

Part 1 Business Overview

Form 56-1 Year 2015



1. Policy and Business Overview

1.1 Vision, Objectives, Goals, and Strategies

SPRC is one of the leading petroleum product producers in Thailand and among the most efficient refineries in the Asia Pacific region. Our "One Family" culture provides the basis for everything we do, with on overall goal to "Set the Standard".

Our One Family culture starts with taking care of ourselves and everyone around us, as demonstrated by our outstanding safety record. We have leveraged off our safety performance, taking the same attitude to drive our world class process safety and reliability programs and performance, which then allows us to maximize our facility utilization. We also focus on optimization, continually looking for ways to improve our financial performance through feedstock selection, yield optimizations, operational expense optimization, and waste elimination.

SPRC understands that to be successful, we must sustain a good balance between financial performance, stewardship of the environment and social development. At SPRC, we are committed to a long term balance in these objectives.

We own and operate a complex refinery with a capacity of 165,000 barrels per day of crude oil, which represents 13.2% of the refining capacity in Thailand. Our refinery is located in the Map Ta Phut Industrial Estate in Rayong province, approximately 200 kilometers southeast of Bangkok. The strategic location of our refinery provides proximity to key transportation options including a multi-product pipeline, trucks, coastal vessels, and a single point mooring, as well as major demand centers, which lowers transportation costs and provides several supply and distribution advantages. Many of our petrochemical feedstock customers are also located in the Map Ta Phut Industrial Estate, providing us with effective methods for managing costs associated with delivery of products to these customers.

Our refinery produces petroleum products, which include liquefied petroleum gas ("LPG"), premium and regular grades of gasoline, jet fuel, diesel, fuel oil, and asphalt, as well as petrochemical feedstocks used in the petrochemical industry, which include polymer grade propylene ("PGP"), LPG, and chemical grade naphtha. We sell most of our petroleum products to Chevron and PTT.

Our Vision: "One Family...Fueling the Future of Thailand"

Our Mission: "We are a highly engaged Family, dedicated to providing sustained superior returns to

our shareholders through safe and reliable operations, producing quality products that exceed customer expectations, in harmony with our communities and the

environment"

We intend to continue to focus on our core refining business and strengthen our position as one of the leading petroleum product producers in Thailand and the only pure complex oil refinery in Thailand, offering our customers a reliable source of high quality petroleum products both for domestic consumption and for export. Consequently, we are focused on improving the efficiency of our refining operations and distributing our petroleum products through channels that will maximize our profit.

To achieve our Vision and Mission, we focus on three Key Strategic Intents, with specific objectives and list of measurable actions to allow us to "Set the Standard".



People: Set the Standard in Thailand as the Employer of Choice

We focus on creating a unified "One Family" culture, a highly engaged family, a strong sense of institutional belonging, an energetic team spirit, and a dedicated and competent workforce, with an emphasis on operational excellence, technical expertise and creating an incident and injury free workplace.

Strategic objectives and measurable actions:

- Achieve the Best Employer Award among Thai companies
- Strengthen and embed the company's core values into behaviors of the SPRC family
- Develop World-Class leaders throughout the organization
- Build organizational capability on "Green" to create competitive advantage
- Integrate Sustainable Development programs to enhance a highly engaged family

Our key accomplishments in 2015 are:

- Implemented a Flexible Benefit program
- Developed Succession and Rising Star programs for career path development
- Conducted IIF Leadership and Supervisors development program
- Completed implementation of our Employee Stock Ownership Plan (ESOP)
- Developed a hiring/selection strategy to attract and retain high talent people
- Enhanced our Knowledge Management program
- Developed techniques for building Green capability

Operational Excellence: Set the Global Standard for Operational Excellence

We seek to be incident and injury free in all of our refinery's operations. We are committed to safety and have implemented an incident and injury free program since 2005, which outlines a set of best practices revolving around the principles of reliability and safety. Our strong incident and injury free family culture has helped us to achieve an excellent safety record and an excellent reliability record, which we strive to continuously improve. SPRC uses a refining business benchmarking service to understand how our performance compares to peers in the Asia Pacific region, and to provide us guidance on areas of performance that we can further improve on.

