San Beda College

Department of Accountancy

College of Arts and Sciences

A Strategic Management Paper on

Petron Corporation

In Partial Fulfillment of the Requirements for the Degree of

Bachelor of Science in Accountancy

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I. INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Executive Summary

This paper is intended to discuss possible strategies that can assist Petron Corporation to enhance its current standing in the market, as well as enhance its financial standing in the future. The strategies that are recommended are derived by using different matrices that can effectively deduce the best strategy for a business.

Petron Corporation is the largest oil refining and marketing company in the Philippines. This shows that Petron is need of strategies that can assist them in maintaining as well as improving their current position as the largest oil refining and marketing company in the Philippines.

This paper includes a systematic process of acquiring data. It consists of research and design methodology, complete analyses of both external and internal analysis in order to gain specific data, the formulation of strategy, the different actions required to finish the proposed strategy, and methods in order to maintain the proposed strategy.

Results of the paper shows that Petron can either formulate strategies based on Backward, Forward, Horizontal Integration, Market Penetration, Market Development or Product Development. The strategies stated can gallantly raise the current position of Petron

1.2 Company Profile

Petron Corporation is the largest oil refining and marketing company in the Philippines. Supplying nearly 40% of the country’s oil requirements, our world-class products and quality services fuel the lives of millions of Filipinos every day.

Petron operates an integrated crude oil refinery and petrochemicals complex with a rated capacity of 180,000 barrels per day in Limay, Bataan. The Integrated Management System

(IMS)-certified refinery processes crude oil into a full range of petroleum products including gasoline, diesel, liquefied petroleum gas (LPG), jet fuel, kerosene, industrial fuel oil, and petrochemical feedstock benzene, toluene, mixed xylene, and propylene.

From the refinery, Petron move their products via barges and marine vessels to 32 International Organization of Standardization (ISO)-certified depots and terminals situated all over the country. Through this vast distribution network, they supply fuel oil, diesel, and LPG to various industrial customers. Petron also supplies jet fuel at key airports for international and domestic carriers.

They have the largest retail network. With nearly 1,900 service stations, they bring our superior automotive fuels closer to motorists. They have the most extensive petroleum product line in the Philippines. Always at the forefront of fuels technology, continuously pioneer ground-breaking products that tailor fit the lifestyles of our customers. Petron Blaze 100, for instance, is one of the few—if not the only—commercially available gasoline in the world with a 100 octane rating.

Their stations give a one-stop service experience to travelers, offering amenities including convenience stores, restaurants, and specialty shops.

They operate repair and maintenance centers to cater to the specific requirements of motorists. Besides selling their lubricants and specialty products here, these centers are outfitted with modern equipment and manned by well-trained technicians.

Their LPG brands, Gasul and Fiesta, have been an intrinsic part of our customers' households for many decades. Through their nationwide dealership network, they offer and deliver them at their doorsteps.

Their commitment to innovation has led us to introduce a variety of Petron Cards to the market. Each of their cards has been engineered to encourage convenience and ensure customer satisfaction in every swipe. An example is the Petron Fleet Card—the first microchip-powered fleet card in the Philippines.

They operate a polypropylene (PP) plant with a rated capacity of 160,000 metric tons of PP resin annually. They run a lube oil blending plant, which manufactures our lubricants and greases. They also run one of the most modern blending facilities in Asia, which enables them to formulate the unique fuel additives they use to produce the premium fuels.

They export various petroleum and non-fuel products to Asia-Pacific countries such as Japan, India, Malaysia, Singapore, South Korea, Thailand, Pakistan, and even to the United Arab Emirates.

To further expand their international presence, they recently established Petron Oil and Gas International to run three companies in Malaysia that comprise an integrated downstream business.

Beyond their business agenda, they take their corporate and social citizenship to heart. They roll out and incorporate programs that address national concerns in education, environment, and health and human services into their operations to ensure sustainability and contribute to social development.

With nearly 80 years of experience in the oil industry, they continue to be dedicated and passionate about our vision to be the leading provider of total customer solutions in the energy sector and its derivative businesses.[1]

1 http://www.petron.com/about-profile.html

II. RESEARCH DESIGN AND METHODOLOGY

The researchers used data researching as the primary tool in order to obtain information that will be used in the formulation of this strategic management paper. Such data is mainly obtained from the company website, news articles involving the said company, blogs, and other thesis papers.

The research design that will be used in this paper is the Strategic Business Management to position relevant data according to the content of each chapter as seen below.

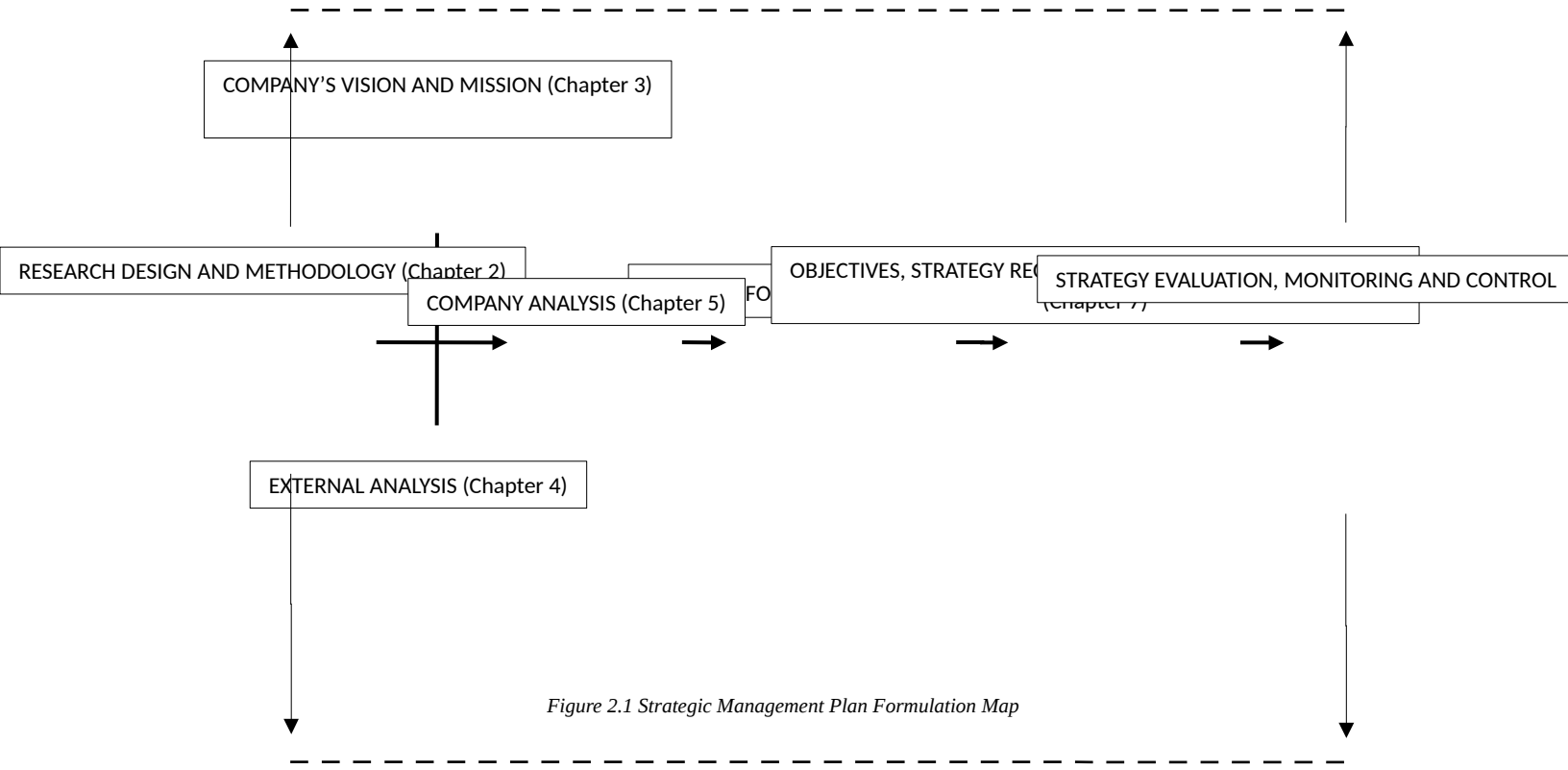


Figure 2.1 Strategic Management Plan Formulation Map

PRIMARY SOURCES:

OUR COMPANY:

- Petron Corporation - www.petron.com

TOP COMPETITORS:

- Shell Philippines – www.shell.com.ph
- Caltex Philippines – www.caltex.com/ph/

Other sources were obtained at:

- Manila Bulletin - www.mb.com.ph
- Business Inquirer – www.business.inquirer.net
- Philippine Star - www.philstar.com
- Inquirer - www.inquirer.net
- Department of Energy website – www.doe.gov.ph
- Interaksyon News – www.interaksyon.com

2.1 Scope and Limitations

The scope of this paper is limited only to the downstream part in the oil industry where production at refinery of petroleum products and distribution to the final consumer take place. This study is limited only on downstream operation of oil companies such as Petron Corporation, Shell Philippines, and Caltex and will not discuss other details outside the scope and limitation of this paper. Additionally, all relevant data in this strategic management paper are limited to the available online references or sources as aforementioned above.

III. COMPANY'S VISION AND MISSION

3.1 VISION

To be the leading provider of total customer solutions in the energy sector and its derivative businesses.

3.2 MISSION

We will achieve our vision by:

- Being an integral part of our customers' lives, delivering consistent customer experience through innovative products and services;
- Developing strategic partnerships in pursuit of growth and opportunity;
- Leveraging on our refining assets to achieve competitive advantage;
- Fostering an entrepreneurial culture that encourages teamwork, innovation, and excellence;
- Caring for community and the environment;
- Conducting ourselves with professionalism, integrity, and fairness; and
- Promoting the best interest of all our stakeholders.

3.3 CORE VALUES

Petron Corporation’s core values are:

- Safety – They make safety the most important part of everything they do.
- Accountability – They accept responsibility for their actions and behaviors.
- Integrity – They intentionally do the right thing.
- Diversity – They treat everyone with dignity and respect.
- Excellence – They strive to be the best.

3.4 CRITIQUES TO THE VISION/MISSION STATEMENTS COMPONENTS

9 Components Mission & Vision Statement	Petron Corporation	Remarks
Customers	Yes	In the company's mission and vision statement, It is stated that "Being an integral part of our customers' lives, delivering consistent customer experience through innovative products and services". This means that the company is focused on satisfying the consumers' wants and needs.
Products and Services	Yes	Like in the Customers Components, it is also mentioned that "Being an integral part of our customers' lives, delivering consistent customer experience through innovative products and services". They strive for excellence and give their customers the best products and services they could ever provide.
Markets	No	It is not mentioned in their Mission and Vision statement about any specific goals about their targeted markets.
Technology	No	The mission and vision statement of Petron Corporation did not state anything with regards to their enhancement of technology and how they will maximize or make use of advancement in their machineries to maintain the competitiveness among

		other oil companies in its industry.
Concern for survival, growth and profitability	Yes	As stated in the company's mission and vision statement "Developing strategic partnerships in pursuit of growth and opportunity" and "Leveraging on our refining assets to achieve competitive advantage", the company is focused on strategies in achieving competitive advantage and growth in order to survive the battlefield of oil industry.
Philosophy	Yes	The company stated in their mission, "Fostering an entrepreneurial culture that encourages teamwork, innovation, and excellence", "Caring for community and the environment" and "Conducting ourselves with professionalism, integrity, and fairness", which means as an oil company, they make sure to protect the environment and community with professionalism, integrity, fairness and provide excellence and innovation in what they do as a one team.
Self-concept	Yes	It is acknowledged in the company's vision and mission statement that "Conducting ourselves with professionalism, integrity, and fairness" and by that they seek for their company to be humble and equal by doing their work efficient and providing their best to its job and its consumers.
Concern for public	Yes	It is mentioned in the company's mission and vision

image		statement that “Promoting the best interest of all our stakeholders”. This mission is aiming to give its best to satisfy its stakeholders with its performance. They will not let the trust of their stakeholders on their company vanish. It is also mentioned in their mission “Caring for community and the environment” which intend to be helpful in the society and helping to sustain the environment in the country.
Concern for employees	Yes	The company indicated in their mission and vision “Fostering an entrepreneurial culture that encourages teamwork, innovation, and excellence” which signify that they would develop their employees to be more active and they would encourage them to have teamwork, improve its innovation and having excellence in doing their work.

3.5 RECOMMENDATION OF REVISED VISION AND MISSION STATEMENTS

3.5.1 Revised Vision

To be the top and major provider in the world of customer solutions and its secondary businesses in energy sector with environmental-friendly products.

3.5.2 Revised Mission

The company is committed to deliver sustainable excellence in business performance by:

- Developing system technology to serve its customers with quality products and services.
- Being an integral part of our customers' lives and delivering consistent customer experience through innovative products and services;
- Achieving customer loyalty by providing improved quality of products and offering eco-friendly with sustainable quality products to household, drivers and passengers.
- Developing strategic plans and partnerships in pursuit of growth and opportunity;
- Continuing growth of our refining assets to achieve majority of the market as our competitive advantage;
- Fostering an entrepreneurial culture that encourages teamwork, innovation, and excellence;
- Caring for community and the environment through environmental-friendly products and programs;
- Assurance of health, safety and security of our employees and develop human resource and skills to achieve a business environment of mutual understanding and trust.
- Conducting ourselves with professionalism, integrity, and fairness; and
- Protecting and promoting the interest of all our stakeholders.

IV. EXTERNAL ASSESSMENT

The external analysis involves the identification of related factors in the oil downstream industry as to its political, social and environmental, economic and technological trends and projections that will be used in determining important information. The external assessment also includes the Porter’s five forces to be used in analysis of the said industry. The external assessment is used by oil companies to determine opportunities to grab and threats to avoid in a volatile market.

4.1 GENERAL ASSESSMENT

The general assessment includes the factors that affects the downstream oil industry in terms of political, economic, social, technological, environmental and legal aspects in the

society. This serves as an information used by companies to adopt to the changes of the demand of the society and formulate strategies to maintain their place in the market.

4.1.1 Political, Legal and Government

4.1.1.1 Republic Act 9367 "Biofuels act of 2006" – amended by Republic Act 10745 on February 26, 2016

An act allowing natural gas power generating plants in the country to use neat diesel as an alternative fuel, exempting them from the requirements of paragraph 5.3, section 5 of republic act no. 9367, otherwise known as the "Biofuels act of 2006"

The act thereby declares that within three months from the effectivity of the Act, a minimum of one percent (1%) biodiesel by volume shall be blended into all diesel engine fuels sold in the country: Provided, That the biodiesel blend conforms to PNS for biodiesel.

And within two years from the effectivity of the Act, the NBB created under this Act is empowered to determine the feasibility and thereafter recommend to the DOE to mandate a minimum of two percent (2%) blend of biodiesel by volume which may be increased taking into account considerations including but not limited to domestic supply and availability of locally-sourced biodiesel component: Provided, That natural gas power generating plants may use neat diesel as their alternative fuel during shortages of natural gas supplies: Provided, however, That the DOE shall ensure that the authority granted herein shall only be availed of, directly or indirectly, by natural gas power plants."

The Biofuels act of 2006 affects the oil companies in terms of production or refining petroleum products. In order to maintain the quality they are giving to consumers they are following specific ingredients and processes but with this act, oil companies must be able to use biofuels as one of the ingredients in refining final petroleum products and biofuels has lesser quality as using crude oil. It is a great challenge to oil companies to maintain the quality of their products while using biofuels.

4.1.1.2 House Bill No. 1221

This is a bill also known as “LPG Industry Regulation and Safety Act of 2016” introduced in the 17th congress of the House of Representative by Umali on July 5, 2016. This act aimed to establish a regulatory framework in LPG refining, production, operation, distribution and refilling processes and promoting national awareness, safety and general welfare in household consumers.

Regulation, standards and requirements in the trade of liquefied petroleum gas (LPG) would affect the firm negatively. The main advantage of normal gasoline and oil is that engines are equipped to use them, and that LPG conversion kits were too costly and the use of such fuel was deemed harmful due to its different composition. If improvements to LPG containers are made and their health hazards are minimized, it would be costly for companies to provide and adapt to these changes.

4.1.1.3 Tax Law

PRODUCT TYPE	TAX RATES
Lubricating oils and greases, including but not limited to base stock for lube oils and greases, high vacuum distillates, aromatic extracts and other similar preparations, and additives for lubricating oils and greases, whether such additives are petroleum based or not	P 4.50 per liter
Processed gas	P 0.05 per liter
Waxes and petrolatum	P 3.50 per kilogram
Denatured alcohol, if used for motive power [i.e. one hundred eighty (180) proof ninety percent (90%) absolute alcohol]. Provided, that unless otherwise provided by special laws, if the denatured alcohol is mixed with gasoline, the excise tax which has already been paid, only the alcohol content shall be subject to tax	P 0.05 per liter
Naphtha, regular gasoline and other similar products of distillation	P 4.35 per liter
Naphtha used as raw material in the production of petrochemical products or as replacement fuel for natural gas-fired combined cycle power plant, in lieu of locally-extracted natural gas during the non-availability thereof	P 0.00 per liter
Leaded premium gasoline	P 5.35 per liter
Unleaded premium gasoline	P 4.35 per liter
Aviation turbo jet fuel	P 3.67 per liter
Kerosene	P 0.00 per liter
Kerosene used as aviation fuel	P 3.67 per liter
Diesel fuel oil, and on similar fuel oils having more or less the same generating power	P 0.00 per liter
Liquefied Petroleum Gas ; Provided, that if used for motive power, it shall be taxed at the equivalent rate as the Excise Tax on diesel fuel oil	P 0.00 per liter
Asphalt	P 0.56 per kilogram
Bunker fuel oil, and on similar fuel oils having more or less the same generating power	P 0.00 per liter

Figure 4.1 Tax Rate on Gasoline Products[2]

Tax implemented law on gasoline affects oil companies negatively. It would increase their cost on taxes. Every increase in production is an increase in taxes to be paid therefore these tax laws may limit the companies in production and therefore limiting sales on petroleum products.

4.1.1.4 Higher excise tax on oil products looms

[2]With oil prices recovering and going up in the world market, the Duterte administration is bent on imposing additional taxes on fuel products on top of the 12 percent value-added tax (VAT).

Among the products covered by the plan are diesel, used by most passenger buses and jeepneys, which will be imposed a tax of P6 per liter, as well as cooking gas and bunker fuel for generating electricity. The tax on gasoline will also be raised from P4.35 to P10 per liter.

Budget Secretary Benjamin Diokno said the behavior of people has changed with low diesel prices. “Even the rich have shifted to diesel-fed SUVs (sport utility vehicles),” he said. Aside from the P6 tax on diesel, the Duterte administration is proposing to tax other oil products, including bunker oil, which is used for producing electricity, cooking gas, kerosene and aviation gas.

2 http://www.philstar.com/headlines/2017/01/05/1659787/government-bent-imposing-p6-diesel-tax-diokno

The Department of Finance (DOF) has submitted the tax proposals to the House of Representatives. It is also proposing to remove certain tax exemptions senior citizens and persons with disability enjoy. Additionally, the finance department wants to collect more levies for car buyers.

Diokno said the administration is aiming for a “net gain” of P200 billion from its tax proposals after offsetting revenues expected to be lost from lower income tax. That means that taxpayers would be made to cough up an additional P200 billion a year in tax payments.

