61	2311.03	81.64%
EXCHANGE RATE	53.42	47.54	5.88	519.58	18.36%
Peso Landed Cost. P/bbl	**4,718.63**	**1,888.02**		**2,830.61**	**100.00%**
Peso Landed Cost. P/liter	29.08	11.64		17.45	77.65%
EXCISE TAX	2.50	0.00		2.50	11.13%
VAT	4.51	2.26		2.25	10.03%
CME	1.30	1.03		0.27	1.19%
Total Cost before Industry Take	**37.39**	**14.93**		**22.47**	**100.00%**
Industry Take	**4.70**	**6.12**		**(1.43)**	**-6.35%**
PUMP PRICE	**42.09**	**21.05**		**21.04**	**93.65%**

Function 2: INDUSTRY STANDARDS AND MONITORING

FUEL QUALITY STANDARDS:
WHAT WE DO?

Fuel Quality Standard Setting	• Standardization Mandate of RA 8749 / RA 9637 / RA 8479
Petroleum Facilities Standard Setting	• MOA with Bureau of Philippine Standards (BPS)
Fuel Quality Monitoring	• Depot product sampling (RA 8479 /RA 8749 /RA 9367
Bioethanol Monitoring	• Imported Bioethanol Denaturing (RA9367/ EO 449 (Revenue Regulation)
Additive Registration	• RA 8479 / RA 8749
Others (Compliance to Reportorial Requirements)	• Registration & Processing RA 8479 / RA 8749/RA9367

Function 2: INDUSTRY STANDARDS AND MONITORING

STANDARD SETTING PROCEDURE

Function 2: INDUSTRY STANDARDS AND MONITORING

TECHNICAL COMMITTEES

I. Technical Committee on Petroleum Products & Additives (TCPPA)

Chair : DOE and DENR

Members :

Government:

DOE
DENR
BPS-DTI
ITDI-DOST

Oil Industry Sector:

Petron
Shell
Chevron
PIP
IPPCA

Engine Suppliers/Manufacturers:
CAMPI, AMMDA, MDPPA

Consumer Sector/NGO:
FilCar Foundation, AWMA

Academe:
UP-NCTS, AIPSI

Function 2: INDUSTRY STANDARDS AND MONITORING

EXISTING PRODUCT STANDARDS

- E-Gasoline (E10)
- Anhydrous Bioethanol & Bioethanol Fuel
- CME-blended Diesel Oil (B2)
- Coco Methyl Ester
- LPG (automotive and non-automotive)
- Fuel oil (bunker)

Function 2: INDUSTRY STANDARDS AND MONITORING

II. Technical Committee on Petroleum Facilities and Processes (TCPPF)

Chair : DOE

Members :

Government:

DTI-BPS
DENR-EMB
DILG-BFP
DOLE (BWC, OSHC)

Industry:

Petron
Shell
Chevron
Total
IPPCA

Testing:
DOST-MIRDC, UP

Prof. Assoc.:
SOPI

Function 2: INDUSTRY STANDARDS AND MONITORING

EXISTING FACILITY & PROCESSES STANDARDS

- LPG Refilling Plant – General Requirements
- Code of Safety Practices in LPG Refilling Plant
- Code of Safety - Hauler
- Retail Outlets – General Requirements (household LPG, auto-LPG dispensing station)
- Code of Safety Practices for LPP in Retail Outlet
- Code of Safety Practice in Auto-LPG Dispensing Station

- LPP Depot – General Requirements
- Retail Outlets – General Requirements (Liquid Fuel)
- Code of Safety Practice for LPP in Retail Outlets

Function 3: RETAIL MARKET MONITORING

REGULATORY FRAMEWORK

Liquid Fuels

- **BP 33/ PD 1865** – Prohibited Acts involving Petroleum Products
- **DOE DC2017-11-0011** - Revised Retail Rules
- **DOE DC2015-06-0006** - Guidelines in Inspection Using Mobile Monitoring and Testing Laboratory

LPG

- **BP 33/ PD 1865** – Prohibited Acts involving Petroleum Products
- **DOE MC 2000-06-010** – Revised Schedules of Fines/Penalties
- **DOE MC 2000-05-007** – Quality Requirements for Cylinders
- **DC2014-01-0001** – Rules and Regulations Governing the LPG Industry
- **DC2013-09-0022** - Transport and Distribution of LPG in Cylinders
- **DC2018-03-0004** – Additional Mandatory Markings for Small-Sized 2.7 KG LPG Cylinder and below

Function 3: RETAIL MARKET MONITORING

TOTAL NUMBER OF GASOLINE STATIONS BY ISLAND GROUP AND PER OIL COMPANY (2017)