Strategic objectives and measurable actions:

- World Leading Safety performance and strong incident and injury free Family Culture
- Benchmarked Top of first quartile in mechanical and operational reliability through operating incident-free with industry leading reliability
- Benchmarked Top of first quartile in utilization of our facilities
- Benchmarked Bottom of first quartile in non-energy operating expenses through a relentless pursuit of waste elimination and efficiency mindset
- Benchmarked Sustained first quartile performance in energy efficiency through improvements while maintaining proper capital discipline
- Integrate Sustainable Development programs to meet our environmental expectations as well as social development and financial performance expectations



Our key accomplishments in 2015 are:

- Completed the year with no injuries, with 5.25 million man-hours since our last injury.
- Best ever performance with sustained high, top quartile, plant reliability and utilization
- Completed SPRC Academy program, Excellence Internship Program, IIF Leadership Program, and Rayong Youth Program
- Completed Process Safety Management self-assessment against Risk Based Process Safety and developed Process Safety Indicators working instruction
- Completed Hazard and Operability Study and Layer of Protection Analysis for Crude Distillation Unit, Vacuum Distillation Unit and Heavy Vacuum Gas Oil Hydrotreating Unit
- Improved Verification and Validation process for Safe Work Practice process
- Conducted Human Performance workshop for Operators and staff

Stakeholders: Set the Standard in Thailand for Shareholder Return

Our continued pursuit of operational excellence also involves identifying prioritizing and pursuing new initiatives to improve our gross refining margin. We continuously drive for improved financial performance through our Bottom Line Improvement Program (BLIP) with focus on crude optimization, product slate optimization, process optimization, improved refinery reliability, cracker feed synergy, energy efficiency, oil loss reduction, people efficiency and waste elimination.

Strategic objectives and measurable actions:

- Provide superior shareholder returns
- Drive toward 15% ROCE
- Benchmarked Achieve top of first quartile in return on investment through strengthening core business and implementing selective growth projects
- Sustain BLIP performance and achieve or surpass our incremental yearly stretch target
- Sustain the position of Supplier of Choice
- Integrate Sustainable Development program to meet our shareholder and communities expectation

Our key accomplishments for 2015 are:

- Achieved best ever Market Gross Refining Margin of \$10.41/bbl and best ever net income after tax of US\$245 million.
- Further improved Bottom Line Improvement Program (BLIP) performance and achieved annual stretch target with best ever performance in 2015
- Completed Advance Optimization Study for Hydrotreater Units, Blending, Linear Programing Health Check, and Innovation Quest Lite
- Through end of the year, achieved highest GHM and domestic sale among Thai refineries
- Achieved best ever Products Quality Giveaway performance
- Processed 10 new crudes in 2015, the highest number ever, with 2 of them new-to-theworld crudes
- Completed Project Development Phase I approval to increase our crude distillation unit sustainable capacity
- Integrated Sustainable Development into SPRC strategy and work processes, initiated our first ever Sustainability Report



1.2 Transition and milestone development

We were initially incorporated in 1992 as a joint venture between Chevron and PTT. Our refinery commenced commercial operations in 1996 with a design capacity of 130,000 barrels per day, and we have gradually brought our production to the present capacity of 165,000 barrels per day through a series of improvements and upgrades.

In response to poor economic conditions following the Asian financial crisis, in 1999, we entered into an alliance with Rayong Refinery Company Limited ("RRC") to integrate the operations of our refinery with its refinery (the "Operating Alliance"). The Alliance Refining Company Limited was incorporated as a company jointly owned by us and RRC to operate the two refineries. On 8 February 2006, we and RRC agreed to terminate the Operating Alliance, effective on 1 February 2009. Since 2009, SPRC has been operating as a stand-alone pure-play refinery.

On 7 June 2012, the Ministry of Commerce accepted for registration our conversion into a public limited company under the Public Limited Company Act (PLCA) and the name of our Company was changed to Star Petroleum Refining Public Company Limited.

In early 2014, we conducted a major capital project to improve several of our refinery's key facilities, including an upgrade to our Residue Fluidized Catalytic Cracker Unit which has improved its product yields and reliability. We also made investments to improve our ability to recover high-value PGP and Installed Air Pre-Heater units in our crude distillation and vacuum distillation unit furnaces, which improved our refinery's energy efficiency.