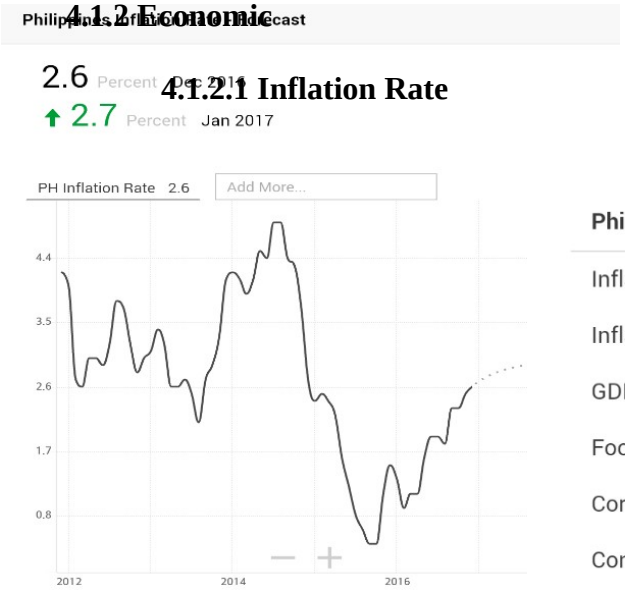
Congressmen have criticized the tax proposals as “anti-poor.”

Marikina Rep. Romero Quimbo, former chairman of the House committee on ways and means, said that the administration would give with its right hand (in terms of lower income tax), it would take away with its left hand. In fact, people would pay more in terms of higher and new taxes.

“The government want to withdraw the tax exemptions of senior citizens and persons with disability. They will tax diesel, which public and most transport vehicles use. They will tax cooking gas. They want to collect higher tax on gasoline and cars. These levies will hit not only the middle class but low-income earners as well.

4.1.2 Economic

4.1.2.1 Inflation Rate

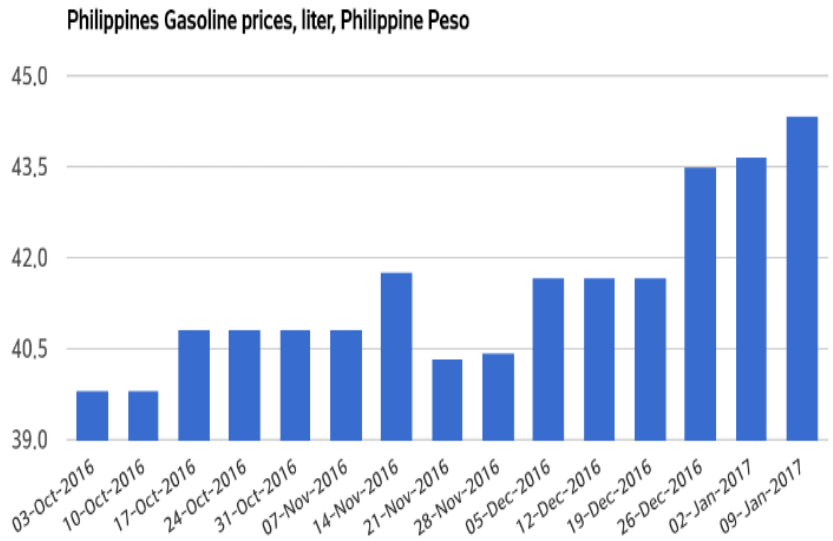


Philippines	T+1
Inflation Rate	2.6
Inflation Rate MoM	0.4
GDP Deflator	177.16
Food Inflation	3.3
Core Inflation Rate	2.5
Consumer Price Index CPI	146.3

Figure 4.2 Inflation Rate in the Philippines

The inflation rate is increasing as we can see it starting 2016. This would be a negative effect on oil companies because this would mean that raw materials used purchased in the Philippines and other equipment used is getting more and more expensive and would mean additional cost to firms. The high costs for firms would mean a higher oil prices to be distributed to the public and this would cause a burden to consumers. This may cause lesser cars used in roads and therefore lesser sales for oil companies.

4.1.2.2 Price Changes



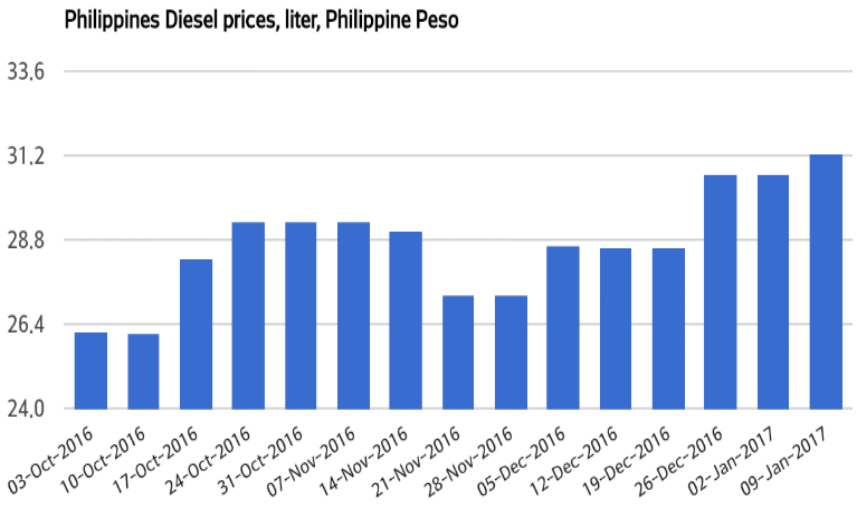


Figure 4.3 Price Changes in Gasoline and Diesel

Price changes would affect negatively oil companies because high oil prices would mean lower demand and therefore lower sales. Since mostly nowadays consumers are more conservative with their expenses and tend to save, high gasoline prices would affect consumer behavior and this may affect the firm profit.

4.1.2.3 Foreign Exchange

Bangko Sentral ng Pilipinas
Treasury Department
Reference Exchange Rate Bulletin — **16 Feb 2017**

	COUNTRY	UNIT	SYMBOL	EURO	U.S. DOLLAR EQUIVALENT	PHIL.PESO
I. CONVERTIBLE CURRENCIES WITH BANGKO SENTRAL:						
1	UNITED STATES	DOLLAR	USD	0.943129	1.000000	49.922000 *
2	JAPAN	YEN	JPY	0.008268	0.008767	0.437700
3	UNITED KINGDOM	POUND	GBP	1.174762	1.245600	62.182800
4	HONGKONG	DOLLAR	HKD	0.121545	0.128874	6.433600
5	SWITZERLAND	FRANC	CHF	0.938437	0.995025	49.673600
6	CANADA	DOLLAR	CAD	0.721433	0.764935	38.187100
7	SINGAPORE	DOLLAR	SGD	0.664971	0.705069	35.198500
8	AUSTRALIA	DOLLAR	AUD	0.727719	0.771600	38.519800
9	BAHRAIN	DINAR**	BHD	2.501669	2.652520	132.419100
10	KUWAIT	DINAR	KWD			
11	SAUDI ARABIA	RIAL	SAR	0.251568	0.266738	13.316100
12	BRUNEI	DOLLAR	BND	0.662636	0.702593	35.074800
13	INDONESIA	RUPIAH	IDR	0.000071	0.000075	0.003700
14	THAILAND	BAHT	THB	0.026938	0.028562	1.425900
15	UNITED ARAB EMIRATES	DIRHAM	AED	0.256802	0.272287	13.593100
16	CHINA	YUAN***	CNY	0.137262	0.145539	7.265600
17	KOREA	WON	KRW	0.000832	0.000882	0.044000
18	EUROPEAN MONETARY UNION	EURO	EUR	1.000000	1.060300	52.932300

Figure 4.4 Foreign Exchange by Banko Sentral ng Pilipinas

Since most oil companies import crude oil outside the country, the foreign exchange will matter since crude oil is priced in dollars or other currency and sold per barrel. The currency exchange rate would determine, along with global crude oil prices, how much a barrel costs. If the exchange rate increases in favor of the peso, it will be less costly to import crude oil from other countries. If the exchange rate decreases in favor of the dollar, it would have the opposite effect and would lessen generation of profit. Exchange rates have great impact in the company's profit since they import crude oils from different countries as the main raw materials used in refining petroleum products.

Private financial institutions forecast the peso to weaken to a range of P50:$1 to P52:$1 toward the end of the year, with the most pessimistic view seeing a scenario of worsening risk sentiment in case of a hardline trade stance between China and the United States.

At the other end of the spectrum, ING Bank Manila expects the peso to trade on the weak side for most of 2017, finishing the year at P52:$1.

4.1.2.4 Americans' consumption affects oil prices in Philippines

"Amid weeks of consecutive hikes in oil prices, Energy Secretary Jericho Petilla told The Manila Times that the reduction in oil price can only be dependent in a slump of the United States economy, among other global factors."

"Petilla said that the main factors that primarily led to the recent price hikes on petroleum products (diesel and fuel) are the activities happening in the US economy and other major regions like Europe. He added that if the US economy declines, there could be a huge chance that oil prices in the Philippines would be reduced."

"He explained that if the US economy declines, the demand for oil in US would decrease, and if that happens, there would be an oversupply of oil, which would translate to a reduction in oil prices in many countries including the Philippines."[3]

As what it is indicated, as the oil consumption of the world market rises, so too will the costs of importing oil from foreign countries and it will greatly affect the Philippine oil industry because of the huge difference in the currency exchange of both countries. Moreover, America is the world's leading economic power which means they are the ones who have control over most of the world market and has a huge impact on the world market's standing. Since America is a very large country with a huge population, their consumption of oil is also huge in number.

3http://peakoil.com/consumption/americans-consumption-affects-oil-prices-in-philippines

4.1.2.5 Crude Oil Supply

June 2016 actual crudes and petroleum products inventory closed at 19,888 thousand barrels (MB) or 50-day supply equivalent; 40 days for crude oil and products in country stocks and 10 days in-transit. This was higher by 14.4 percent from June 2015 level of 17,382 MB. YTD June 2016 average inventory was recorded at 45 days, 38 days in country stock and 7 days in-transit.

The government continued to enforce the Minimum Inventory Requirement (MIR) given the continuing risks faced by the downstream oil industry sector such as geopolitical instability and supply delivery problems to areas affected by calamities (e.g. typhoon, flood, earthquake, etc.).

Current MIR for refiners is in-country stocks equivalent to 30 days while an equivalent of 15 days stock is required for the bulk marketers and 7 days for the LPG players.

Various types of crude oil imported for the period totaled 37,941 MB, a slight decrease of 0.9 percent from first half of 2015's 38,294 MB.

About eighty-five percent of the total crude mix (32,163 MB) originated from the Middle East, of which 34.7 percent (13,164 MB) was sourced from Kuwait, replacing Saudi Arabia as top supplier of crude oil into the country. On the other hand, 3,434 MB of crude oil was imported from the ASEAN and from local production equivalent to 9.1 percent of the total crude mix. The remaining 6.2 percent (2,343 MB) was sourced from Russia

4.1.2.6 Petroleum Product / Ethanol Imports

YTD June 2016 petroleum product imports totaled 44,027 MB, an increase of 17.7 percent from 1H 2015's 37,410 MB.

Compared with 1H 2015 imports, diesel oil import grew by 31.5 percent. Kerosene/avturbo, LPG and gasoline also rose by 48.9, 26.5 and 4.5 percent, respectively. On the other hand, fuel oil imports dropped by 2.2 percent.

The other industry players accounted for majority of the product imports with 71.4 percent of the total imports volume, up by 13.6 percent to 31,419 MB from 1H 2015's 27,658 MB. The oil majors (Petron, Chevron and Pilipinas Shell) accounted for the remaining 28.6 percent which increased by 29.3 percent from 1H 2015's 9,752 MB to 12,608 MB.

The local refiners (Petron and Pilipinas Shell) accounted for 17.5 percent of the total product imports, which included blending stocks, as against 82.5 percent share by direct importers.

Product import mix comprised mostly of diesel oil at 42.6 percent, gasoline at 18.1 percent, LPG at 12.3 percent, kerosene/ avturbo at 9.3 percent, fuel oil at 8.3 percent and other products at 9.5 percent share in the total product mix.

Total gasoline import reached 44.4 percent of gasoline demand while diesel oil import was 55.7 percent of diesel demand. LPG import on the other hand, was 69.5 percent of LPG demand. Total product import was 54.8 percent of the total products demand.

The oil majors' import share in the total demand was 15.7 percent while the other players' import share was at 39.1 percent. As for the refiners, their import share in the total demand was 9.6 percent, while 45.2 percent was attributed to direct importers.

Meanwhile, a total of 642 MB ethanol was imported for fuel use during the first half of 2016, which dropped by 26.8 percent from 877 MB of 1H 2015 (Table 3f). Republic Act No.

9367 of 2007 mandated that all gasoline to be sold in the country should be E-10 (gasoline with 10% bioethanol content).

4.1.3 Social, Cultural and Demographic

4.1.3.1Metro Crowded with 2.5M Autos

The increasing number of vehicles mainly caused the worsening traffic in the National Capital Region, a Metro Manila Development Authority official said.

The major contributing factor, according to Carlos, is the growing number of motor vehicles.

“It’s really the volume, nothing else. Can you imagine the 2.5 million registered vehicles in Metro Manila? How about other regions like those in Region 4 but they are working in Metro Manila? Our daytime (road) population is 14 million,” Lawyer Emerson Carlos, MMDA assistant general manager for operation said.

The low price of brand new cars is also a factor, he added. “It contributed 19 percent increase.”

Some analysts said to solve traffic congestions in Metro Manila, the government must concentrate on the development and improvement of the public transport system. They recommended also the strict regulation of car ownership, a no garage, no car policy and higher fees on parking area.

Asked if the government is considering limiting the number of car ownership, Carlos said “How will you regulate the right to possession, the right to own, how would you do that? It’s a constitutional right. Just like a one child policy. Just like if you don’t have a garage, you have no right to own a car, but is it acceptable? Would the people accept it?”

The increasing number of vehicles and the lower prices of cars and motor vehicles being sold have a negative effect in the society because it results to a heavy traffic, but for oil companies increasing number of vehicles is an opportunity to increase sales and profit. Heavy traffic increases petroleum consumption and therefore demand for petroleum products also increases, this would increase the sales of oil companies in the society.

With the easy application of car loan and its low down payment and/ low monthly amortization, anyone nowadays can have the power to purchase a new car. 3Below are some of the examples of requirements in getting a car loan:

- Completely filled auto loan application form
- Photocopy of any valid ID (Passport, Driver's License, TIN ID, Voter's ID, SSS ID, GSIS ID, PRC ID)
- For employed applicants, they must submit the following (Original cop of COE or Certificate of Employment, Photocopy of at least 2 month pay slip, ITR or Income Tax Returh with BIR or bank stamp for at least 1 year)
- For self-employed applicants, they must submit the following (Photocopy of latest ITR with BIR stamp, Photocopy of Business Registration from DTI or SEC, Copy of Audited Financial Statements of at least 2 years)

Eligibility Requirements:

- Applicant must be between 21-65 years old
- Must be a resident of the Philippines

- For employed applicants, the gross income must not be below P50,000

- For self employed applicants, they must be the owner of a business and operating for at least 2 years *(https://www.ecomparemo.com/auto-loan)*

4.1.4 Technological Advancement and Changes

4.1.4.1 New Fuel Injection System to make Petrol Engines as Efficient as Hybrids

"Delphi is developing an engine fuel injection technology that could improve the fuel economy of gas-powered cars by 50 percent, potentially rivaling the performance of hybrid vehicles at less cost."[4]

This is relevant to the firm because advancements in the fuel efficiency of internal combustion engines may cause a slight decrease in revenue. An efficient engine would mean that the car would consume less fuel in a given time and this would mean that people would only fill their gas tanks after a longer period of time. This would in turn, slow down business for oil retailing companies.

4.1.4.2The entry of hybrid and electronic cars in the market

"Bernie O'Connor, executive vice president for Toyota Motor Asia Pacific Pte. Ltd., said the Philippines has the potential to be one of the top users of hybrid vehicles in the region owing to its growing economy as well as increasing environmental consciousness among Filipinos.

"Hybrid vehicles are powered by a coordinated use of power from their gasoline engines and batteries, dramatically reducing fuel consumption and pollution."[5]

4http://oilprice.com/Energy/Energy-General/New-Fuel-Injection-System-to-make-Petrol-Engines-as-Efficient-as-Hybrids.html

5http://www.philstar.com/headlines/2013/05/26/946394/approval-pending-bill-seen-boost-demand-hybrid-vehicles

This is relevant to the company or to the industry because there is a possibility that the consumption of fuel or oil will be reduced. The reduction of the said consumption is caused by the entry of a new type of vehicle which will be cost efficient for the consumers. If the entry of these types of automobiles will boost or increase, consumption of oil will be greatly affected.

4.1.4.3 Optical Wireless in Cars

"Scientists from the University of Warwick are undertaking research into the use of optical wireless in cars, technology that can send data signals with light. The researchers say optical wireless could replace most wiring within vehicles, providing an eco-friendly solution that cuts fuel and maintenance costs."[6]

Cutting fuel costs would mean less revenues for oil retailing companies. If this would happen, oil companies would suffer since eventually demand on petroleum and gas would decline and since sales and demand are directly proportional with each other so as the sales of oil companies would greatly decrease.

4.1.4.4 PUV's converting to Auto-LPG

"Liquefied petroleum gas or LPG is gaining a lot of popularity these days for use of public transport vehicles. The number one converts in particular are taxicab drivers who swear to lower fuel costs, often translating to a 100 percent increase take home pay. Being a clean burning fuel, LPG use vehicles also means reduced maintenance requirements and cost, lesser engine vibration and a power output and torque comparable with petrol engines. LPG also has typically around 20 percent less ozone-forming potential, a measure of the fuel's capability to generate photochemical smog, which causes cancer and respiratory problems."[7]

6http://www.interaksyon.com/motoring/optical-wireless-pioneer-shows-auto-makers-the-light

7http://www.bizlinksphilippines.net/100909.html

If there would be a major increase in converted taxicabs and if the major taxi companies would convert their units into LPG taxicabs, there would be lesser revenues from the sale of petroleum products to taxicabs.

4.1.5 Environmental Changes

4.1.5.1 Climate Change affecting energy-related activities

"The United Nations is targeting a global average temperature rise of 2C from pre-industrial levels for what scientists believe would be manageable climate change, avoiding worst-case-scenario increases in droughts, storms, floods and sea level rises.

In its "Redrawing the Energy-Climate Map" report, the IEA said carbon dioxide (CO2) emissions from fossil fuel use rose by 1.4 percent last year to a record of 31.6 billion tons.

The agency recommended four energy policies it said could halt the growth in energy-related emissions by the end of the decade, at no net economic cost.

Boosting energy efficiency in buildings, industry and transport could account for half of an eight-percent greenhouse gas reduction by 2020 envisioned under the plan, the report said.

Limiting coal-fired power stations would contribute another 20 percent of the reduction, cutting the escape of methane gas when extracting oil and gas 18 percent, and a partial phasing-out of fossil fuel subsidies another 12 percent."[8]

The information provided focuses on the global warming which is affected by human activities. One of these activities is the combustion of fossil fuels which, in connection with the oil industry, affect the environment. Once fossil fuel substitutes become more available to the buying public, gasoline will start to be phased out and it would greatly affect the operations of all oil industries as this would mean that production, refining and distribution of fossil fuels will

8 http://www.interaksyon.com/article/63769/world-set-to-exceed-global-warming-limit---iea

decrease over time. Therefore, the sales and profit of petroleum companies will decrease because their main business is the distribution of refined oil to consumers.