REGION	MAJORS	NEW PLAYERS w/bulk supply/facilities	NEW PLAYERS Independent*	REGIONAL TOTAL
National Capital Region (NCR)	612	285	247	1144
Cordillera Administrative Region (CAR)	27	9	12	48
Region I (Ilocos Region)	122	70	237	429
Region II (Cagayan Valley)	107	57	141	305
Region III (Central Luzon)	295	233	352	880
Region IV (Southern Tagalog)	778	454	638	1870
Region V (Bicol Region)	188	38	313	539
Total NCR	**612**	**285**	**247**	**1144**
Total - Rest of Luzon	**1517**	**861**	**1693**	**4071**
Over-all Total Luzon	**2129**	**1146**	**1940**	**5215**
Region VI (Western Visayas)	337	223	209	769
Region VII (Central Visayas)	346	155	144	645
Region VIII (Eastern Visayas)	137	45	98	280
Over-all Total Visayas	**820**	**423**	**451**	**1694**
Region IX (Zamboanga Peninsula)	86	9	43	138
Region X (Northern Mindanao)	201	17	184	402
Region XI (Davao Region)	218	108	356	682
Region XII (SOCCSKSARGEN)	129	12	149	290
Region XIII (CARAGA)	70	5	79	154
Autonomous Region of Muslim Mindanao (ARMM)	0	5	4	9
Over-all Total Mindanao	**704**	**156**	**815**	**1675**
OVER-ALL TOTAL	**3653**	**1725**	**3206**	**8584**

* Outlets with 1 to 5 branches
Figures subject for further validation

Function 3: RETAIL MARKET MONITORING

TOTAL NUMBER OF LPG PLAYERS BY ACTIVITY

- Refillers

277

- Brand-Owners (Marketer)

>100

- Dealers

>3455

- Retail Outlets

>15000

- Haulers

18

- Auto-LPG Refilling Station

178

Function 3: RETAIL MARKET MONITORING

MONITORING MECHANISM

Regular Inspection

- all the provinces in the regions under RMMSCD's jurisdiction are visited and inspected yearly; divided and scheduled into 4 quarters per year. In selecting the areas to be inspected, priority is given to those with higher percent of violations from previous year of inspection.

Complaint-related inspection

- Complaints from different individuals and entities are also given priority besides the scheduled regular inspections. Some inspections, particularly for LPG are conducted with the representatives from LPGMA and CIDG.

Function 3: RETAIL MARKET MONITORING

MONITORING MECHANISM

Focused Inspection

- a massive, more focused and simultaneous monitoring and inspections of various LPG and LF establishments by composite teams composed of representatives from DOE, DTI, LGU, BFP and PNP. It is conducted once a year in selected provinces in Luzon, Visayas and Mindanao by the OIMB, VFO and MFO, respectively

Special Instructions

- inspections directed by the management; usually with regards to issues on product quality and price monitoring.

Support Program

Gasoline Station Lending & Financial Assistance Program

Particulars	DC 2011-03-0005	DC 2002-05-001
Coverage	Includes improvement loan, working loan capital, and refinancing. Also, eligible is the establishment/ construction and improvement/maintenance of Auto LPG dispensing stations	Confined to gasoline stations only
Loanable Amount	100% of loan amount, not to exceed Php 10M	Php 5M to 10M
Loan Term	10 years @ 6% p.a.	7 years @ 6% p.a.
Equity Participation	Minimum of 20% of Total Project Cost, including land and improvements	50%

Function 4: NATURAL GAS MANAGEMENT

MALAMPAYA GAS AS THE ONLY SOURCE OF NATURAL GAS SUPPLY

- **Malampaya has existing six gas sales and purchase agreements for a total of 3, 200 MW**
  - 500 MW San Lorenzo PP (First Gen)
  - 1000 MW Sta Rita PP (First Gen)
  - 1200 MW Ilijan PP (KEPCO)
  - 414 MW San Gabriel (First Gen)
  - 97 MW Avion (First Gen)
  - 18 MW Shell Pilipinas Oil Refinery

- **Malampaya has an average production of 450 million standard cubic feet (mmscf) per day**

- **The Malampaya concession expires in 2024 and Drop in supply is expected to start by 2022, supply can go as far as 2027 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 industrial, commercial, residential and transport sectors.**

Thus:

- **In the short term, Philippines has no sufficient supply from Malampaya or other potential developments to justify new infrastructure development.**

- **New gas might come from domestic resources, but the volumes and timing are unpredictable.**

- **The logical source of new gas would be the imported liquefied natural gas (LNG) to ensure supply security and sustainability of natural gas**

- **Much cheaper than oil, competitive with coal in the mid-cycle, and once import facilities are built, industrial, commercial, transportation and residential users can also gain access to gas**

Function 4: NATURAL GAS MANAGEMENT

REGULATORY FRAMEWORK

Rules and Regulations Governing the Philippine Natural Gas (DC 2017-11-0012)

- Provided the general policies and principles of the Government towards the development of the downstream natural gas industry where there is no price regulation however regulation remains on setting of standards and their enforcement on areas of product quality, facility and processes.

- Provided the guidelines on the acceptance and evaluation of project proposals, issuance of permit, requirement for construction standards and management team, inspection and monitoring of operation and maintenance.

- Provided the provision for third party access to enhance liquidity of trade and use.

Thank You !

(+632) 840-2187

hideliza.ludovice@doe.gov.ph

www.doe.gov.ph

//doe.gov.ph

@doe_ph