In 2015, SPRC completed an Initial Public Offering (IPO), with our shares starting to trade on the Stock Exchange of Thailand on 8 December 2015. Through the IPO, PTT sold down its shareholding from 36.0% to 5.4%. SPRC issued and sold 197 million new shares to the public and sold 36 million shares through an Employee Stock Ownership Program (ESOP). Chevron's shareholding was diluted to 60.6%, and 34.0% of our shares are publicly traded.

Shareholding Structure

We are governed by our Articles of Association and the provisions of the PLCA. We were registered as a limited company in November 1992 and converted to and registered as a public limited company in June 2012. In 2015, following completion of our IPO, the shareholding structure changed as shown below.



Chevron and PTT have agreed not to sell any of their shares for a period of 1 year following the 1st day of trading, which was 8 December 2015. Of the 34.03% of "Other Shareholders", 0.07% is owned by our executives and 0.82% is owned by our staff through our ESOP program.



1.3 Relationship with major shareholder

Chevron is one of the largest energy companies in the world. We benefit from being an affiliate of Chevron through access to Chevron's global procurement services for crude oil and other feedstocks, a global refined petroleum products sales network, advanced technological, operational, engineering and other technical support services, as well as access to Chevron's master supply agreements for materials and services. We also benefit from the availability of Chevron and its affiliated management and technical personnel, including senior personnel such as our current chief executive officer and chief financial officer. Chevron intends to remain a significant shareholder in SPRC following our listing, and its continued objective for SPRC is that SPRC remains a top performer in terms of safety and reliability in the Thai refining community, driven by a dedicated and competent workforce.



2. Nature of Business

SPRC is one of the leading petroleum product producers in Thailand and among the most efficient refineries in the Asia Pacific region. We own and operate a complex refinery with a capacity of 165,000 barrels per day of crude oil, which represents 13.2% of the refining capacity in Thailand. We are a pure play refinery, purchasing crude and other feedstocks primarily through Chevron and PTT, and we sell about 80% of our products through our Product Offtake Agreement to Chevron and PTT, with the remaining 20% to mostly petrochemical companies. In order to maximize value for SPRC and its shareholders, we also emphasize placement of products in the higher value domestic market, achieving 87% placement in 2015, higher than the industry average.

2.1 Crude and Product

Our refinery is capable of processing a wide range of crude oil, which we typically source from the Middle East and the Far East. Our choice of feedstocks and product slate at any time depends on relative prices and yields. We decide on our product slate with input from our offtakers, based on our assessment of demand and projected prices for the various products that we can produce, typically around three months in advance of expected orders.

Our primary petroleum products from the distillation and conversion of crude oil are hydrocarbon fuels, which include LPG, premium and regular grades of gasoline, jet fuel, diesel, fuel oil and asphalt, as well as petrochemical feedstocks used in the petrochemical industry, which include PGP, LPG, chemical grade naphtha, mix C4, reformate and sulfur.

2.2 Revenue structure

The following table sets forth the sales revenue and sales volumes of our various petroleum products for the periods indicated. Sales prices and revenue include excise taxes, oil fund, conservation fund and local taxes on fuels as required. These taxes are pass-through taxes that are sent on to the government.

	Year Ended December 31,		Year Ended December 31,			Year Ended December 31,			
		2013			2014			2015	
Sale Revenue (in millions of US\$)	Sales Revenue	Volume (thousand barrels)	\$/bbl ⁽²⁾	Sales Revenue	Volume (thousand barrels)	\$/bbl ⁽²⁾	Sales Revenue	Volume (thousand barrels)	\$/bbl ⁽²⁾
PGP	176.1	1,643	107.18	135.2	1,368	98.85	131.4	1,834	71.64
LPG	242.5	3,383	71.68	205.9	3,082	66.81	146.4	3,223	45.42
Light Naphtha	246.0	2,522	97.55	232.4	2,582	90.00	147.7	2,867	51.53
Gasoline	2,431.1	15,684	155.01	2,158.5	14,888	144.98	1,586.4	15,797	100.42
Jet Fuel	684.0	5,598	122.18	417.1	3,814	109.36	306.4	4,752	64.48
Diesel	3,073.0	23,299	131.89	2,506.4	20,701	121.08	2,073.8	23,663	87.64
Fuel Oil	679.5	7,199	94.38	504.9	6,037	83.63	273.2	6,404	42.66
Asphalt	87.8	906	96.99	83.7	934	89.56	85.5	1,455	58.73
Mix C4	224.5	2,372	94.64	162.9	1,900	85.76	131.5	2,607	50.44
Crude	85.0	763	111.39	86.1	1,094	78.71	4.0	65	61.13
Other ⁽¹⁾	507.0	5,210	97.32	541.5	6,050	89.51	334.5	5,671	59.00
Total Revenue	8,436.5	68,579	123.02	7,034.6	62,450	112.64	5,220.8	68,338	76.40