4.2 INDUSTRY AND COMPETITORS ANALYSIS

4.2.1 Porter's Five Forces

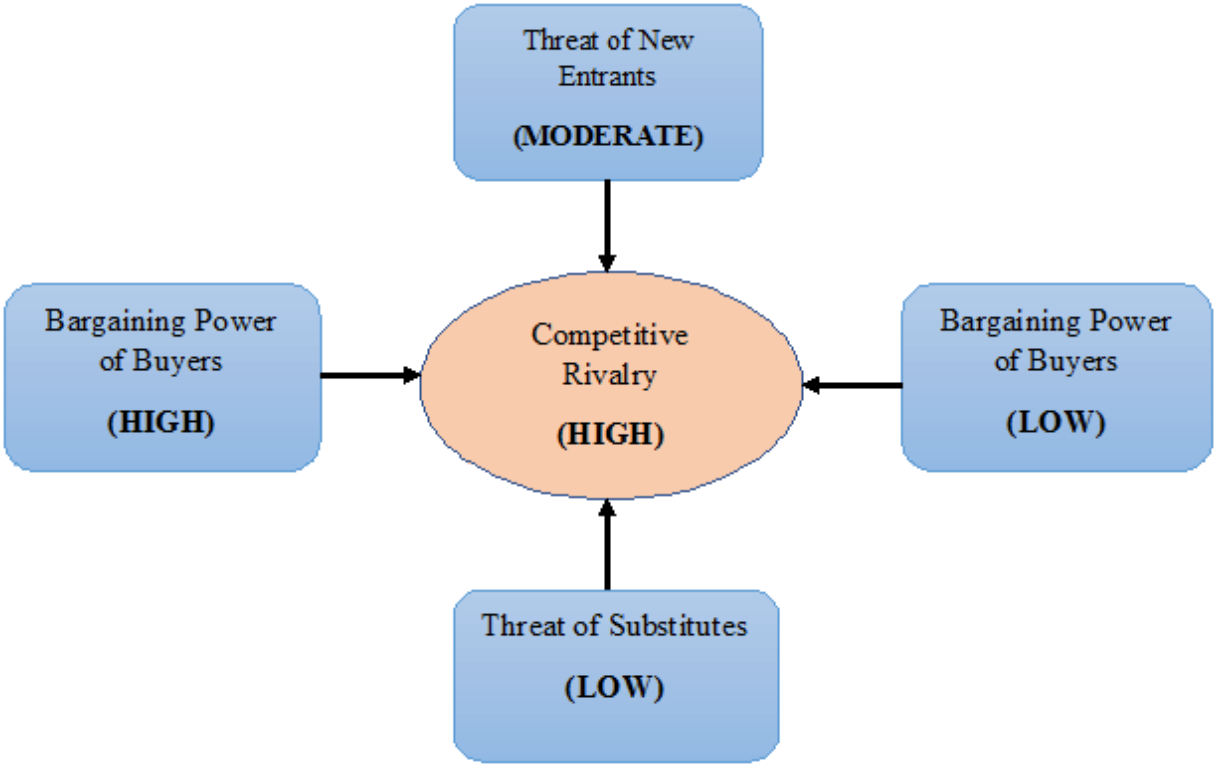


Figure 4.5 Porter's Five Forces

4.2.1.1 Competitors Analysis

` These factors may affect the competitive environment in the petroleum industry that affects individual players in terms in their share in the market:

1. Innovation of petroleum products.

2. Extra services offered by the retail stations to the customers, like Petron offers also amenities including convenience stores, restaurants and specialty shops.
3. Technological change and innovations
4. Engaging in vertical integration like Petron has also engaged in operating repair and maintenance centers to cater to the specific requirements of motorists, selling lubricants and specialty products in these centers and giving a quality service with modern equipment and well-trained technicians.
5. Perks and gift cards, reward cards and other benefits for every purchase of petroleum in every retail stations.
6. Marketing advantages and promotions.
7. Boosting environmental and social credibility through corporate social responsibility programs made by companies.
8. Using biodiesel component on petroleum products to support government environmental friendly programs and also supporting the government on laws implemented about using biodiesel.

Degree of rivalry of firms in the petroleum industry is relatively high due to the causes mentioned above most specially nowadays that there are many minor players in downstream segment of petroleum industry that offers a little bit lower prices on petroleum products because they use the biofuel or biodiesel component and this component has relatively low cost than the original component of regular petroleum products.

CALTEX

The Caltex Star stands for quality, value and service. Most importantly, it stands for our commitment to you, our customer.

Our creed of quality, professionalism, service and efficiency dictates that you are always satisfied with our distinctive value through modern and well-managed facilities, high-quality products and services, and fast and polite service.

Caltex gained its foothold in the Philippines in 1917 when Texas Company (as Texaco was then known) began marketing its products in the Philippines through a local distributor, Wise and Co. Four years later, Texaco (Philippines) was formally established and opened its office in Binondo, Manila. Eleven years later, its Pandacan warehouse depot was converted into a key distribution terminal to bring products by barge to nearby provinces. The company has withstood the test of time that despite changes in the past and changes to come in the future, the commitment that Caltex has shown to the Philippines will remain the same.

In 1936, Caltex (Philippines) Inc. was formed when Texaco joined forces with the Standard Oil Company (California). On the same year, Caltex improved its position dramatically —it increased its capitalization from an initial PHP 2 million to PHP 200 million—transferred to a new office, and opened depots and service stations nationwide, making it the country's number one oil company.[9]

Products:

Product's Name	***Description***
1. *Caltex with Techron®*	
a. *Silver 91 with Techron®* *b. Platinum 95 with Techron®* *c. Diesel with*	

9 http://www.caltex.com/ph/

Techron® D

- Unique fuel cleaning additive.
- Techron® works molecule by molecule to prevent deposits from forming in vital engine parts and removes deposits left behind by inferior-quality fuel. There are several Caltex with Techron fuels to cater to the different requirements of your vehicles. Now you can match the most efficient fuel for your needs.
- Enjoy 5 benefits in 1 fuel when you use any Caltex with Techron petrol. It cleans your engine to help maximize power, improve fuel economy and lower emissions to ensure reliable performance and a smoother drive.
- Designed for high performance engines and demanding drivers, this superior gasoline contains 50% more active Clean and Glide Technology™ ingredients. This higher dose means faster clean-up of deposits that build up on critical engine components.
- In diesel engines, the fuel injector nozzle could be as narrow as the width of two human hairs. Yet these fuel injectors are usually located inside the combustion chamber – which means they're exposed to extreme heat, and more vulnerable to deposit formation than in a petrol engine. Deposits hinder the fuel and air mixing process, causing inefficient combustion.

2. *Techron Concentrate Plus*

- It is an advanced fuel additive that helps clean fuel injectors, intake valves and combustion chambers with just one treatment. Backed by decades of research and development, it's proven to clean your vehicle's fuel systems.
- One little bottle can help protect your new investment or restore your used car as close as possible to its original performance. Either way, it keeps your engine running clean and can even prevent faulty fuel gauge readings. For best results, use every 5,000 km or at every oil change.
- Usage: For all types of automobile Petrol engines. Techron Concentrate

Plus is designed for use with spark ignition and hybrid engines/vehicles, and is formulated to work in a broad range of Petrol and ethanol fuels.

3. *Lubricants*

a. *Havoline® Car Engine Oils*

- Havoline® helps improve performance and can help maximize fuel economy. That's why automobile enthusiasts everywhere reach for Havoline® products when they want to protect their car's engine and its performance.
- Havoline introduced its new and improved Havoline® motor oil which for the first time featured gas additives that inhibited corrosion, provided detergent and dispersive action, reduced piston ring wear at both low and high temperatures, and protected against engine rust. Havoline® with Deposit Shield™, an advanced formulation that protects your engine from harmful deposits, helps improve performance, and maximizes fuel economy.
- Havoline protects your motocycle engine from impurities that can harm the engine; Havoline range of motorcycle engine oils has been developed to meet the needs of modern engines. It contains advanced formulation that protects your engine from harmful deposits, helps improve performance, and maximizes fuel economy - giving your motorcycle

engine maximum protection.

4. *Delo® Diesel Engine Oil*

- Delo® Diesel Engine Oil is the right engine oil also helps to disperse soot and control sludge, so as to improve fuel economy and engine durability – and most importantly, minimize operating cost.
- Delo®, short for Diesel Engine Lubricating Oil, is formulated with ISOSYN® Technology that combines highly refined base oils with advanced additives to create products that rival synthetic lubricants in critical performance tests.

SHELL PHILIPPINES

Shell, also known as Royal Dutch Shell is an Anglo–Dutch multinational oil and gas company headquartered in the Netherlands and incorporated in the United Kingdom. Created by the merger of Royal Dutch Petroleum and UK-based Shell Transport & Trading, it is the largest company in the world, in terms of revenue, and one of the six oil and gas "supermajors".

Shell is vertically integrated and is active in every area of the oil and gas industry, including exploration and production, refining, distribution and marketing, petrochemicals, power generation and trading. It has minor renewable energy activities in the form of biofuels and wind. It has operations in over 90 countries, produces around 3.1 million barrels of oil equivalent per day and has 44,000 service stations worldwide. Shell Oil Company, its subsidiary in the United States, is one of its largest businesses.

Today, the Royal Dutch Shell operates in the Philippines under its subsidiary, Shell Philippines Petroleum Corporation. Its headquarters is in Makati City and it has facilities in the Pandacan oil depot and other key locations. On January 2010, the Bureau of Customs claimed 7.34 billion pesos worth of unpaid excise taxes against Shell Philippines for importing Catalytic cracked gasoline (CCG) and light catalytic cracked gasoline (LCCG) stating that those imports are bound for tariff charges. Shell Philippines denied the claim stating that those imports are raw materials for making their products. The company later emphasized that they are considering

closing their local oil refinery if the case continues. Shell Philippines informed the public that they will exhaust all necessary steps to meet the demand for fuel.[10]

Products:

Product's Name	***Description***
1. *Shell V-Power Nitro+*	 • It's designed to clean your engine and protect vital engine parts both gasoline engines and racing car engines. • For gasoline engines, the Shell V-Power Nitro+ Gasoline has Friction Modification Technology that is designed to reduce friction in critical areas of the engine to help your engine deliver more power. So you bring your thrilling road adventures to life. Shell V-Power Nitro+ Racing is designed to give more power and responsiveness than Shell V-Power+ Gasoline.
2. *Shell Fuelsave Fuels*	 • These are efficient fuels with Active Efficiency Ingredients that is

10 http://www.shell.com/global/aboutshell/who-we-are/our-history.html

designed to last longer. It is designed to improve engine efficiency from the very first tank, to help you manage your motoring costs.

- Shell FuelSave Gasoline is designed to reduce energy losses in the engine to help improve your engine's efficiency and help you get a little further on each tank. It is also designed to keep inlet valves clean, prevent deposit formation & improve engine efficiency.
- Shell FuelSave Diesel is designed to ignite and burn more effectively to help improve fuel economy. It also contains special detergents formulated to maintain engine condition by helping to prevent the build-up of injector deposits. And for a workhorse like new diesel engine, it provides a fuel that is designed to last longer.

3. Lubricants

a. *Shell Helix Ultra with PurePlus technology*

- It is designed to help your car's engine perform its best, even in extreme conditions. Shell Helix Ultra stays stronger for longer in extreme high temperatures to keep performing and protecting the engine. It provides superior resistance to oil degradation, up to 32% better than the latest industry standard. It also helps to protect high-performance engines from harmful deposits that hinder power and performance and up to 50% less evaporation loss compared to inferior engine oils which helps to save time and money.

b. *Shell Advance Motorcycle Oils*

- Shell Advance Ultra does not degrade between oil changes, so motorcycle bikes can perform at its best. Shell Advance Ultra minimizes deposit build-up that can lead to frictional losses, allowing for more efficient power transmission, leading to better fuel economy therefore longer ride of 5km more per liter of fuel.
- Volatility and oil oxidation leads to oil degradation. Shell Advance Ultra has lower volatility and better oxidation stability, which means it does not degrade within 6000km, which is twice the typical oil drain interval.

c. *Shell Rimula Truck & Heavy-Duty Engine Oils*

- Shell Rimula's adaptive technology gives outstanding wear protection with reduced viscosity for improved fuel economy. It provides acid protection not leading to corrosion that may cause catastrophic engine failure, deposit protection wherein Shell Rimula diesel engine oils contain molecules that adapt to remove and then block deposit-forming

particles to help keep engines clean and protected and wear control whereas Shell Rimula diesel engine oils have adaptive molecules that are designed to protect the engine by reacting under heat and pressure to form a protective film that helps to reduce wear.

PETRON CORPORATION

Products:

Product's Name	*Description*
1. Automotive Fuels	
a.	PETRON BLAZE 100 is the Philippines' first high-performance premium plus gasoline with 100-octane. It is formulated and developed to unleash the full potential of modern and high performance vehicles. It's extremely high octane characteristic combined with fully synthetic detergent additive and organic combustion enhancer deliver optimum engine performance. It's the right fuel when you need instant power and acceleration. Petron Blaze 100 provides the following performance benefits: -Maximum power and acceleration -Excellent engine cleaning action and protection -Improved fuel economy

b.

PETRON TURBO DIESEL is a technologically advanced fuel, enhanced with C-booster and combustion enhancer to provide smooth and premium performance. Petron Turbo Diesel with its premium and advanced additive system can give the following performance benefits:

-Improved fuel economy

-Better engine torque for superior acceleration

-Efficient and complete combustion to give maximum and smooth power

-Excellent detergency that keeps the engine and fuel injector clean

-Reduced smoke and exhaust emissions

-Improved cold start performance

-Excellent protection against corrosion

-Excellent anti-foam performance

c.

PETRON DIESEL MAX is a high quality diesel fuel with an advanced multi-functional detergent additive that cleans the engine. It contains combustion improvers that helps burn fuel more efficiently and reduce exhaust emissions. It also effectively protects the engine and fuel system from corrosion. Petron Diesel Max delivers the following benefits:

-Control over nozzle fouling

-Improved engine performance

-Improved fuel economy

-Reduced exhaust emissions

-Excellent protection from corrosion

d. 

PETRON XCS is the 95 octane, triple-action premium gasoline that provides quick engine response, superior engine protection and optimal fuel efficiency. Its complete combustion system delivers a high-octane performance with its unique organic combustion catalyst and excellent detergent additive. Petron XCS gives the following benefits:

-Enhanced engine power and responsiveness

-Improved fuel efficiency

-Excellent cleaning action and protection

e. 

Petron XTRA Advance, is the 93 octane gasoline that's proven to make you go for the extra miles. Its advanced fully synthetic detergent additive effectively cleans the engine for a more fuel-efficient operation. It also protects the fuel system and critical engine parts from corrosion. PETRON XTRA ADVANCE gives the following benefits:

-Improved engine performance

-Improved fuel economy

-Improved engine protection

f. PETRON SUPER XTRA GASOLINE is the regular-priced but quality gasoline of Petron. It has 91 octane and contains a powerful detergent additive that cleans away and prevents harmful engine deposits. It also protects the fuel system from corrosion. Petron Super Xtra Gasoline has the following benefits:

-Good engine performance and drive ability

-Good fuel economy

-Engine protection and reduced maintenance cost

g. PETRON Xtend Autogas is a clean burning liquefied petroleum gas (LPG) primarily used as an alternative fuel for gasoline-fed automotive vehicles. Among the benefits of using Xtend Autogas as an alternative fuel include:

-Reduced expenses on the vehicle's fuel and maintenance costs

-Cleaner and environment-friendly exhaust emission

-Increased fuel capacity (by using a dual fuel system)

-Extended engine life due to less carbon deposits

Automotive Lubricants

a.

- PETRON 2T AUTOLUBE is a superior quality motorcycle oil specially formulated for two-stroke gasoline engines equipped with an autolube system. It can be poured directly into the oil reservoir of the autolube without any adjustment in the autolube system. It can also be added to the gasoline tank during fill-ups.

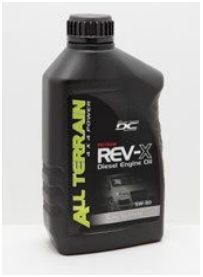
- PETRON 2T ENVIRO is a semi-synthetic, high quality motorcycle oil specially designed and formulated to significantly reduce the heavy visible smoke coming from the exhaust of old and new two-stroke gasoline engines. It can be poured directly into the oil reservoir of the autolube system. It can also be added to the gasoline tank during fill-ups.
- PETRON 2T POWERBURN is superior quality motorcycle oil

specially formulated for two-stroke gasoline engines equipped with an autolube system. It can be poured directly into the oil reservoir of the autolube without any adjustment in the autolube sytem. It can also be added to the gasoline tank during fill-ups.

- PETRON 2T PREMIUM is premium quality motorcycle oil recommended for Kawasaki, Suzuki and Yamaha motorcycles as well as other two-stroke gasoline engines.

b. 

PETRON MOTOR OIL is cost-effective motor oil suitable for passenger cars running in mild service conditions. It gives the engine protection against sludge, wear, and rust.

c. 

REV-X All-Terrain with DC Technology is a top-tier, fully synthetic engine oil specifically formulated for high performance heavy duty diesel vehicles. It contains a superior additive system specially designed to improve protection of engine and advanced emissions control systems including diesel particulate filters (DPF) and exhaust gas recirculation (EGR).

d. 

PETRON SPRINT 4T RACER is a fully- synthetic, superior quality engine oil especially formulated with advanced additive technology to provide outstanding protection and improved clutch operation for modern, high performance motorcycles. It is suitable for both air-cooled and water-cooled four-stroke motorcycles operating under the most severe conditions.

e. 

ULTRON RACE with TS3 is fully synthetic, high performance oil specifically engineered to give the ultimate protection in extreme driving conditions, including intense heat and cold, stop-and-go traffic, and heavy loads. The Thermal Stress Stabilizing System (TS3) keeps the oil stable even at extreme temperatures, providing ultimate protection from engine stress.

4.2.1.2 Threat of New Entrants

The factors that may affect the newest company to enter in the Petroleum, Gas or Oil Industry both in the upstream and downstream segments are the following:

1. It needs a greater amount of capital most especially if you engage in the upstream segment because it includes plants, tankers, vessels, and huge machineries and equipment in order to operate exploration, drilling and extraction of natural gasses. Downstream segment needs also high capital requirement but compared to upstream segment, it has a lower capital requirement that is why recently there are many minor petroleum companies now that entered the market in retailing and distribution of petroleum products.
2. The share in the market is relatively low compared to the successfully established companies who have achieved their place in the market.
3. Increase in the rivalry and competition among the existing petroleum companies and new entrants may not be able to adapt to the competitive environment.

4. Oil, gasses and petroleum products are regulated by the government and new companies to enter is strictly regulated first by the government before entering the market.
5. Uncontrollable petroleum, gas and oil prices.
6. Tariff and custom duties for importation of petroleum products and tax laws to be observed in entering the industry.
7. Social responsibility laws implemented must be observed in entering the industry.
8. Other National and International laws that greatly affects the new entrants in the industry.
9. Competitive advantage of existing companies in terms of technological change and research and development projects which is hard to cope with if you are new in the industry.
10. Economies of scale requirement on new companies in the petroleum industry.
11. Weak linkages of between SMEs and large enterprises.

The petroleum industry is hard and tough to enter by newly formed or organized business due to the cases and causes mentioned above.

4.2.1.3 Threat of Substitutes

Before petroleum products, gas and oil has no substitute products but due to technological innovations and due to advance research and development studies these products was found out to be potential substitute of petroleum, gas and oil products:

1. Nuclear Energy

   Nuclear power is usually used by using a nuclear reactor to heat a working fluid such as water, which is then used to create steam pressure, which is converted into mechanical work for the purpose of generating electricity or propulsion in water.