⁽¹⁾ Includes sulfur, reformate and products sold pursuant to our cracker feed exchange with PTT Global Chemical

We sell a significant portion of our petroleum products primarily through the Offtake Agreement that we have entered into with Chevron and PTT and we sell our products both domestically and for export.

⁽²⁾ Includes excise tax, energy conservation promotion fund, oil fuel fund and local tax.



From time to time, we also enter into a variety of short-term product sales agreements on a spot or term basis for the remaining petroleum products that are produced in our refinery.

Our top two customers are Chevron and PTT. The following table sets forth the percentage of total revenue accounted for by Chevron and PTT, respectively, for the periods indicated.

	Year Ended December 31,					
_	2013	2014	2015			
_	% of Total Revenue					
Chevron	34.3	33.8	50.5			
PTT	49.6	48.7	34.8			
Others	16.1	17.5	14.7			
Total	100.0	100.0	100.0			

The following table sets forth our sales revenue for our petroleum products that are sold domestically as compared to export for the periods indicated. The domestic market is typically higher value than the export market, and SPRC has worked successfully with its customers to increase placement of products in the domestic market, as shown by the reduced exports from 2013 through 2015.

	Year Ended December 31,						
	201	13	2014	ļ	2015		
	Sales Revenue	% of Total Revenue	Sales Revenue	% of Total Revenue	Sales Revenue	% of Total Revenue	
		(in millio	ns of US\$, ex	cept for perc	entages)		
Petroleum Produc	ts						
Domestic	7,055.2	83.6%	6,069.2	86.3%	4,748.5	91.0%	
Export	1,381.2	16.4%	965.4	13.7%	472.3	9.0%	
Total revenue	8,436.5	100.0%	7,034.6	100.0%	5,220.8	100.0%	

The following table sets forth our sales revenue for each of our petroleum products and such revenue as a percentage of our total revenue for the periods indicated.

	Year Ended December 31,						
	20	13	20	14	2015		
		% of		% of		% of	
Sale Revenue (in millions of US\$)	Sales Revenue	Total Revenue	Sales Revenue	Total Revenue	Sales Revenue	Total Revenue	
(111 11111110113 01 033)	Hevenue	Hevenue	nevenue	Hevenue	Hevenue	Hevenue	
Polymer Grade Propylene	176.1	2.1%	135.2	1.9%	131.4	2.5%	
Liquefied Petroleum Gas ⁽¹⁾ .	242.5	2.9%	205.9	2.9%	146.4	2.8%	
Light Naphtha	246.0	2.9%	232.4	3.3%	147.7	2.8%	
Gasoline	2,431.1	28.8%	2,158.5	30.7%	1,586.4	30.4%	
Jet Fuel	684.0	8.1%	417.1	5.9%	306.4	5.9%	
Diesel	3,073.0	36.4%	2,506.4	35.6%	2,073.8	39.7%	
Fuel Oil	679.5	8.1%	504.9	7.2%	273.2	5.2%	
Asphalt	87.8	1.0%	83.7	1.2%	85.5	1.6%	
Mix C4	224.5	2.7%	162.9	2.3%	131.5	2.5%	
Crude	85.0	1.0%	86.1	1.2%	4.0	0.1%	
Others ⁽²⁾	507.0	6.0%	541.5	7.7%	334.5	6.4%	
Total Revenue	8,436.5	100.0%	7,034.6	100.0%	5,220.8	100.0%	