2. Coal

   Coal can be turned into gases and liquids that can be used as fuels or processed into chemicals to make other products. These gases or liquids are sometimes called *synthetic fuels* or *synfuels*. Synthetic fuels are made by heating coal in large vessels. These fuels produce fewer air pollutants when burned than burning coal directly.

3. Hydrogen

One of the biggest advantages of hydrogen as a fuel is that burning it produces only water. Burning hydrogen is a less efficient means of extracting energy than are hydrogen fuel cells. Current fuel cells are roughly 60% efficient, though when heat trapping features are included, they can reach 83% efficiency. Typical combustion engines, whether burning hydrogen or petroleum are 25% efficient at a maximum.

Fuel cells are similar to batteries in many ways. The major difference between a fuel cell and a battery is that the chemicals in a battery are finite while in a fuel cell, constant supplies of hydrogen and oxygen are fed in. Other than that, the principle is generally the same.

4. Biofuels and other renewable resources such as wind and solar energy.

Biofuels are produced from living organisms or from metabolic by-products (organic or food waste products). In order to be considered a biofuel the fuel must contain over 80 percent renewable materials. It is originally derived from the photosynthesis process and can therefore often be referred to as a solar energy source. There are many pros and cons to using biofuels as an energy source.

Biofuels seem well positioned to penetrate the transportation market. Ethanol can be produced from corn, sugar, and fibrous plants, such as switch grass. Currently, 10 percent ethanol is blended with gasoline to make e10, in large part as a substitute for MBTE (once added to gasoline for environmental purposes).

Biofuels not only substitute for petroleum but they also can have beneficial impacts on climate change. Ethanol and biodiesel are produced within a relatively closed carbon cycle where carbon dioxide (CO2) released into the atmosphere during combustion is

recaptured by the plant material and used to produce additional fuels. To the extent these biofuels displace petroleum, they reduce CO2 emissions and therefore are more climate-friendly than petroleum.

These alternative sources of energy can replace a high amount of hydrocarbons use in the global energy mix according to their performance, quality and price of course.

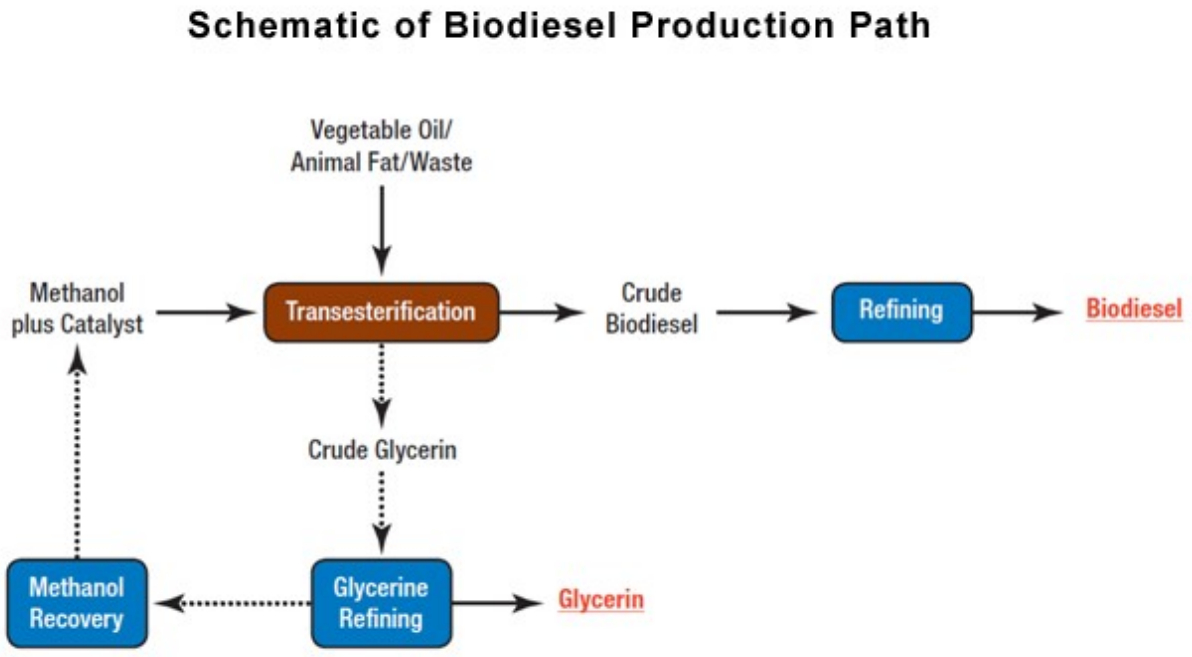


Figure 4.6 Biodiesel Production

5. Solar Energy

The sun provides approximately 12,180,000,000,000,000 kilowatts (that is 12, 180 trillion kilowatts) of power to the Earth's surface every year. By contrast the world consumes about 15,000,000,000 (15 trillion) kilowatts of power each year. Those are

staggering numbers. Put into perspective, the sun provides enough energy in one hour to supply the energy needs of the whole of humanity for an entire year.

The problem, however, is that the energy does not fall on all parts of the Earth equally and the surface area over which it falls is about one half of the surface area of the Earth, a huge amount of space. When broken down by square meter, this amounts to approximately 1000 to 1300 watts per square meter (~1.15 kilowatts per square meter). Locations closer to the equator are above this average and locations further away are below. The average home consumes 9000 kilowatt-hours of electricity in a year.

The benefits of solar energy are that it does not produce air pollutants, it does not contribute greenhouse gases to the atmosphere, and it has a minimal impact on the environment. The limitations to solar are that the sun “does not shine” all hours of the day, a large surface area is needed to collect adequate amounts of light, and storage of the energy for use during “dark times” can be difficult.

The substitute products of oil and gas energy are coal, solar energy, wind energy hydroelectricity, nuclear energy and many more. The threat of substitute is low in the oil and gas industry. This threat is low due to an increased cost of production of alternative energy solutions which are not as cost effective; moreover, these alternatives/substitutes do not give same efficiency that is given by oil and gas. However, companies are investing a great amount in finding out other alternatives such as solar energy and making them as efficient as oil and gas. A disadvantage of this is that the switching and maintenance cost is very high when dealing with these alternatives. This makes them unattractive for consumers.

The Philippine has its own Nuclear Power Plant located in Bataan, however it is being neglected for several decades, but just last year, government officials and international energy experts revisited the mothballed Bataan Nuclear Power Plant (BNPP) to assess its status and they also had called in for experts to study if it is indeed a feasible energy source for the Philippines.

The BNPP (Bataan Nuclear Power Plant) has a power capacity of 623 megawatts. And, it is well protected against tidal waves and tsunamis.

As for the coal, The Philippines has a vast potential for coal resources just awaiting full exploration and development to contribute to the attainment of the country's energy self-sufficiency program. As of 31 December 2015, our in-situ coal reserves amount to 470 million metric tons or 19.7% of the country's total coal resource potential of 2.39 billion metric tons.

Philippines is said to have the largest deposit of Deuterium which is a Heavy Water or Hydrogen without oxygen. Deuterium can replace gasoline, LPG, LNG, Avgas, etc. in powering all types of internal combustion engines. It does not emit pollutants or any harmful carbon monoxide and does not cause any environmental problems because it is in the water family as emissions are nothing but water vapor or steam.

The use of biofuels for transport is a major thrust of the Philippines to reduce the country's dependence on imported fossil fuels and to mitigate greenhouse gas emissions. To pursue this objective, the Congress enacted Republic Act. No 9367 otherwise known as the Biofuels Act of 2006, with an amendment under RA No. 10745. In accordance to the mandate of the said law, the government is presently implementing the National Biofuels Program (NBP) to promote investments in biofuel productions and encourage the utilization of this product. Other activities that coincide with this program are the establishment of support mechanisms to ensure

adequate supply of feedstock and the adoption of appropriate technology for vehicles/engines to be able to use alternative fuels.

Exploiting the power of the sun as a source of energy is a growing industry. However, harnessing, generating and distributing solar power requires a high level of technology and significant financial investment.

These products still need a bigger of capital investments and research and development studies just to make sure that this will qualify fully as a substitute of the petroleum, gas and oil products. Therefore, petroleum industry has low threat of substitute.

4.2.1.4 Bargaining Power of Suppliers

When suppliers have bargaining power, they can apply pressure on a company by charging higher prices, adjusting the quality of the product or controlling availability and delivery timelines. Within the five forces framework, there is an understanding that when suppliers have this bargaining power, they can affect the competitive environment and directly influence profitability for the company.

Crude Oil Supply

Various types of crude oil imported for the period totaled 37,941 MB, a slight decrease of 0.9 percent from first half of 2015's 38,294 MB.

About eighty-five percent of the total crude mix (32,163 MB) originated from the Middle East, of which 34.7 percent (13,164 MB) was sourced from Kuwait, replacing Saudi Arabia as top supplier of crude oil into the country. On the other hand, 3,434 MB of crude oil was imported from the ASEAN and from local production equivalent to 9.1 percent of the total crude mix. The remaining 6.2 percent (2,343 MB) was sourced from Russia.

The other industry players accounted for majority of the product imports with 71.4 percent of the total imports volume, up by 13.6 percent to 31,419 MB from 1H 2015's 27,658 MB. The oil majors (Petron, Chevron and Pilipinas Shell) accounted for the remaining 28.6 percent which increased by 29.3 percent from 1H 2015's 9,752 MB to 12,608 MB.

The local refiners (Petron and Pilipinas Shell) accounted for 17.5 percent of the total product imports, which included blending stocks, as against 82.5 percent share by direct importers.

There are only few crude oil suppliers all over the world and these oil and gasses are minerals and natural resources and therefore limited only. That is why there is a high bargaining power of suppliers in terms of crude oil. Downstream oil companies are being dependent on the prices and volume given by its suppliers and usually undergo purchase commitments in order to secure supply of raw materials for refining of petroleum products.

4.2.1.5 Bargaining Power of Buyers

The idea is that the bargaining power of buyers in an industry affects the competitive environment for the seller and influences the seller's ability to achieve profitability. Strong buyers can pressure sellers to lower prices, improve product quality, and offer more and better services. All of these things represent costs to the seller. A strong buyer can make an industry more competitive and decrease profit potential for the seller. On the other hand, a weak buyer, one who is at the mercy of the seller in terms of quality and price, makes an industry less competitive and increases profit potential for the seller. The concept of buyer power Porter created has had a lasting effect in market theory.

Petroleum Product Demand

First half 2016 total demand of finished petroleum products grew by 13.0 percent to 80,382 MB from 71,103 MB of 1H 2015. This can be translated to an average daily requirement of 441.7 MB compared with last year's level of 392.8 MB.

Compared with first half of 2015 figures, diesel oil demand posted an increase of 16.2 percent. Fuel oil demand was also up by 17.0 percent. Gasoline, LPG and kerosene demand also grew by 12.9, 9.6 and 9.2 percent, respectively. Likewise, naphtha demand went up by 10.9 percent.

Product demand mix comprised mostly of diesel oil at 41.9 percent, gasoline at 22.3 percent, fuel oil at 10.3 percent, LPG at 9.7 percent, kerosene at 9.6 percent, naphtha at 4.4 percent and other products at 1.8 percent share in the total product mix.

Oil is a commodity, and even it changes its price, demand is still high since it is inelastic in nature. That is why buyers have low bargaining power since they have no control on the consumption of oil and gasses. Oil Companies have the control over its market since petroleum products are daily consumption of the people. The market cannot influence Petroleum companies instead it's the other way around because it's a commodity.

4.3 SUMMARY AND CONCLUSION

4.3.1 Competitor Profile Matrix (CPM)

Critical Success Factors		Petron Corporation		Shell Philippines		Caltex	
	Weight	Rating	Score	Rating	Score	Rating	Score

Advertising	0.05	3	0.15	3	0.15	2	0.10
Product Quality	0.20	4	0.80	4	0.80	3	0.60
Price	0.15	3	0.45	3	0.45	3	0.45
Management	0.10	4	0.40	4	0.40	3	0.30
Financial Position	0.15	4	0.60	3	0.45	2	0.30
Customer Loyalty	0.15	3	0.45	3	0.45	2	0.30
Market Share	0.20	4	0.80	3	0.60	2	0.40
Total	1.00		3.65		3.30		2.45

4.3.2 External Factor Evaluation (EFE)

Key External Factors	Weight	Rating	Weighted Score
Opportunities			
1. Increasing number of vehicles	0.15	4	0.60
2. Auto-LPG as used in vehicles	0.07	3	0.21
3. Use of Biodiesel as raw materials	0.15	4	0.60
4. Decreasing prices of motor vehicles and cars	0.10	4	0.40
5. Product Innovation (e.g. gasoline to improve engine performance, eco-friendly products)	0.08	3	0.24
Threats			
6. Decreasing value of peso	0.10	4	0.40
7. Introduction of energy-efficient electric vehicles and hybrid cars (renewable sources of energy)	0.07	3	0.21
8. Strict regulatory framework by the	0.10	3	0.30

Government ~ taxes, environment			
9. Limited Crude Oil Supply	0.10	4	0.40
10. Increasing number of small players in the petroleum retailing industry	0.08	3	0.24
TOTAL	**1.00**		**3.60**

Opportunities:

1. Increasing number of vehicles **–**The increasing number of vehicles is a great opportunity for oil companies since the vehicles are the top users of petroleum products and therefore an increase in the number of users would mean an increase in sales and profitability.

2. Auto-LPG as used in vehicles **–** Petron is one of the top producers of LPG that is why even if petroleum gasses are not used anymore in vehicles Petron would still be able to generate more profit than its competitors which sells solely petroleum gasses.

3. Use of Biodiesel as raw material - This would be a great opportunity or Oil refining companies since as discussed earlier crude oil are expensive whereas the use of biodiesel, it would be a cheaper cost for raw materials and would benefit the oil companies. Biodiesel also can lessen the pollution, global warming and scarcity of minerals and natural resources since it is a renewable source of energy.

4. Decreasing prices of motor vehicles and cars **–** This would mean a increasing number of consumers of gas and petroleum products since even average person would afford to buy vehicles and therefore increasing the number of motorists or vehicle users. And this increase would generate increase in sales and profitability.

5. Product Innovation **–** most consumers most specially those who are car lovers and car racers would always take care of its car engines. That is why offering innovative petroleum gas for car engines would entice more market to patronize petroleum products and therefore increases profitability of oil companies.

Threats:

1. Decreasing Value of Peso **–** since the main raw materials of oil companies are imported outside the country and money used to pay is in different currency, this would be costly for companies if the Philippine Peso continues to decrease in value. And lesser production may occur if the company cannot afford to buy enough raw material for refining petroleum products.

2. Introduction of energy efficient electric vehicles and hybrid cars– This would mean a decrease in the consumption of gas and petroleum products since consumers would be able to use solar or electric power to use its vehicles rather than buying for gasoline to be used. And decrease in consumption is decrease in sales and profitability by oil companies.

*3. Strict regulatory framework by the government (e.g. production, environment,taxes and prices)***–** Strict regulation by the government may limit the operations of oil companies and may affect the profitability of companies. The Government may implement additional taxes and cost which is unfavorable for every oil companies.

4. Limited Crude Oil Supply **–** This would affect the production of petroleum gasses and would cause a decrease in the supply of products. This would also mean a decrease in sales since the company cannot supply for the demand of petroleum products.

5. *Increasing number of small players in the petroleum retailing industry* – This increases the competition and widening the market options of petroleum products. These small players usually

offer low price petroleum products to encourage consumers which is very alarming for big oil companies.

V. INTERNAL ASSESSMENT

The internal assessments include information regarding Petron Corporation's management, production, distribution and marketing, human resource and operation in order to determine its strengths or competitive edge among its competitors and use this to gain a share in the market. This information is also used to determine the company's weaknesses to formulate strategies of managing, regulating and minimizing these weaknesses to avoid failures and risks.

5.1 MANAGEMENT

BOARD OF DIRECTORS	EXECUTIVE OFFICERS
Ramon S. Ang Eduardo M. Cojuangco, Jr. Lubin B. Nepomuceno Eric O. Recto	Ramon S. Ang - President and Chief Executive Officer (CEO) Lubin B. Nepomuceno – General Manager Emmanuel E. Eraña - Senior Vice President and Chief Finance Officer

Estelito P. Mendoza Jose P. De Jesus Ron W. Haddock Aurora T. Calderon Mirzan Mahathir Romela M. Bengzon Virgilio S. Jacinto Nelly Favis-Villafuerte Artemio V. Panganiban (independent) Reynaldo G. David (independent) Margarito B. Teves (independent)	Susan Y. Yu - VP, Procurement Rowena O. Cortez - VP, Supply Freddie P. Yumang - VP, Refinery Archie B. Gupalor - VP, National Sales Albertito S. Sarte - VP, Treasurers and Treasurer Joel Angelo C. Cruz - VP - General Counsel and Corporate Secretary/Compliance Officer Rodulfo L. Tablante - VP, Operations Julieta L. Ventigan - VP, Business Planning and Development Dennis S. Janson - AVP, Controllers and Controller

Figure 5.1 Organizational Structure

5.1.1 Human Resource

The country's leading oil refining and marketing company Petron Corporation marked another milestone as it was named EMPLOYER OF THE YEAR by the People Management Association of the Philippines (PMAP) last September 26, 2008. The prestigious award was given to Petron during the 45th PMAP Conference held in Baguio City with the theme SA TAO MAGKAKATALO or PEOPLE MAKE THE DIFFERENCE. The PMAP Employer of the Year award is given to companies who put a premium on people through strategic and innovative human resource programs.

Over the past few years, Petron has undergone a strategic transformation in terms of organization and business direction. The company mapped its road to the future by launching a

new vision and branding program in 2004 and identifying strategic business imperatives, including diversification into the production of petrochemical feedstocks and expansion of its non-fuel business.

To support these new initiatives, Petron focused its human resources programs on aligning employees' goals with the company's vision. This has no doubt been an important factor in improving the company's performance. In 2007, the company posted its best-ever financial results when it registered a P6.4-billion net income. Petron's Human Resources Manager Ma. Cristina M. Menorca also won PMAP's PEOPLE MANAGER OF THE YEAR AWARD for her contributions to the field of Strategic Human Resources.

5.1.1.1 Careers at the Refinery

Petron consider the human resource as their most valued asset. They believed that in order to continue to be an industry leader with global aspirations, leadership, competence, and teamwork of the human resource is required. The Petron Bataan Refinery (PBR) is the largest and most modern oil refining and petrochemical complex in the country. Run by Filipino refining experts, PBR is a testament to the world-class capability of the countrymen.

5.2 CORPORATE SOCIAL RESPONSIBILITY

As the country's leading oil refining and selling company, they continuously seek to be socially responsible and excellent corporate society. Thus, they join as one sustainable and corporate social responsibility (CSR) programs interested in their business prospects.

Through Petron Foundation Inc. (PFI), their CSR arm, they begin and preserve various initiatives that address nationwide concerns in essential areas such as education, environment, health and human services, and other advocacies in partnership with the community, local and national government units, like-minded organizations, and their employee-volunteers.

Ultimately, their goal is to give to a brighter future for Filipinos by fueling H.O.P.E. (Helping the Filipino Children and Youth Overcome Poverty through Education), their flagship program in schooling or education.

5.2.1 Education

The CSR (Education) of Petron Corporation are called “Tulong Aral Ng Petron Program” and it provides scholarships to some high school students and college students.

Petron is supporting the education of its top Tulong Aral elementary graduates through secondary school under the Tulong Aral High School Scholarship Program, a partnership among DepEd, DSWD, and Land Bank of the Philippines. The program is being implemented for Petron by the Philippine Business for Social Progress (PBSP), with the Philippine Psychology and Research Training House providing the research and training component.