⁽¹⁾ Includes Government fuel subsidies

⁽²⁾ Includes sulfur, reformate and products sold pursuant to our cracker feed exchange with PTT Global Chemical



2.3 Product Pricing

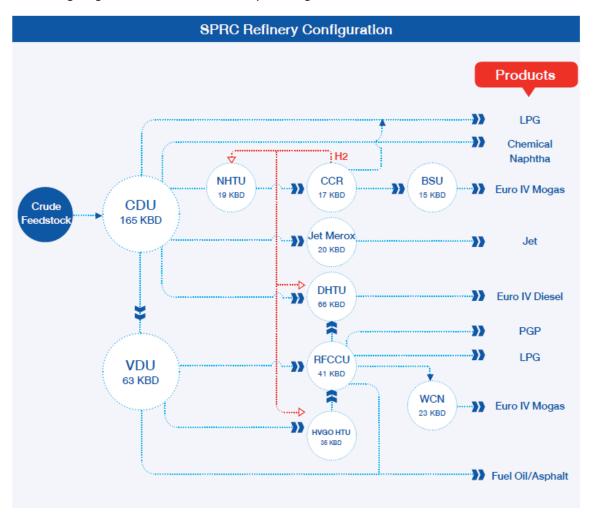
Most of the products sold through the offtake Agreement are benchmarked off the Mean of Platts Singapore, or MOPS. Thai domestic prices are adjusted from MOPS pricing with certain transportation, production, product quality, and market adjustments as appropriate.

Domestic sale prices of petroleum products sold outside of the Offtake Agreement are also market driven and are generally based on the monthly average of regional benchmark prices with certain adjustment for the applicable product in the month that they are sold. Our exports for petroleum products are also generally based on benchmark pricing, such as the price for the relevant product quoted on MOPS, plus or minus a premium or discount based on market conditions and negotiations with potential purchasers as well as differences in product quality and location.

2.4 Production Facilities and Processes

Our production facilities are located in Rayong province, approximately 200 kilometers to the southeast of Bangkok. Our refinery is a cracking refinery as compared to a hydroskimming refinery. Hydroskimming refineries are relatively low complexity refineries that have a significant amount of fuel oil yield. Cracking refineries are able to upgrade a significant portion of fuel oil into higher value transportation fuels such as gasoline, jet and diesel, providing a much higher margin than hydroskimming refineries.

The following diagram illustrates our refinery's configuration:





Our refinery's main units comprise the following (all capacity figures are given as of 31 December 2015):

- one Crude Distillation Unit ("CDU") that heats crude and then distills it, with a capacity of 165,000 barrels per day that uses crude oil as a primary feedstock and primarily produces LPG, naphtha, jet fuel, diesel and long residue;
- one Vacuum Distillation Unit ("VDU") that uses a vacuum to improve distillation of long residue from the CDU, with a capacity of 63,400 barrels per day, and primarily produces diesel, heavy and very heavy vacuum gas oil, fuel oil and asphalt.
- one Naphtha Hydrotreater Unit ("NHTU"), with a capacity of 18,900 barrels per day, which
 removes sulfur from heavy naphtha prior to feeding it to the continuous catalytic regeneration
 reformer;
- one Continuous Catalytic Regeneration Reformer ("CCR"), with a capacity of 17,400 barrels per day, which converts low-octane naphtha into high-octane reformate for production of various grades of unleaded gasoline;
- one Benzene Saturation Unit ("BSU") that reduces the benzene in reformate, with a capacity of 15,100 barrels per day;
- one Jet Merox Unit that treats jet streams from the CDU in order to produce jet fuel, with a capacity of 20,000 barrels per day;
- one Diesel Hydrotreater Unit ("DHTU") that treats streams from the CDU, VDU and RFCCU to produce diesel, with a capacity of 66,400 barrels per day;
- one Residue Fluidized Catalytic Cracker Unit ("RFCCU") that cracks petroleum hydrocarbons in
 order to convert heavy low value fractions of petroleum crude oils to more valuable and higher
 margin products, with a capacity of 40,800 barrels per day. The RFCCU operates in conjunction
 with one propane/propylene splitter that allows for the separation and production of polymer
 grade propylene (PGP), with a capacity of 6,400 barrels per day, as well as merox treating units
 designed to make LPG and gasoline products meet product specifications with a total capacity
 of 49,000 barrels per day;
- one Whole Cracked Naphtha Hydrotreater Unit ("WCN") that treats gasoline from the RFCCU, with a capacity of 22,600 barrels per day; and
- one Heavy Vacuum Gas Oil Hydrotreater Unit ("HVGO HTU") that removes sulfur and improves feed quality for the RFCCU, with a capacity of 34,700 barrels per day.

2.5 Overview of the Refinery Production Process

By heating crude oil to a certain temperature and sending it to the crude distillation unit, it is possible to separate crude oil into different fractions, each with its own boiling range. The crude distillation unit produces several streams that are utilized in the refinery to produce different petroleum products. The lighter boiling components rise up the crude distillation unit while the heavier boiling components fall to the bottom. As the lighter components pass through the crude distillation unit, the oil's temperature gradually drops and vapor is condensed. The distillation of oil vapors at different temperatures produces various petroleum products such as LPG, naphtha, jet fuel, and diesel. The heavier components are sent to the vacuum distillation unit which reduces the boiling point of the heavier components to facilitate the separation of diesel and heavy vacuum gas oil from residue. The residue



from the vacuum distillation unit is used to produce fuel oil and asphalt. The heavy vacuum gas oil and very heavy vacuum gas oil are sent to the RFCCU.

The heavy vacuum gas oil from the vacuum distillation unit is fed to the heavy vacuum gas oil hydrotreater, which removes sulfur and improves feed quality for the RFCCU. The RFCCU converts streams from the vacuum distillation unit and the heavy gas oil hydrotreater unit that would otherwise be used to make lower value fuel oil into lighter, more valuable products such as LPG, gasoline and diesel by cracking, or breaking, large molecules into smaller molecules. Our RFCCU also upgrades a portion of the vacuum distillation unit residue and this allows our refinery to process lower cost, heavier crude oils. A dedicated distillation process is used to separate components into refinery fuel gas, PGP, LPG, gasoline, diesel, and a small amount of fuel oil. The gasoline from the RFCCU is treated in the whole cracked naphtha hydrotreater unit to meet Euro IV gasoline specifications.

Some of the lighter components from the crude distillation unit are sent to a series of towers called the light end recovery. The separated components consist of a refinery fuel gas, LPG, light naphtha and heavy naphtha. Light naphtha is sent to the gasoline-blending unit, or sold as chemical naphtha to petrochemical companies as ethylene cracker feedstock. Low octane heavy naphtha is routed to the naphtha hydrotreater to remove sulfur and then to the continuous catalyst regeneration reformer to boost its octane by changing the shape of the oil molecules to higher octane molecules. The reformed naphtha, or reformate, is sent to the benzene saturation unit which reduces benzene content in order to comply with Euro IV specifications. The product from the benzene saturation unit is used to blend different grades of unleaded gasoline.

The oil from one of the streams of the crude distillation unit is directed to the Jet Merox Unit to remove contaminants to produce jet fuel. Other streams from the crude distillation unit, the vacuum unit and the RFCCU are treated in the diesel hydrotreater unit to produce Euro IV diesel.

2.6 Feedstocks

2.6.1 Crude Oil Supply

The main feedstock used in our refinery production process is crude oil. We are capable of processing a wide range of crude oil, including crude oil from the Middle East, Far East and other regions. As our refinery has upgrading and conversion units, we are able to use a higher proportion of heavy sour crude from the Middle East, which has a higher sulfur content and is less costly than light sweet crude, to produce a product slate that matches customer demand. We use Chevron's global crude and feedstock procurement network, crude characterizations and proprietary linear program to optimize the quantity and type of crude oil and other feedstocks that serve as inputs in our refinery. This allows us to more precisely source, select and blend crude oil that enhances our gross refining margins while meeting customer demand. Our crude oil slate is determined after we decide on our product slate with input from our offtakers, based on our assessment of customer demand and projected prices for the various products that we can produce, typically around three months in advance of product sales. We input pricing and product demand information into Chevron's proprietary linear software, which takes into account our production processes and constraints, to determine the optimal blend of crude oil to purchase.