Through the Tulong Aral College Scholarship, Petron makes ten scholarship slots each in a Bachelor's degree in Engineering, a Bachelor's degree in a four-year course relevant to Petron's business, and a Technical/Vocational course for Tulong Aral seniors who qualify in the schools' admissions procedures. They see this as the next step in their road map for an integrated poverty alleviation strategy, with the college scholars eventually earning an opportunity to be employed in Petron.

5.2.2 BATAAN INTEGRATED COASTAL MANAGEMENT PROGRAM

The Bataan Integrated Coastal Management Program (BICMP) is a comprehensive and long-term program which aims to resolve multiple marine and coastal use pressures through public-private partnerships. It aims to serve as a catalyst in rehabilitating Manila Bay.

It also conforms to Executive Order No. 533 which adopts ICM as a national strategy for the sustainable development of the country's coastal and marine environment and supports UN Millennium Development Goal #7 of "ensuring environmental sustainability" and the Global Compact Principles on the environment

The BICMP's major accomplishments include the development of the Bataan Sustainable Development Strategy (BSDS) and the Bataan Coastal Land and Sea Use Zoning Plan (CLSUZP), which provide the blueprint for the long-term management of the province's natural resources and its implementing mechanisms and regulatory framework. The CLSUZP is the first of its kind to be published in the Philippines. It continues to be used as reference in the development of a similar plan for the entire Manila Bay area.

5.3 INTERNAL AUDIT AND CONTROL SYSTEM

1. Establish the internal audit function as a separate unit in the company which would be overseen at the Board level.
2. Have a comprehensive enterprise-wide compliance program that is annually reviewed.
3. Institutionalize quality service programs for the internal audit function.
4. Have in place a mechanism that allows employees, suppliers and other stakeholders to raise valid issues.
5. Have the Chief Executive Officer and Chief Audit Executive attest in writing, at least annually, that a sound internal audit, control and compliance system is in place and working effectively.

5.3.1 Recognizes and Manages its Enterprise Risks

1. Have its board oversee the company’s risk management function.
2. Have a formal risk management policy that guides the company’s risk management and compliance processes and procedures.

3. Design and undertake its Enterprise Risk Management (ERM) activities on the basis of, or in accordance with, internationally recognized frameworks such as but not limited to, COSO, (The Committee of Sponsoring Organizations of the Treadway Commission) I and II.
4. Have a unit at the management level, headed by a Risk Management Officer (RMO).
5. Disclose sufficient information about its risk management procedures and processes as well as the key risks the company is currently facing including how these are being managed.

Seek external technical support in risk management when such competence is not available internally.

5.4 PRODUCTION

Petron deals its purchases and imports majority of its crude oil from Saudi's state-owned oil giant the Saudi Amarco and some of its crude oil supply from Malaysia's Petronas and its wholly-owned trading subsidiary in Singapore – the Petron Singapore Trading Pte Ltd. (PSPTL), which has been created for the purpose of optimizing procurement processes in crude oil and participate in Singapore's global trader program thus, allowing Petron to access a globally wider crude oil supplier alternatives in order to make sure that it has enough and a high quality supply of raw material for its produced products.

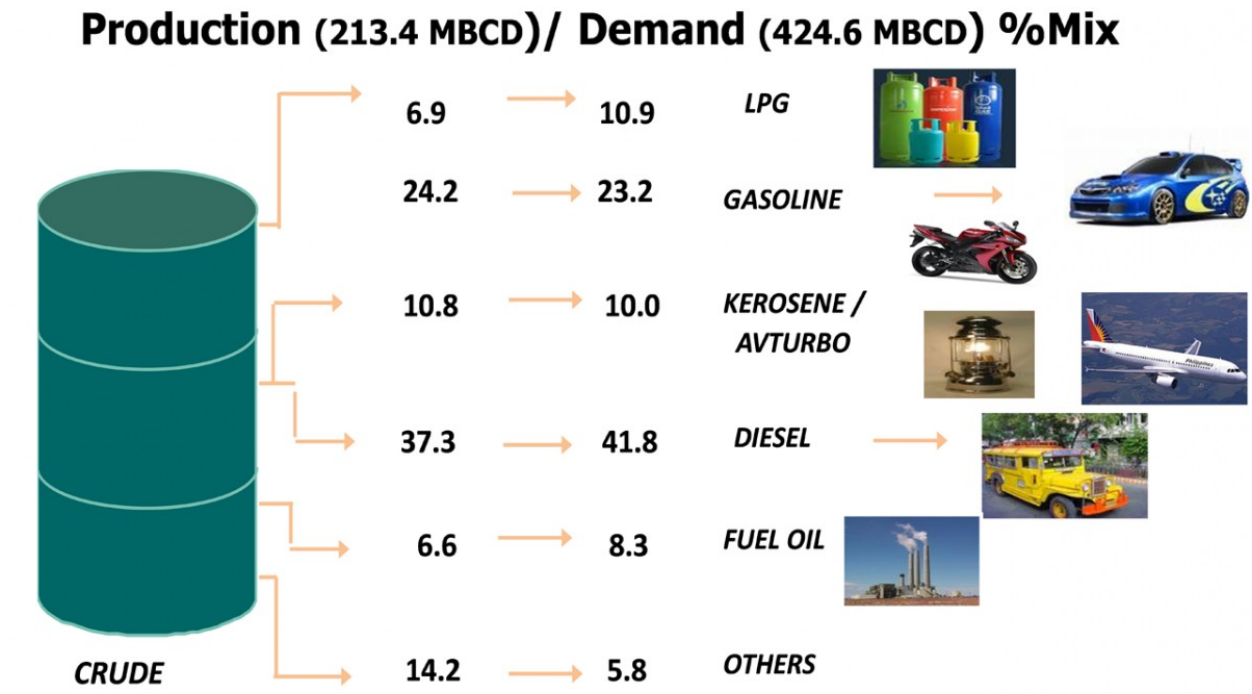


Figure 5.2 Refinery Process of Crude Oil

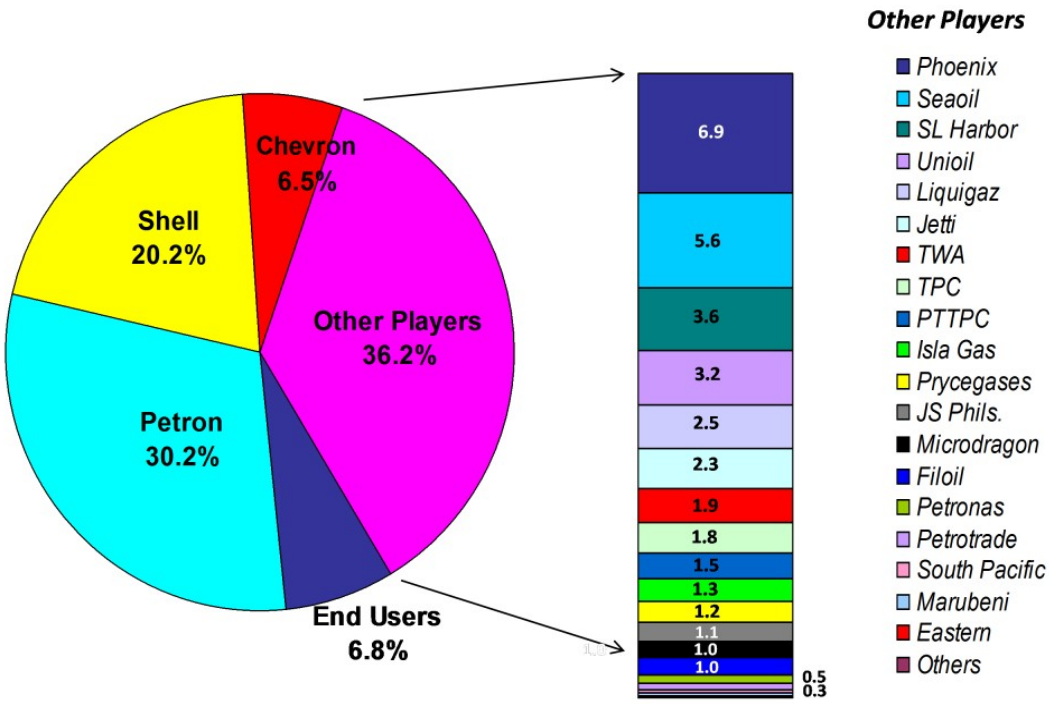
These crude oils are delivered to Petron's Bataan Refinery (PBR) which is the biggest crude oil refinery in the Philippines found in Limay, Bataan to be refined into different forms of petroleum products which are: (1) gasoline, (2) diesel, (3) liquified petroleum gas or popularly known as LPG, (4) jet fuel, (5) kerosene, and (6) industrial fuel oil. PBR also produces petrochemical feedstock benzene, toluene, mixed xylene, and propylene. PBR is the heart of the company's operation which is run by Filipino refining experts and operates with a first-rate technology. The refinery also produces revolutionary and environmental friendly petroleum products like the use of biogas which is a renewable source of energy.

In order for Petron to serve the country right, just and following environmental laws and acts implemented the government, it invested a lot on PBR to adopt to these changes in the society and PBR is the only local producer of petrochemical feedstock which are raw materials such as naphtha, light gas oil and individual gases such as ethane, propane and butane, which come from

a complex mixture of hydrocarbons known as natural gas liquids and used wide variety of applications, including food packaging, rope, sacks, plastic parts, home appliance, automotive parts, reusable containers, etc.

Figure 5.3 Market Share in Petroleum Products (2016)

Due to the country's largest refinery, Petron has the higher production compared to its competitors and is said to supply almost one-third of the country's oil requirements. Petron's Bataan Refinery can produce 180,000 barrels per day compared to Shell as the second which can



produce 110,000 barrels a day and therefore Petron shares higher in the market share due to it's production capacity.

5.5 DISTRIBUTION

Petron manages its distribution from Bataan Refinery to it's respective strategically-located 32 oil depots, plants and terminals all over the country through marine transport and finally to its retailing stations through land transport.

5.5.1 Marine Transport

Petron Corporation is the first to use double-hull, double-bottom oil product tanker, the M/T Petro Anica as its marine transport. This vessel is part of Shipping Business Alliance a company that aimed transporting products across the country with safer vessels and a high quality performance. Petro Anica is the largest and most modern Philippine oil product tanker and it belongs to the next generation of tankers certified for unrestricted service, with complete compliance to all international and local regulations. All navigational and radio communications employ the latest upgraded requirements as standard features such as the Ship Security Alert, Electronic Chart Display Information and Anti-Collision Alert systems. All these are backed by the double redundancy format as required by the IMO.

The vessel is outfitted with advanced systems for fire-fighting and life-saving, exceeding the requirement for local tankers. The propulsion and power are automated and it even has a bow thruster to enhance safety in docking and undocking operations. Cargo handling is centralized in a control room from which all pumps and valves are operated. The vessel can transport a wide range of fuels from black (bunker fuel oil) and white (gasoline, kerosene & diesel) petroleum products, and even bio-fuels (ethanol and CME).

5.5.2 Land Transport

From the 32 storage facilities situated all over the archipelago, premium fuels are transported by land via tank trucks and delivered to our over 2,000 service stations and industrial clients in essential industries for the nation.

Trucks are models of safe and efficient product transport. It is equipped with the latest technology to ensure that quality products reach every customer in excellent condition and on

time. Furthermore, the company ensures that the trucks undergo safety, security, and quality checks, passed the strictest environmental regulations and have necessary operating permits before being commissioned. Accordingly, truck drivers undergo a rigorous selection process and training on proper handling of petroleum products before being assigned to drive.

Figure 5.4 Number of Service Station of Oil Companies

There are 2,000 retailer stations located across the country to serve every Petron

OIL COMPANY	Market Share (%)	No. of service stations
Petron	36.9	2000
Pilipinas Shell	24.7	930
Chevron	8.4	850
Phoenix	7.2	325
Total	3.1	200
Liquigaz	3.1	
Unioil	2.5	33
Seaoil	2	340
Jetti	1.7	112
PTT	1.6	70

customers and satisfy their need of petroleum products. Through this sales are generated by Petron.

5.6 MARKETING

Aside from offering the petroleum products, Petron has been offering different kinds of services to attract more customers:

5.6.1 Petron Car Care Center (CCC)

The Petron Car Care Center offers various automotive maintenance and repair services to the monitoring public, such as:

- Lubrication
- Engine Works
- Chassis Repair
- Tire Services
- Washing and undercoating
- Cooling system maintenance
- Air conditioning and electrical repair maintenance (selected stations)

CCC customers can then be assured of “casa-like” quality of parts and service at affordable cost.

5.6.2 Petron Lube Center

The Petron Lubes and Specialties Center (PLSC) provides various automotive maintenance and repair services to motorists such as:

- Suspension Repair
- Engine Tune-up

5.6.3 Petron Motocenter

The Petron Motocenter is a maintenance repair shop that specializes on motorcycles Staffed and fellow biking enthusiasts and prepared with Petron lubricants and specialty products, the Motocenter is geared to fix and keep your motorbike good as new.

5.6.4 One-Stop Service Convenience

Besides having friendly personnel serving premium fuels, many of our service stations provide automobile service checks, restrooms, convenience stores, specialty shops, ATM machines, and in our bigger stations, an array of restaurant options to choose from.

5.6.5 Petron Cards

Petron offers Value Card is a loyalty and reward redemption program of Petron Corporation (“Petron”) which aims to provide maximum value to Petron Value Card holders (“Cardholders”) by granting them reward points, discounts, added services and other benefits.

At present, Petron has been into so many promotions distributed to different channels like Digital Media - TVCs, Social Media, Radio ads, and even on Prints. Also, every year they have the raffle promo to attract more customers. It has also penetrated the sports field having a team in basketball then volleyball.

In recent projects, Petron is now partnered with one pf the world’s leading ridesharing application – UBER. And just last year Petron served as the official fuel of Formula 4 SEA Philippine Leg.

The use of such advertisements requires a huge amount of expense as they’ll be spending on the artists, media channels and other ads costs.

5.7 RESEARCH AND DEVELOPMENT

The future of oil and gas companies in the industry depends heavily on the critical factor of research and development. R&D efforts create new technologies, products, and processes that help preserve the environment, ensure public health and safety and affect all aspects of the industry from oil and gas extraction to distribution and sale of the final product. Research is organized in different programs. Exploration, producing technology and knowledge which will strengthen our positions in important exploration areas. Increased recovery, improved reservoir models and new drilling and well solutions at reduced costs, and maturing of resources into profitable reserves for development. New development solutions, which is to develop cost effective technologies realizing crude oil and gas fields. Oil and gas value chain, competitive and

sustainable technology for heavy oil, refining and gas value chain. New energy and HSE, that researches unto new forms of energy and cost-effective solutions in HSE.'

Oil and gas companies will engage in greater collaboration for R&D in the future by establishing partnerships, creating joint ventures and acquiring startups. Internationalization of R&D is not a new phenomenon. When expanding internationally, firms have always needed to adapt technologies locally to sell successfully in host countries. However, it was traditionally the case that R&D was reserved for the home countries of the Transnational Companies (TNCs). Now a number of new features are emerging in the internationalization process. TNCs are setting up R&D facilities outside developed countries that go beyond adaptation for local markets. Increasingly, in some developing and South-East European and CIS countries, TNCs' R&D is targeting global markets. TNCs Primary areas of innovation interest are in subsea and remote technology; innovative solutions that support increased uptime and efficiency; and the application of nano technology to better enhance oil recovery in new offshore and onshore fields.

5.7.1 R&D in developing countries

The share of host developing countries in the global R&D systems of TNCs is rising, but unevenly. Only a few economies have attracted the bulk of the R&D activity. Developing Asia is the most dynamic recipient. In the case of R&D expenditures by majority-owned foreign affiliates of United States TNCs, for example, the share of developing Asia soared from 3 percent in 1994 to 10 percent in 2002. The increase was particularly noticeable for China, Singapore, Hong Kong (China) and Malaysia.

5.7.2 Involvement of Private Sector in R&D

Presently, most of the funding for R&D comes from government or the public sector. Under the present scenario when private sector is also playing a significant role in the growth of petroleum industry, we must ensure funding of research coming from private sector also.

5.8 FINANCIAL

5.8.1 Statement of Financial Position

PETRON CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Amounts in Million Pesos)

	Note	December 31 2015	2014
ASSETS			
Current Assets			
Cash and cash equivalents	*6, 34, 35*	**P18,881**	P90,602
Financial assets at fair value through profit or loss	*7, 34, 35*	**509**	1,632
Available-for-sale financial assets	*4, 8, 34, 35*	**233**	430
Trade and other receivables - net	*4, 9, 28, 34, 35*	**30,749**	48,339
Inventories	*4, 10*	**30,823**	53,180
Other current assets	*15*	**34,530**	24,846
Total Current Assets		**115,725**	219,029
Noncurrent Assets			
Available-for-sale financial assets	*4, 8, 34, 35*	**388**	451
Property, plant and equipment - net	*4, 12, 37*	**161,597**	153,650
Investment in shares of stock of an associate	*4, 11*	**1,814**	1,162
Investment property - net	*4, 13*	**112**	113
Deferred tax assets	*4, 27*	**211**	242
Goodwill	*4, 14*	**7,694**	8,921
Other noncurrent assets - net	*4, 15, 34, 35*	**6,726**	7,756
Total Noncurrent Assets		**178,542**	172,295

Current Liabilities			
Short-term loans	*16, 34, 35*	**P99,481**	P133,388
Liabilities for crude oil and petroleum product importation	*34, 35*	**16,271**	24,032
Trade and other payables	*17, 28, 34, 35*	**9,347**	39,136
Derivative liabilities	*34, 35*	**603**	98
Income tax payable		**183**	73
Current portion of long-term debt - net	*18, 34, 35*	**694**	5,860
Total Current Liabilities		**126,579**	202,587
Noncurrent Liabilities			
Long-term debt - net of current portion	*18, 34, 35*	**71,726**	66,269
Retirement benefits liability	*30*	**5,509**	2,273
Deferred tax liabilities	*27*	**4,638**	3,471
Asset retirement obligation	*4, 19*	**1,809**	1,659
Other noncurrent liabilities	*20, 34, 35*	**906**	1,373
Total Noncurrent Liabilities		**84,588**	75,045
Total Liabilities		**211,167**	277,632

Forward

	Note	**2015**	2014
Equity Attributable to Equity Holders of the Parent Company	*21*		
Capital stock		**P9,485**	P9,485
Additional paid-in capital		**19,653**	19,653
Undated subordinated capital securities		**30,546**	30,546
Retained earnings		**41,712**	40,815
Reserve for retirement plan		**(3,204)**	(1,018)
Other reserves		**(5,563)**	(2,149)
Treasury stock		**(10,000)**	-
Total Equity Attributable to Equity Holders of the Parent Company		**82,629**	97,332
Non-controlling Interests		**471**	16,360
Total Equity		**83,100**	113,692
		P294,267	P391,324

Figure 5.5 Statement of Financial Position of Petron

	Sep 2016	5-quarter trend
Cash & Short-Term Investment	12.70 B	
Total Debt	155.40 B	
Total Liabilities	201.00 B	
Total Shareholder's Equity	85.13 B	
Book Value Per Share	9.08	-

Figure 5.6 Balance Sheet of Petron Graphed

Petron has a declining Total Assets and Equity but increases in the Non-current Liabilities. If just looking at the Statement of Financial Position of Petron, we can conclude that the company is prone to bankruptcy if Total Assets continue to decrease and Non-current Liabilities continue to increase. The Balance Sheet also depicts that the company is not expanding as a business in the oil industry. This is a bad sign for Petron if its Balance Sheet continue to have decreasing trend.

5.6.2 Income Statement

PETRON CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2015, 2014 AND 2013
(Amounts in Million Pesos, Except Per Share Data)

	Note	**2015**	2014	2013
SALES	*28, 37*	**P360,178**	P482,535	P463,638
COST OF GOODS SOLD	*22*	**328,438**	463,100	440,479
GROSS PROFIT		**31,740**	19,435	23,159
SELLING AND ADMINISTRATIVE EXPENSES	*23*	**(13,606)**	(11,830)	(11,475)
INTEREST EXPENSE AND OTHER FINANCING CHARGES	*26, 37*	**(5,533)**	(5,528)	(5,462)
INTEREST INCOME	*26, 37*	**686**	844	1,285
SHARE IN NET INCOME OF AN ASSOCIATE	*11*	**133**	102	110
OTHER INCOME (EXPENSES) - Net	*26*	**(3,495)**	790	(675)
		(21,815)	(15,622)	(16,217)
INCOME BEFORE INCOME TAX		**9,925**	3,813	6,942
INCOME TAX EXPENSE	*27, 36, 37*	**3,655**	804	1,850
NET INCOME		**P6,270**	P3,009	P5,092
Attributable to:				
Equity holders of the Parent Company	*32*	**P5,618**	P3,320	P5,247
Non-controlling interests		**652**	(311)	(155)
		P6,270	P3,009	P5,092
BASIC/DILUTED EARNINGS (LOSS) PER COMMON SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT COMPANY	*32*	**P0.15**	(P0.15)	P0.28

See Notes to the Consolidated Financial Statements.

	Note	2015	2014	2013
NET INCOME		**P6,270**	P3,009	P5,092
OTHER COMPREHENSIVE INCOME (LOSS)				
ITEMS THAT WILL NOT BE RECLASSIFIED TO PROFIT OR LOSS				
Equity reserve for retirement plan	*30*	**(3,112)**	(4,656)	3,232
Share in other comprehensive loss of an associate	*11*	**(6)**	-	-
Income tax benefit (expense)		**935**	1,396	(957)
		(2,183)	(3,260)	2,275
ITEMS THAT MAY BE RECLASSIFIED TO PROFIT OR LOSS				
Exchange differences on translation of foreign operations		**(3,748)**	(1,475)	589
Unrealized fair value losses on available-for-sale financial assets	*8*	**(1)**	(25)	(31)
Income tax benefit		**-**	2	2
		(3,749)	(1,498)	560
OTHER COMPREHENSIVE INCOME (LOSS) - Net of tax		**(5,932)**	(4,758)	2,835
TOTAL COMPREHENSIVE INCOME (LOSS) FOR THE YEAR - Net of tax		**P338**	(P1,749)	P7,927
Attributable to:				
Equity holders of the Parent Company		**P390**	(P1,368)	P6,971
Non-controlling interests		**(52)**	(381)	956
		P338	(P1,749)	P7,927

See Notes to the Consolidated Financial Statements.

Figure 5.7 Income Statement of Petron (2016)

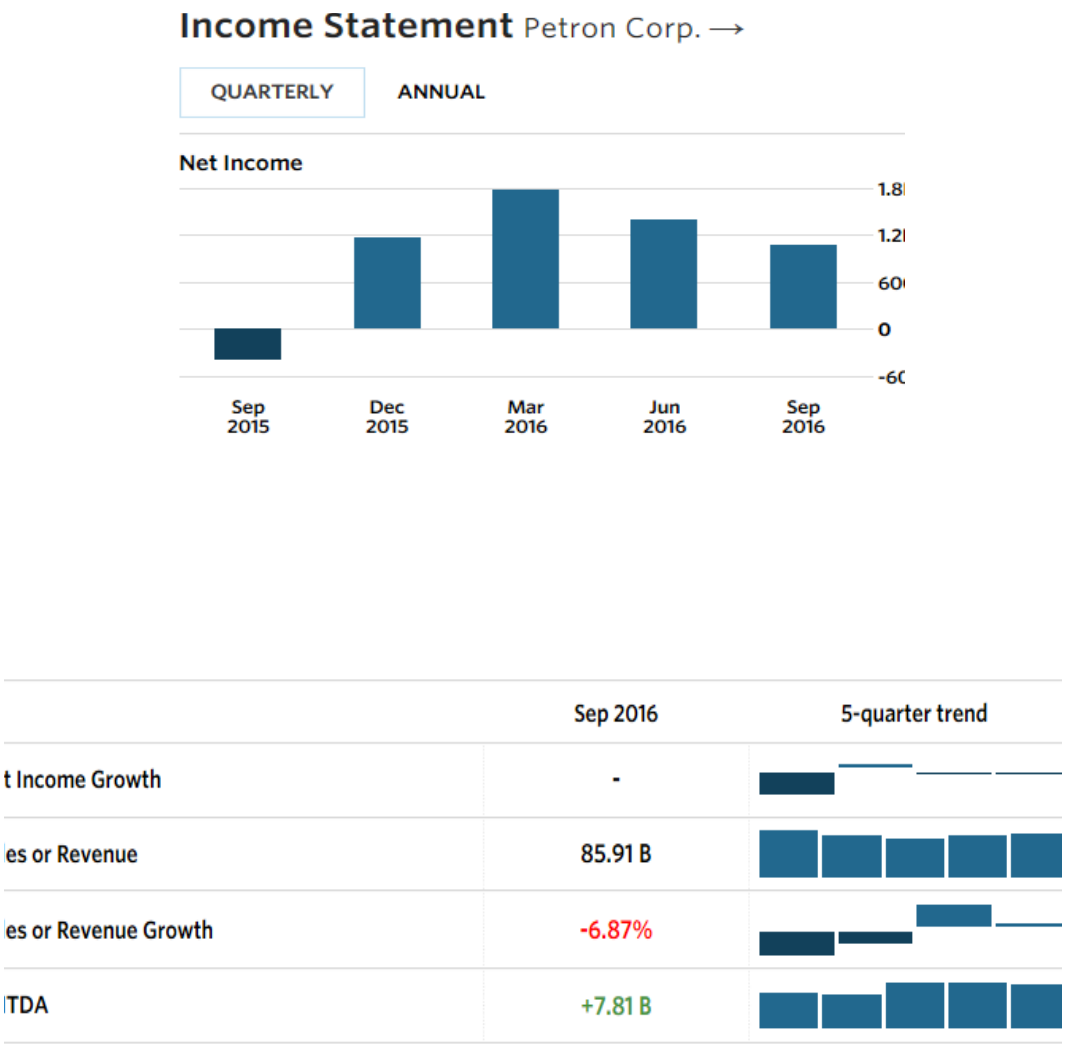


Figure 5.8 Income Statement of Petron Graphed

The Income Statement of Petron shows that in 2014 it decreases a lot but increases in 2015. The 2014 decrease is maybe due to the Guimaras oil spill which the company had to incur expenses in order to be responsible with the incident. Notice their Income Statement, the company is still profitable but if we notice in Figure 5.7 the companies net income for the first three quarter of 2016 decreases which is a negative image for Petron.

5.6.3 Financial Statement Analysis

OVERVIEW » FINANCIALS ALL SECTIONS

Earnings & Estimates Petron Corp.

Qtr. EPS Est.	-	Qtr. Year Ago	-
Ann. EPS Est.	+0.57 FY 2016	Ann. Year Ago	+0.15 FY 2015
Next Report	03/23/2017	Last Report	11/10/2016
Fiscal Yr Ends	December 31	No. of Analysts	-

Per Share Data Petron Corp.

All values updated annually at fiscal year end

Earnings Per Share	+0.15	Sales	38.42
Tangible Book Value	7.87	Operating Profit	1.81
Working Capital	-1.16	Long Term Liabilities	9.02
Capital Expenditure	1.44	Capital Expenditure TTM	0.56

Ratios & Margins Petron Corp.

All values updated annually at fiscal year end

Valuation

* P/E Ratio (TTM)	17.87
** P/E Ratio (including extraordinary items)	17.82
Price to Sales Ratio	0.18
Price to Book Ratio	0.79
Price to Cash Flow Ratio	7.74
** Enterprise Value to EBITDA	10.45
** Enterprise Value to Sales	0.73
Total Debt to Enterprise Value	0.79
Total Debt to EBITDA	7.45
EPS (recurring)	0.02
EPS (basic)	0.15
EPS (diluted)	0.15

Profitability

Gross Margin	+7.86
Operating Margin	+4.70
Pretax Margin	+2.72
Net Margin	+0.56
Return on Assets	0.59
Return on Equity	2.23
Return on Total Capital	0.72
Return on Invested Capital	1.26

Capital Structure

Total Debt to Total Equity	208.04
Total Debt to Total Capital	67.54
Total Debt to Total Assets	58.42

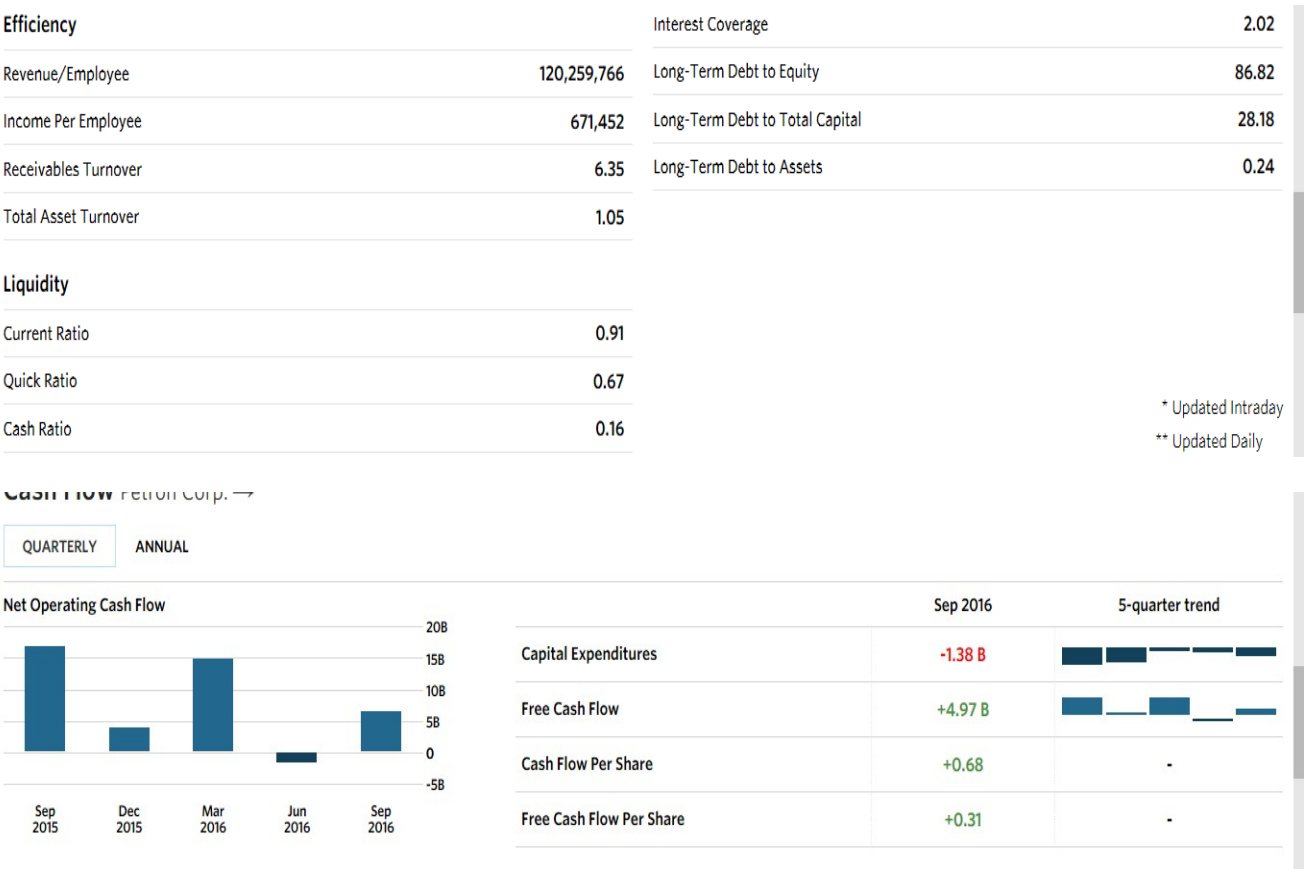


Figure 5.9 Financial Statement Analysis of Petron (2015)

Financial statement analysis involves the identification of the following items for a company's financial statements over a series of reporting periods. Create trend lines for key items in the financial statements over multiple time periods, to see how the company is performing. Typical trend lines are for revenues, the gross margin, net profits, cash, accounts receivable, and debt.

An array of ratios is available for discerning the relationship between the size of various accounts in the financial statements. For example, you can calculate a company's quick ratio to estimate its ability to pay its immediate liabilities, or its debt to equity ratio to see if it has taken on too much debt. These analyses are frequently between the revenues and expenses listed on the income statement and the assets, liabilities, and equity accounts listed on the balance sheet.

There are several general categories of ratios, each designed to examine a different aspect of a company's performance. Like the profitability ratios, these ratios measure how well a company performs in generating a profit. The return on equity of Petron is 2.23, return on capital is 0.72 and the return on assets is 0.59. The leverage ratios, the ratios reveal the extent to which a company is relying upon debt to fund its operations, and its ability to pay back the debt, total debt to total equity of Petron is 208.04. The activity ratios such as, accounts receivable turnover which is 6.35. And the liquidity ratios, the most fundamentally important set of ratios, because they measure the ability of a company to remain in business, current ratio of 0.91, quick ratio of 0.67 and cash ratio of 0.16 for Petron.

5.7 INTERNAL FACTOR EVALUATION MATRIX

Key Internal Factors	Weight	Rating	Weighted Score
Strengths			
1. Innovation of engine efficient and eco-friendly petroleum products	0.10	4	0.40
2. Customer engagement (e.g. Petron Cards and other benefits)	0.09	3	0.27
3. Advanced equipment used in land and Sea transport	0.08	3	0.24
4. Accessibility of retail stations	0.10	4	0.40
5. Strong brand recognition	0.09	4	0.36
6. Largest refinery and mass production	0.13	4	0.52
Weaknesses			
7. Air pollutant product	0.10	3	0.30
8. Costly raw materials	0.12	4	0.48
9. Slow Research and Development	0.09	3	0.27
10. Quality of Service in Retail Stations	0.10	4	0.40
TOTAL	**1.00**		**3.64**

Strengths:

1. *Innovation of engine efficient and eco-friendly petroleum products* – Petron Corporation has many variations of petroleum products to enhance engines of vehicles and offers gasoline used for sports cars like turbo diesels. They are the only oil company having many variations of petroleum diesel.
2. *Customer engagement (e.g. Petron cards and other benefits)* – Petron Corporation not only offers their products to its customers but also offers services like stores located in retail stations and services such as Petron Car Care Center, Petron Lube Center and others which helps to maintain customer loyalty.
3. *Advanced equipment used in land and sea transport* – Petron Corp. invested on their distribution process. They have the safest and advance distribution of petroleum products all over the country to supply its customers' demand.
4. *Accessibility of Retail Stores* – Petron Station has the largest number of retail stores all over the country and even in almost remote places in the country Petron Station is established and seen by consumers. That is why travelers often see Petron in highways and provinces. This would definitely increase the company's market share and thereafter its sales.
5. *Strong Brand Recognition* – The Petron Corporation is known as the leading oil company retailer in the country. It becomes an advantage of Petron since it will increase customers and secure loyalty because the company already made a high quality image in the market.
6. *Largest refinery and mass production* – Petron is considered the oil company in the country with the largest refineries and largest number of production compared to the other two big oil companies. This is an advantage for Petron since increase production would mean increase sales and company has potential for expansion and growth.

Weaknesses:

1. *Air Pollutant Product* – This unavoidable since this is natural for petroleum gases to be considered as pollutant. This becomes a weakness since government regulations may limit the operation of Petron Corporation due to its harmful products. Government may interfere in the production and selling of petroleum products and may cause additional costs.
2. *Raw Materials are costly* – Since the company is importing crude oil, it is costly most especially now that the value of peso continues to decrease. The importation of raw material is costly like in paying for tariffs and custom costs and even the shipment or freight costs are additional cost incurred by the company. High cost would decrease the company's profit.
3. *Slow Research and Development process in product innovation* – This may be a weakness of Petron because the company may not be able to adapt to the changing customer preferences in their product if it has slow R & D like the use of biodiesel which most consumers prefer nowadays.
4. *Poor quality of Service in Retail Stations* – Unlike Shell offering services as putting additional water on vehicle's engines and even cleaning the glass of cars, Petron do not offer services like those mentioned above which is sometimes the basis of comparison of consumers between oil companies. Therefore, customers tend to switch from Petron to other oil retail stations.

VI. STRATEGY FORMULATION

6.1 SWOT ANALYSIS

	Strengths	**Weaknesses**
	1. Innovation of engine efficient and eco-friendly	1. Air pollutant product

	petroleum products 2. Customer engagement (e.g. Petron Cards and other benefits) 3. Advanced equipment used in land and sea transport 4. Accessibility of retail stations 5. Strong brand recognition 6. Largest refinery and mass production (gas and petroleum products)	2. Raw materials costly 3. Slow Research and Development 4. Quality of Service in Retail Stations
Opportunities	**SO Strategies**	**WO Strategies**
1. Increasing number of vehicles	1. Biodiesel as raw materials and/or new product to minimize production cost. (S1, O3)	1. Look for a biodiesel supplier. (W2, O3)
2. Auto-LPG as used in vehicles	2. Adaptation of use of Auto-LPG in vehicles. (S1, S6, O2)	2. Compliance with Clean Air Act with the use of Biodiesel. (W1, O3)
3. Biodiesel as raw materials	3. Increase production and distribution. (S6, S4, O4)	3. Increase customer engagement and improve services with new eco-friendly products. (W4, O5)
4. Decreasing prices of motor vehicles and cars		
5. Product Innovation (e.g. gasoline to improve engine performance, eco-friendly products)		

Threats	**ST Strategies**	**WT Strategies**
1. Decreasing value of peso	1. Product innovation through use of Biodiesel as raw materials to reduce importation cost. (S1, T1, T4)	1. Reduce production cost through Biodiesel. (W2, T5)
2. Introduction of energy-efficient electric vehicles and	2. Reduce air pollutant petroleum product. (S1, T3)	2. Improve product with the use other renewable resources

hybrid cars (renewable sources of energy)		(e.g. biofuels, solar, wind, etc.). (W2, T2, T3)
3. Strict regulatory framework by the Government (e.g. production, environment, Taxes and prices)	3. Increase or maintain market share thru ads and customer engagement or other social media means. (S2, S5, T5)	3. Employee trainings on quality service and customer-relation. (W5, T5)
4. Limited Crude Oil Supply		
5. Increasing number of small players in the petroleum retailing industry		

SO Strategies:

The SWOT Matrix revealed that the use of Biodiesel is one great opportunity to adapt to the changing preference of people. Wherein nowadays people would prefer environmental friendly products and it can also minimize the production or importation cost of Petron if it uses Biodiesel as raw materials than the use of purely crude oil.

Since Petron is considered as one having the largest refinery in the country, they can take advantage of it to increase production in order to cater customers who prefer the use of Auto-LPG and also to comply with the increasing demand of ordinary petroleum products due to the increasing volume of vehicles.

WO Strategies:

With the use of Biodiesel, Petron would be able to minimize cost since it would not rely purely on importation of crude oil but the company must be able to assure the supply for the biodiesel. And since biodiesel is a renewable source of energy, it would support the advocacies of the Government in terms of healthy environment and conserving the natural resources and therefore reducing the conflict of consumption of petroleum gasses.

The behaviors of customers nowadays are health and environmental conscious that is why with innovation of eco-friendly products such as biodiesel would entice more customers to patronize their product.

ST Strategies:

Due to the scarcity on natural resources such as crude oil and decreasing value of peso, importation of crude oil is costly. This would negatively affect Petron's operations especially if the company relies on this. But with the use of biodiesel as substitute for natural oil is a way to minimize these risks and minimize costs.

The emerging small players in the oil industry is a threat since it causes a decrease in Petron's market share and in order to overcome this threat, the utilization of benefits and rewards given to customers and enhance company's image or credibility to the market would be a helpful action for Petron to regain and increase its market share.

Innovation of energy efficient gasoline products would reduce damage in the environment in terms of air pollution. This will help to minimize the threat of limiting Petron of its operation by the regulatory bodies in the government.

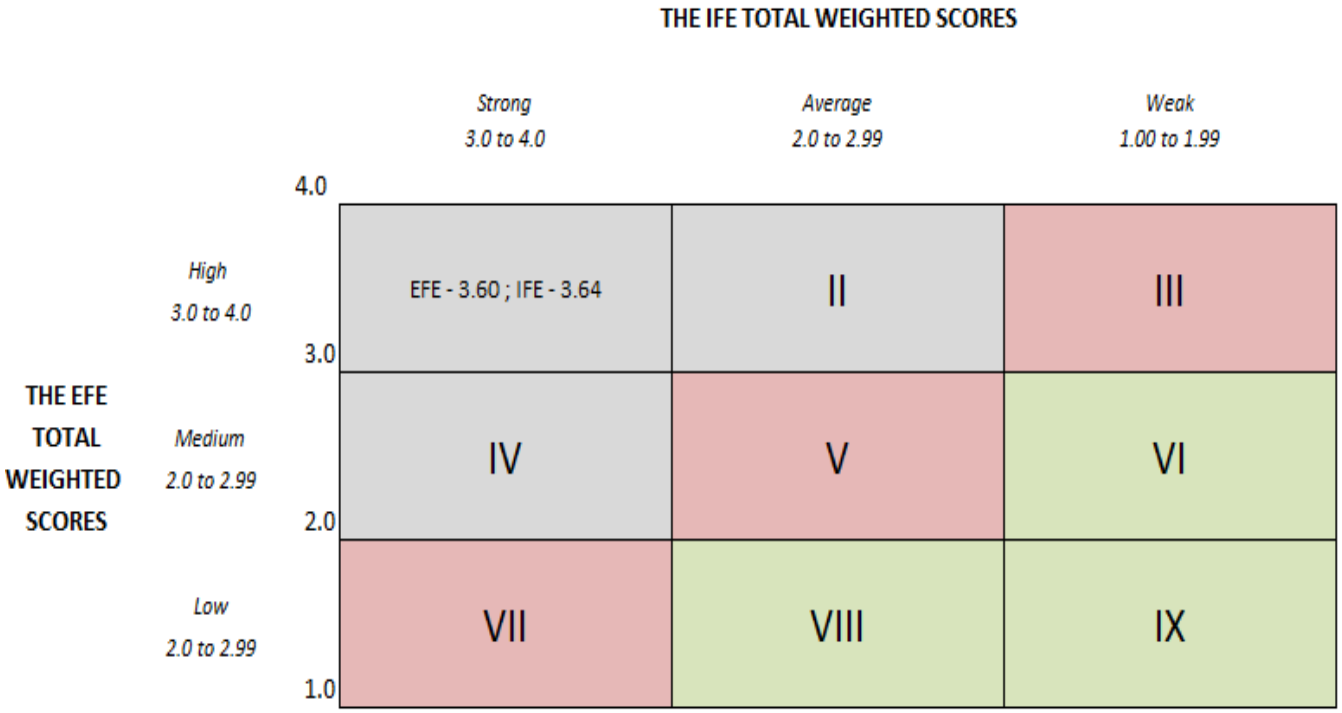
WT Strategies:

With the use of Biodiesel classified as renewable source of energy as substitute for raw materials, Petron would actually minimize cost and would minimize the production of air pollutant products in accordance with the advocacies of the government.

Petron should provide employee trainings on how to deal and interact with customers and improve the services they offer because sometimes this is the basis of customers on what they see the company and this may establish good image and credibility to the customers and this may result to an increase in market share.

6.2 IE MATRIX

The IE Matrix showed that Petron lies in the intersection of strong and high quadrant or the first quadrant which means that Petron is in the “grow and build” region which is the most appropriate region of the division. And falling in Quadrant I means that Petron should implement strategies either Backward, Forward, Horizontal Integration, Market Penetration, Market Development or Product Development.



STRATEGY		
Grow and Build	**Hold and Maintain**	**Harvest or Divest**
Backward, Forward,	Market Penetration	Retrenchment
Horizontal Integration	Product Development	Divestiture
Market Penetration		
Market Development		
Product Development		

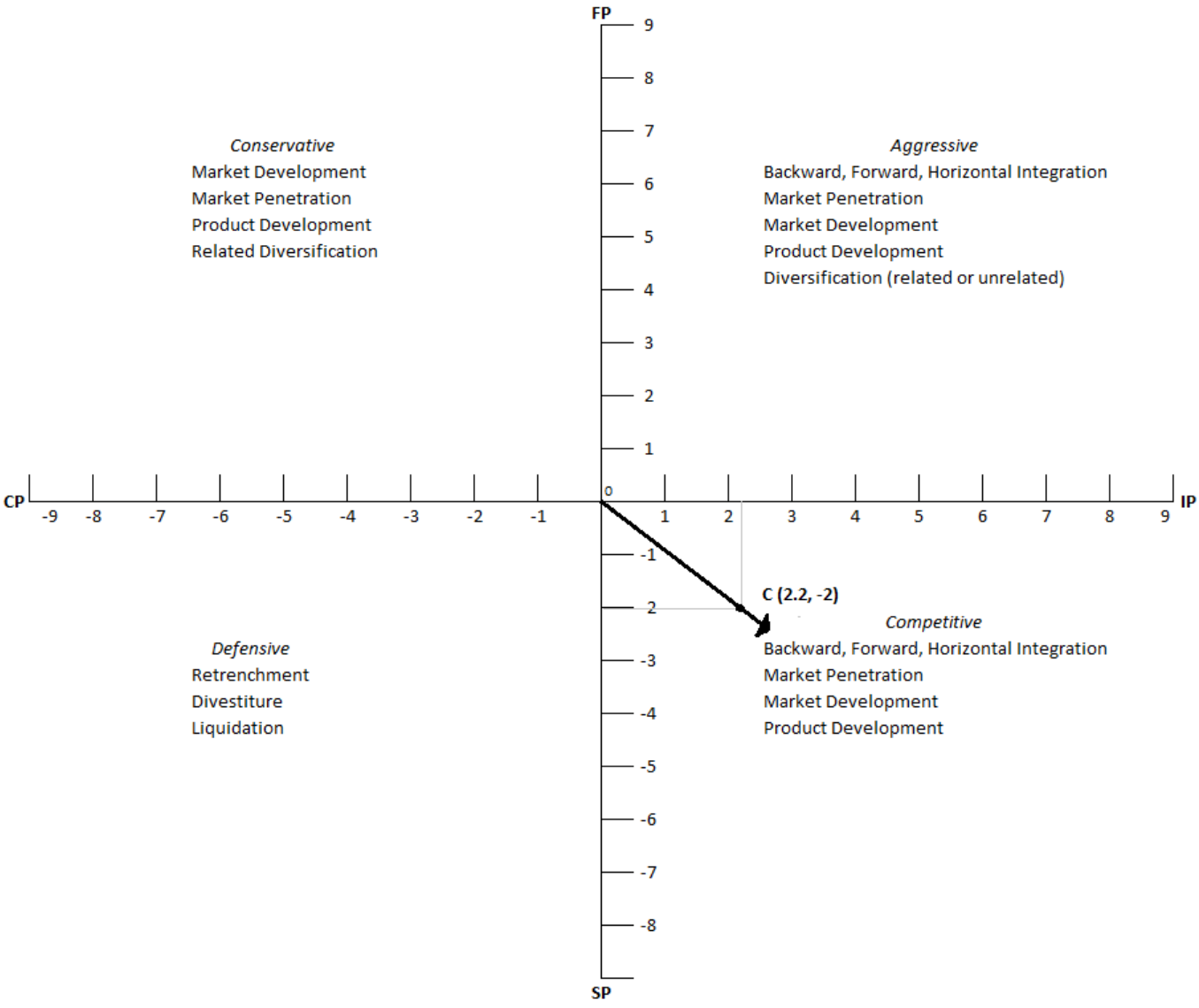
6.3 SPACE MATRIX

The SPACE Matrix revealed that Petron should focus on their competitive strategy. Petron should be focusing on their industry strength and environmental stability. As what was revealed in IE matrix, Petron also can choose to either do the backward, forward or horizontal integration; or to penetrate the market; or to focus on market or product development

Internal Analysis (+1worst, +7 best)			***External Analysis***	
Financial Position (FP)			**Stability Position *(-7 worst, -1 best)***	
Return on Investment	1		Rate of Inflation	-2
Leverage	4		Technological Changes	-5
Liquidity	3		Price Elasticity of Demand	-7
Working Capital	2		Competitive Pressure	-2
Cash Flow	1		Barriers to Entry into Market	-5
Financial Position Average (FP)	**2.2**		**Stability Position Average(SP)**	**-4.2**
Internal Analysis			***External Analysis***	
Competitive Position (CP) *(-7 worst, -1 best)*			**Industry Position (IP) *(+1worst, +7 best)***	
Market Share	-5		Growth Potential	7
Product Quality	-2		Financial Stability	5
Customer Loyalty	-3		Ease of Entry into Market	6
Technological know-how	-2		Resource Utilization	5
Control over Suppliers/Distributors	-2		Profit Potential	2
Competitive Position Average (CP)	**-2.8**		**Industry Position Average(IP)**	**5**

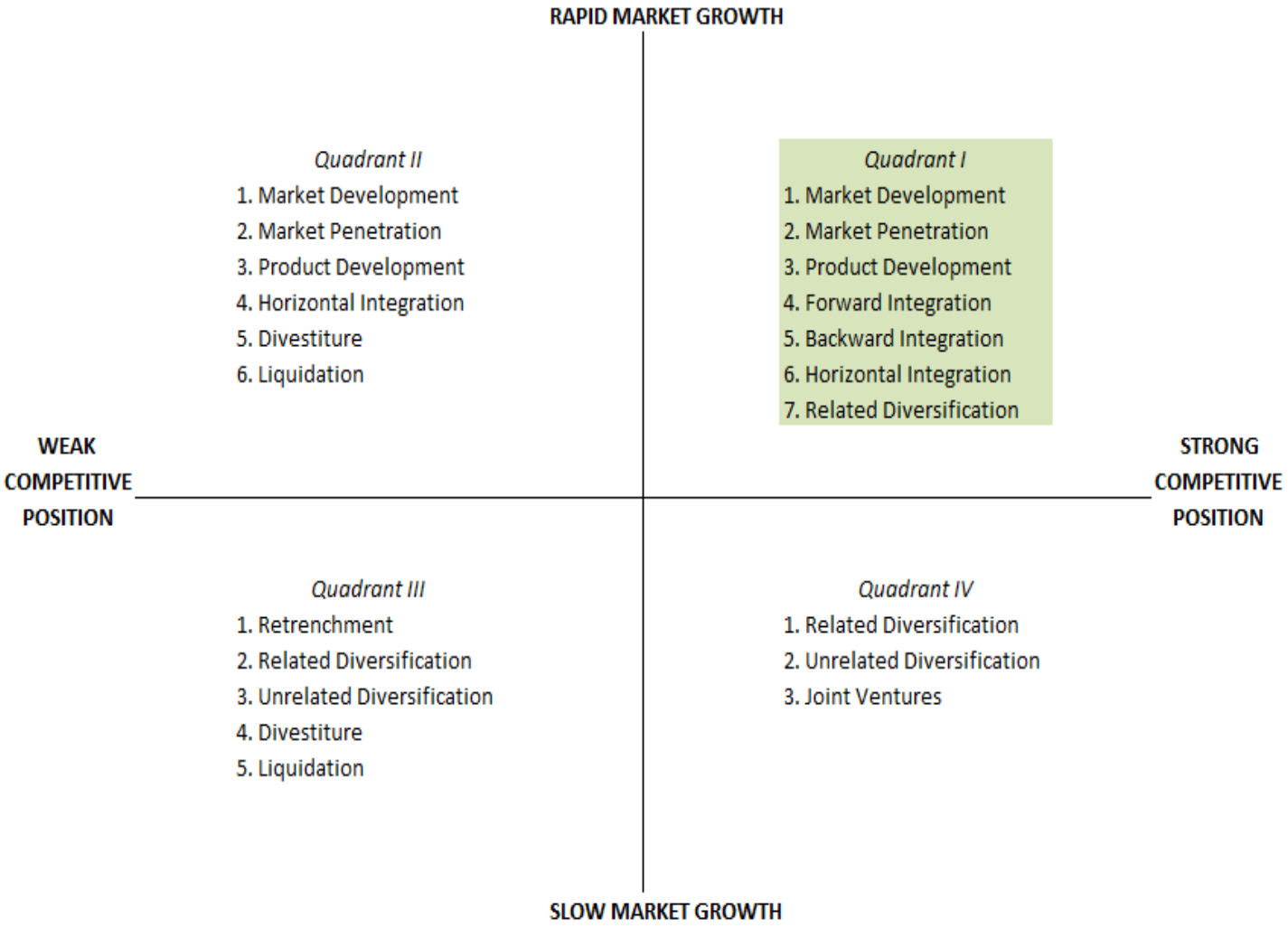
Coordinates (x,y)	(2.2, -2)
y coordinate	-2
x coordinate	2.2

Conclusion: Vector points in Competitive variant


FP
9
8
7
6
5
4
3
2
1
CP
-9 -8 -7 -6 -5 -4 -3 -2 -1
0
1 2 3 4 5 6 7 8 9
IP
-1
-2
-3
-4
-5
-6
-7
-8
SP
C (2.2, -2)
Conservative
Market Development
Market Penetration
Product Development
Related Diversification
Aggressive
Backward, Forward, Horizontal Integration
Market Penetration
Market Development
Product Development
Diversification (related or unrelated)
Defensive
Retrenchment
Divestiture
Liquidation
Competitive
Backward, Forward, Horizontal Integration
Market Penetration
Market Development
Product Development

6.4 GSM (Grand Strategy Matrix)

The Grand Strategy Matrix shows that Petron falls in Quadrant I which tells that Petron has a very strategic position. Petron should focus on its competitive advantage as much as possible by concentrating on existing market, implementing the set of product development and market penetration strategies. And Petron has also the option to diversify its single product line to decrease the risk related to a single product line. The option to be aggressive is also available to Petron and may benefit the firm in numerous ways.



6.5 BCG Matrix

The BCG Growth-Share Matrix is a portfolio planning model which uses the relative market share and market growth rate in order to identify the appropriate category for the company's business. The relative market share is derived by dividing the market share of the company and the market share of the largest competitor, while the industry growth rate is derived by dividing the industry's current year total revenue over the industry's previous year total revenue.

Based on the oil & gas industry growth rate of -13.19% and a relative market share of 1.0, the Petron Corporation is classified under the "cash cow" category of the growth-share matrix. This signifies that Petron yield an enormous amount of cash due to its large market share, and at the same time does not consume an enormous amount of cash due to having a negative growth rate, resulting to a greater inflow of cash. Staying in the category of a cash cow shows that Petron is already a mature company and just needs to sustain their business to continue being a cash cow in the future.

Relative market share:

$$\frac{\textit{Market share of company}}{\textit{Market share of largest competitor}} = \frac{30.40}{30.40} = 1$$

Explanation:

- Relative market share is derived by dividing the market share of the company over the competitor with the largest market share. This is to derive in order to know how close or far behind the company is to the largest competitor of the industry. In the result of the relative market share of Petron, it shows that Petron is the largest competitor in the industry.

Industry growth rate:

$$\frac{\textit{Industry currrent year total revenue}}{\textit{Industry previous year total revenue}} - 1 = \frac{1,187,490}{1,367,997} - 1 = -$$

13.19%

Explanation:

- Industry growth rate is derived by dividing the current total revenue of the industry over the previous total revenue of the industry. This is derived in order to know how the growth of sales of the industry from previous years. In the computation above, it shows that the industry in 2015 had lesser sales than in the previous year.

Industry total revenue:

$$\frac{\textit{Company's gross revenue}}{\textit{Market share of company}}$$

- **2015**

- $\frac{360,178,000,000}{30.40} = 1,184,796,052,632$

- **2014**
  - $\frac{482,535,000,000}{35.40} = 1,363,093,220,339$

Explanation:

- The company's gross revenue was used in order to derive the total revenue of the industry. It is derived by dividing the gross revenue of the company for the year over the market share of the company.

6.6 SUMMARY OF MATRIXES

Strategies - Matrix	SWOT	IE	SPACE	GSM	BCG	TOTAL
Market Development	✓	✓	✓	✓		4
Market Penetration	✓	✓	✓	✓		4
Product Development	✓	✓	✓	✓	✓	5
Related Diversification	✓			✓	✓	3
Unrelated Diversification					✓	1
Backward Integration	✓	✓	✓	✓		4
Forward Integration		✓	✓	✓		3
Horizontal Integration		✓	✓	✓		3
Retrenchment					✓	1
Divestiture					✓	1
Liquidation						-

Based on the above summary, it shows that Petron can adapt to 6 strategies. And if you could remember most of them fall in the competitive quadrant. Which means that Petron is attractive and has competitive advantages over its rivals. Petron could likewise improve its profitability by reducing some of its costs – making sure to communicate with the market well; or expanding into new markets and products ~ Product Development.

6.7 QSPM (Quantitative Strategic Planning Matrix)

The Quantitative Strategic Planning Matrix shows that Petron should pursue the strategy Product Development. This strategy is not just about offering a new product in the market, it requires keen attention to competitors and customer needs now and in the future, the ability to finance prototypes and manufacturing processes, and a creative marketing and communications plan.

		1		2		3	
		Product Development		Market Development and Penetration		Backward Integration	
Key Factors	Weight	AS	TAS	AS	TAS	AS	TAS
OPPORTUNITIES							
1. Increasing number of Vehicles	0.15	3	0.45	4	0.60	2	0.30
2. Auto-LPG as used in vehicles	0.07	0	-		-	3	0.21
3. Biodiesel as raw materials	0.15	4	0.60		-	0	-
4. Decreasing prices of motor vehicles and cars	0.10	0	-	4	0.40	0	-
5. Product Innovation (gasoline to improve engine performance)	0.08	4	0.32	4	0.32	2	0.16
THREATS							-
1. Decreasing value of Peso	0.10	4	0.40	2	0.20	0	-
2. Introduction of energy-efficient electric vehicles and hybrid cars (renewable sources of energy)	0.07	3	0.21	2	0.14	2	0.14
3. Strict regulatory framework by the government (e.g. production, environment, taxes and prices)	0.10	3	0.30	3	0.30	0	-
4. Limited Crude Oil Supply	0.10	3	0.30	0	-	4	0.40
5. Increasing number of small players in the petroleum retailing industry	0.08	0	-	4	0.32	4	0.32
TOTAL			-		-		-

	1.00							
STRENGTHS								
1. Innovation of engine efficient petroleum products	0.10	4	0.40	2	0.20	3	0.30
2. Customer engagement (e.g. Petron cards and other benefits)	0.09		-	4	0.36	0	-
3. Advanced equipment used in land and sea transport	0.08	0	-	0	-	4	0.32
4. Accessibility of retail stations	0.10	2	0.20	4	0.40	2	0.20
5. Strong brand recognition	0.09	2	0.18	4	0.36	3	0.27
6. Largest refinery and mass production (gas and petroleum products)	0.13	3	0.39	0	-	4	0.52
WEAKNESSES							
1. Air Pollutant product	0.10	4	0.40	0	-	2	0.20
2. Raw materials costly	0.12	4	0.48	0	-	3	0.36
3. Slow research and development	0.09	2	0.18	3	0.27	0	-
4. Quality of service in retail stations	0.10	0	-	4	0.40	4	0.40
TOTAL	**1.00**		**4.81**		**4.27**		**4.10**

VII. OBJECTIVES, STRATEGY RECOMMENDATIONS AND ACTION PLANS

7.1 STRATEGIC AND FINANCIAL OBJECTIVES

As what have shown in the matrices the company is in the “grow and build” and “competitive” section and in order for the company to achieve these two strategies, Petron should increase its market share and gain competitive advantage by having the following strategic and financial objectives:

7.1.1 Strategic Objectives

1. To increase company’s market share by 15% for 2016.
2. To invest in the company’s research and development department for development and innovation of biodiesel petroleum products and existing petroleum products.
3. Empowering employees and improve employee services to the customer by encouraging teamwork and excellence through trainings and seminars.
4. To grow, develop, increase number of retail stores and be globally competitive.
5. Expansion and development of refinery fully equipped with latest technology to increase number of production of high quality products.
6. Protect and promote the interest of the company’s stakeholders.

7.1.2 Financial Objectives

- Growth in Assets by 10%.
- Increase production by 10% in 2016 and 5% the proceeding years.
- Increase sales by the end 2016 7% and increments of 2% every year thereafter.

- Increase return on sales by 5.5% by the end of 2016 and approximately and additional of 1.4% every year thereafter.
- ROS is at approximately 10% by the end of 2018.
- Increase marketing efforts in the introduction of the use of biodiesel and existing petroleum products to generate more markets by allocating 15% of previous income to marketing expenses in 2016 and 5% thereafter.
- Decrease production cost by 5% for 2016 and 2% thereafter until 2018.
- Increase operating expense because of Research and Development process by 40% in 2016 and 10% thereafter.

7.2 REVISED VISION AND MISSION

Vision

To be the top and major provider in the world of customer solutions and its secondary businesses in energy sector with environmental-friendly products.

Mission

The company is committed to deliver sustainable excellence in business performance by:

- Developing system technology to serve its customers with quality products and services.
- Being an integral part of our customers' lives and delivering consistent customer experience through innovative products and services;
- Achieving customer loyalty by providing improved quality of products and offering eco-friendly with sustainable quality products to household, drivers and passengers.
- Developing strategic plans and partnerships in pursuit of growth and opportunity;
- Continuing growth of our refining assets to achieve majority of the market as our competitive advantage;
- Fostering an entrepreneurial culture that encourages teamwork, innovation, and excellence;

- Caring for community and the environment through environmental-friendly products and programs;
- Assurance of health, safety and security of our employees and develop human resource and skills to achieve a business environment of mutual understanding and trust.
- Conducting ourselves with professionalism, integrity, and fairness; and
- Protecting and promoting the interest of all our stakeholders.

7.3 RECOMMENDED BUSINESS STRATEGY

From the data gathered from the external analysis and internal analysis, the study has been able to point out the most appropriate strategies applicable to its current standing through the use of various matrices. From the analysis made in SWOT, SPACE, IE, and GSM, it shows that Petron is a competitive company. Therefore, Petron may focus on executing strategies such as market development, market penetration, product development, forward integration, backward integration, horizontal integration, and related diversification. However, strategies as many as these may not be efficient to be executed all at the same time due to cost restraints.

In order to have competitive edge among its major competitors in the downstream oil industry and achieve its goals and objectives in the long run, there are top 3 competitive strategies that the strategy tools and the matrices used in previous chapter showed. These are:

A. *Product Development* – the use of biodiesel or biogas as a mixture or raw materials of the company's petroleum products has a great impact on company's profitability, competitive advantage and growth. The use of biodiesel would mean a low production cost, a revolutionary innovation of the use of gas and oils and an eco-friendly petroleum product. The low production cost would greatly increase the net income of the company by reducing its expenses and production cost.

The awareness of customers of the destruction and endangered environment nowadays, causes them to change their product preference. The use of biodiesel would adapt to the changing preference of the customers since biodiesel is a renewable source of energy and an environmental-friendly product and the company would gain from this. The production of biodiesel petroleum product would be a revolutionary innovative product that may cause change in oil industry business industry.

B. *Market Penetration and Market Development* – The company would be able to increase its market share through increasing its production since there is increasing number of vehicle users and consumers and maximizing production would minimize cost therefore increasing income. Petron would also increase its market share through the use of biodiesel petroleum product since it would qualify to the changing preference of the present and future consumers.

As of 2008, Industry leader Petron Corporation initially launched its new E10 Premium product in selected service stations in Metro Manila as part of its efforts to make available cheaper and more environment-friendly fuels for motorists. Amid soaring gasoline prices, the company's E10 Premium will be priced P2.00/liter cheaper than Xtra Unleaded 93 RON.

Petron E10 Premium is a new specially formulated unleaded gasoline that meets and exceeds the requirements of the Philippine Biofuels Law. It contains 10% fuel grade Ethanol and 90% Petron Premium Unleaded Gasoline with enhanced fuel additive. This unique additive allows the removal of existing deposits, which results in improved power and fuel economy. The company's introduction of ethanol is ahead of the implementation of the Biofuels Law of 2006 which mandates a 5%

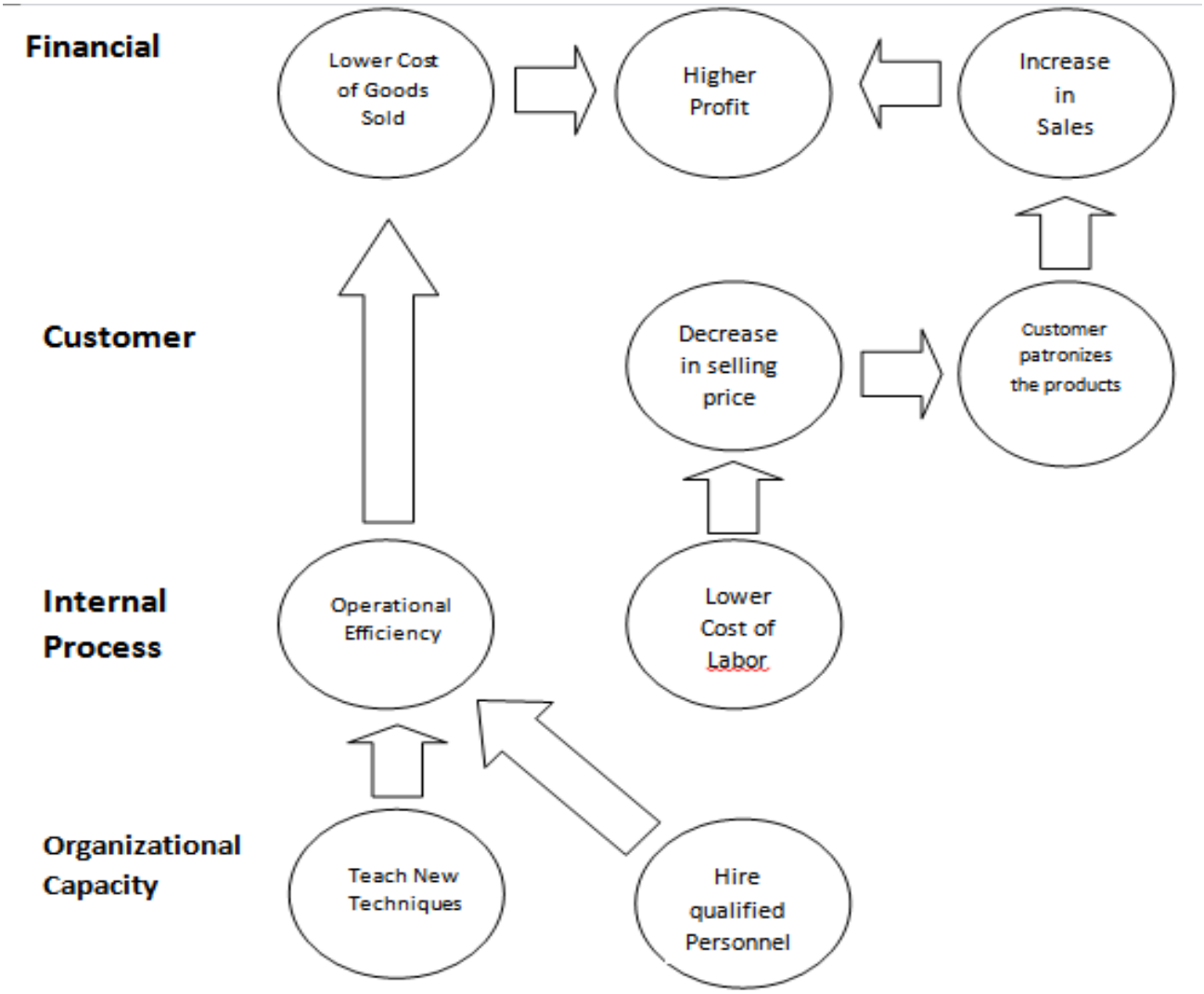
ethanol blend in gasolines by 2009 and a 10% blend by 2011. Though the biofuels product has been introduced way back, Petron must maximize its market visibility since at the near future, eco-friendly products will be of necessity.

The Petron Corporation may also increase its market share through implementing trainings regarding services given by retail stores employees to each customer since one factor for customer to remain loyal is the services offered. These strategies would increase the company's market share and therefore increasing profitability and the company may grow and develop.

C. *Backward Integration* – Since the company will be producing biodiesel petroleum products the company must be able to get supplier of biodiesel to maintain its mass production. As what we have seen in the financial reports of Petron, the company has high potential to finance expansion for backward integration being one of only few suppliers of biodiesel in the country.

Among the three strategies mentioned if mutually exclusive the product development strategy should be implemented since it has higher score in QSPM matrix performed in previous chapter and it will offer more benefits to the company and as the researchers noticed, after implementing the biodiesel petroleum product, the remaining two strategies will follow after without so much effort.

7.3 THE STRATEGY MAP



7.4 FINANCIAL PROJECTIONS

Petron should be able to achieve the following financial projections after successfully implementing the product development strategies:

1 Growth in Assets by 10%.
2 Increase production (inventory) by 10% in 2016.
3 Increase sales by the end 2016 7% and increments of 2% every year thereafter.
4 Increase return on sales by 5.5% by the end of 2016 and approximately and additional of 1.4% every year thereafter.
5 ROS is at approximately 10% by the end of 2018.
6 Increase marketing efforts in the introduction of the use of biodiesel and existing petroleum products to generate more markets by allocating 15% of previous income to marketing expenses in 2016 and 5% thereafter.
7 Decrease production cost by 5% for 2016 and 2% thereafter until 2018.
8 Increase operating expense because of Research and Development process by 40% in 2016 and 10% thereafter.

A. Statement of Financial Performance Projection for The Years 2016-2018(in millions)

	2015	**2016**	**2017**	**2018**
Net Sales	360,178	385,390	393,098	400,960
Cost of Sales	(328,438)	(312,016)	(305,776)	(299,660)
Gross Profit	31,740	73,374	87,322	101,300
Selling and Admin. Expense	(13,606)	(19,989)	(23,392)	(27,458)
Interest Expense and Other Financing charges	(5,533)	(5,730)	(5,630)	(5,720)
Interest Income	686	691	650	623
Share in Net Income of an Associate	133	125	129	131
Other Income (Expenses) -	(3,495)	(4,598)	(5,122)	(4,893)

Net				
Income Before Tax	9,925	43,873	53,957	63,983
Income Tax Expense	(3,655)	(15,794)	(19,425)	(23,034)
NET INCOME	6,270	28,079	34,532	40,949
Gross profit rate	8.82%	19.04%	22.21%	25.27%
Return on Sales	1.74%	7.29%	8.78%	10.21%

B. Asset Portion of Statement of Financial Position Projection for the Years 2016-2018 (in millions)

STATEMENTS OF FINANCIAL POSITION	**2015**	**2016**	**2017**	**2018**
ASSETS				
Current Assets				
Cash and Cash Equivalents	P 18,881	P 20,769	22,846	25,130
Financial Assets at Fair Value through Profit or Loss	509	560	616	678
Available-for-Sale Financial Assets	233	388		200
Trade and Other Receivables	30,749	33,824	37,206	40,927
Inventories	30,823	33,905	37,296	41,025
Other Current Assets	34,530	37,983	41,781	45,959
Non-Current Assets				
Available-for-Sale Financial Assets	388	-	200	-
Property, Plant and Equipment - net	161,597	177,757	195,532	215,086
Investment in Share of Stock of an Associate	1,814	1,939	2,068	2,199
Investment Property - net	112	123	136	149

Deferred Tax Assets	211	232	255	281
Goodwill	7,694	6,467	5,240	4,013
Other Non-current Assets –net	6,726	7,399	8,138	8,952
TOTAL ASSETS	**294,267**	**321,346**	**351,314**	**384,599**

7.5 DEPARTMENTAL PROGRAMS

7.5.1 Action Plan for Product Development

Program	Expected date/duration	Objectives	Person-in-charge
Improve petroleum products through biofuels integration	1 month	To increase the products that Petron offers to the market thereby increasing revenue	Research & Development
Market Survey on the use of biodiesel if the market would patronize the product.	1 - 3 months	To gather a reliable data and information on the behaviour of the market on the new product developed.	Research and Development
Examine gathered data and review results	2 weeks	To determine the number of production and number to be sold every year.	Research and Development
Introduce to the public the new product with different marketing strategies	1-3 months	To increase market share and therefore increase revenue	Marketing Department
Production of biodiesel petroleum products	Evenly during the year	To cater the demand for the new petroleum products	Production Department

Evaluation and inspection of progress	Every week for 4 months	The company should know the progress of the project and to detect arising problems during the process	Management
Make improvements if necessary	1 – 2 months	To improve product quality and maintain strategy success	Research and Development

7.5.2 Action Plan for Market Penetration and Market Development

Program	Expected date/duration	Objectives	Person-in-charge
Hire new employees if needed to improve the quality of service in retail stores	One month	To increase manpower in order to provide a quality service to customers	Human Resource Department
Employee trainings on customer relation and quality service in retail stores.	Once a month	To improve service offered by Petron to its customer and therefore increasing customer loyalty.	Human Resource Department
Marketing plan formulation to increase promo offered and intensive advertisements through use of social media, radio and TV stations.	1-3 months	To come up with the best customer engagement plan to be implemented by the company	Marketing Department
Implementation of the plan	1-2 months	To increase customer market share.	Marketing Department
Increase production and distribution	Evenly during the year	To increase the products that Petron offers to the market thereby increasing revenue	Production and Distribution Department

Evaluation and inspection of progress	Every week for 4 months	The company should know the progress of the project and to detect arising problems during the process	Management
Make improvements if necessary	1 – 2 months	To improve product quality and maintain strategy success	Marketing Department

7.5.3 Action Plan for Backward Integration

Program	Expected date/duration	Objectives	Person-in-charge
Acquisition of major supplier(s)	At least one year	To minimize cost on raw materials and to ensure supply along with securing bargaining leverage on vendors	Management

VIII - STRATEGY EVALUATION

8.1 Financial Perspective

OBJECTIVE	MEASURES	TARGET	INITIATIVE
1. Reduction of costs through efficient use of its resources	1. Proper training of employees in handling its resources in order to attain operational efficiency.	1. Increase income by reducing operational inefficiencies.	1. Develop training programs for employees.

8.2 Internal Business Processes

OBJECTIVE	MEASURES	TARGET	INITIATIVE
1. Hire personnel that can efficiently and effectively help the business attain its objectives.	1. The human resource department can develop well devised requirements in hiring new personnel.	1. Reducing operational inefficiencies through hiring competitive personnel.	1. Hire qualified personnel.

8.3 Learning and Growth Perspective

OBJECTIVE	MEASURES	TARGET	INITIATIVE
1. Job Mastery	1. Enlighten employees of their jobs and different skills and techniques to master their work.	1. Employees will attain job satisfaction therefore increasing productivity.	1. Teach different skills and techniques to employees to make their jobs easier.

8.4 Customer Perspective

OBJECTIVE	MEASURES	TARGET	INITIATIVE
1. Affordable products	1. Be cost effective in order to reduce selling price yet having the same or better income due to the reduction of costs	1. Increase sales through lower selling price	1. Reduce cost and to make it proportional to the selling price will result to more customers purchasing the products and will lead to greater income.

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APPENDIX

Financial Ratios

- **Profitability Ratios**

Gross Profit Rate = Gross Profit / Net Sales

Evaluates how much gross profit is generated from sales. Gross profit is equal to net sales (sales minus sales returns, discounts, and allowances) minus cost of sales.

Return on Sales = Net Income / Net Sales

Also known as "net profit margin" or "net profit rate", it measures the percentage of income derived from dollar sales. Generally, the higher the ROS the better.

Return on Assets = Net Income / Average Total Assets

In financial analysis, it is the measure of the return on investment. ROA is used in evaluating management's efficiency in using assets to generate income.

Return on Stockholders' Equity = Net Income / Average Stockholders' Equity

Measures the percentage of income derived for every dollar of owners' equity.

- **Liquidity Ratios**

Current Ratio = Current Assets / Current Liabilities

Evaluates the ability of a company to pay short-term obligations using current assets (cash, marketable securities, current receivables, inventory, and prepayments).

Acid Test Ratio = Quick Assets / Current Liabilities

Also known as "quick ratio", it measures the ability of a company to pay short-term obligations using the more liquid types of current assets or "quick assets" (cash, marketable securities, and current receivables).

Cash Ratio = (Cash + Marketable Securities) / Current Liabilities

Measures the ability of a company to pay its current liabilities using cash and marketable securities. Marketable securities are short-term debt instruments that are as good as cash.

Net Working Capital = Current Assets - Current Liabilities

Determines if a company can meet its current obligations with its current assets; and how much excess or deficiency there is.

- **Leverage Ratios**

Debt Ratio = Total Liabilities / Total Assets

Measures the portion of company assets that is financed by debt (obligations to third parties). Debt ratio can also be computed using the formula: 1 minus Equity Ratio.

Equity Ratio = Total Equity / Total Assets

Determines the portion of total assets provided by equity (i.e. owners' contributions and the company's accumulated profits). Equity ratio can also be computed using the formula: 1 minus Debt Ratio.

The reciprocal of equity ratio is known as equity multiplier, which is equal to total assets divided by total equity.

Debt-Equity Ratio = Total Liabilities / Total Equity

Evaluates the capital structure of a company. A D/E ratio of more than 1 implies that the company is a leveraged firm; less than 1 implies that it is a conservative one.

- **Valuation and Growth Ratios**

Earnings per Share = (Net Income - Preferred Dividends) / Average Common Shares Outstanding

EPS shows the rate of earnings per share of common stock. Preferred dividends is deducted from net income to get the earnings available to common stockholders.

Price-Earnings Ratio = Market Price per Share / Earnings per Share

Used to evaluate if a stock is over- or under-priced. A relatively low P/E ratio could indicate that the company is under-priced. Conversely, investors expect high growth rate from companies with high P/E ratio.

Book Value per Share = Common SHE / Average Common Shares

Indicates the value of stock based on historical cost. The value of common shareholders' equity in the books of the company is divided by the average common shares outstanding.