We source and purchase crude oil primarily through Chevron and PTT and their affiliates on credit terms that are in line with market practice.



2.6.2 Other Refinery Feedstocks and Raw Materials

We also purchase long residues and other feedstocks for processing in our refinery. We purchase such principal feedstock for our refinery primarily from Chevron under feedstock supply agreements. We use hydrogen to remove sulfur from our petroleum products as part of the hydrotreating process. We have entered into agreements with outside suppliers to provide supplemental hydrogen to our refinery.

2.6.3 Intermediate Products Exchange

We have entered into a cracker feed exchange with PTTGC where we supply heavy vacuum gas oil as supplemental feed to PTTGC's hydrocracker, and PTTGC supplies us with hydrocracker bottoms as a supplemental feed to the RFCCU. The objective of the exchange is to increase yields of higher value products at both our RFCCU and PTTGC's hydrocracker. Our facilities are located near to those of PTTGC's refinery, and the intermediate products exchange is accomplished through use of direct pipelines.

2.6.4 Catalysts

We use various types of catalysts in many of the major units in our refinery to facilitate reactions to improve product yields and product quality. Catalysts typically last from two to five years, depending on the type of catalyst used and the unit in which it is used. We evaluate and select catalysts based on their performance and price and the needs of our refinery. We typically purchase catalysts on a spot basis, based on technical and commercial considerations at the time. However, our Residue Fluidized Catalytic Cracker Unit requires continuous catalyst make-up, and we typically enter into term contracts for this continuous supply.

2.7 Flows and Storage

2.7.1 Crude Oil

We primarily receive crude oil shipments through a single point mooring system, that we own jointly with PTTGC, that permits us to receive shipments from very large crude carriers, or VLCCs, of up to 265,000 dwt capacity. VLCCs significantly reduce crude transportation costs from the Middle East and we also take advantage of co-loading VLCCs with PTTGC in order to share these transportation costs. We are also able to receive crude oil in smaller shipments through a pier in our marine terminal. This crude is delivered to storage tanks at the refinery through pipelines that connect directly to our refinery

2.7.2 Product Distribution

The strategic location of our refinery in the Map Ta Phut Industrial Estate in Rayong provides us access to a convenient product delivery network that allows us to distribute our products in a cost effective manner via transmission pipelines, coastal vessels via our marine terminal, and trucks via our truck loading terminal, to Thailand's main demand clusters for petroleum products. In addition, several petrochemical companies that purchase products from our refinery are also located in the vicinity of the Map Ta Phut Industrial Estate. Our refinery is connected to the Thappline pipeline and our offtakers transport gasoline, jet fuel and diesel through it to distribution networks in the Bangkok area. We operate a booster pump, which is jointly owned with PTTGC, to deliver products to the Thappline pipeline.

We also have a marine terminal with two piers to distribute products throughout Thailand. The main pier has five berths and is able to accommodate vessels of up to 80,000 dwt and is used for the



distribution of petroleum products both domestically and to export markets as well as to receive domestic crude oil and other feedstocks. We also have a second pier that has two berths for the loading and distribution of LPG. We contracted out a portion of the capacity of the LPG pier to PTTGC. Such contract terminated in July 2015.

We also operate a truck loading terminal for our offtakers to facilitate the distribution of our petroleum products to the southeast and northeast of Thailand, within Rayong province and to the Indo-China export market, including Laos, Cambodia and Myanmar. Our truck loading terminal also contains an asphalt loading rack to distribute asphalt and we charge operating costs of the truck loading terminal to offtakers. We have installed a vapor recovery unit and bottom loading capabilities in our truck terminal to reduce VOC emissions at the terminal.

2.7.3 Storage

Our refinery has a total of 71 storage tanks and facilities to enable us to store feedstocks after delivery and before process, products before delivery and certain intermediate processing streams. We have an aggregate nominal crude oil storage capacity of approximately 4.9 million barrels, representing up to 29 days' supply of crude oil. Thai regulations require us to hold a legal reserve of crude oil equivalent to 6% of our annual sale of petroleum products domestically. Our product inventory increases and decreases from time to time reflecting timing of product deliveries and operational variations.

2.8 Competition

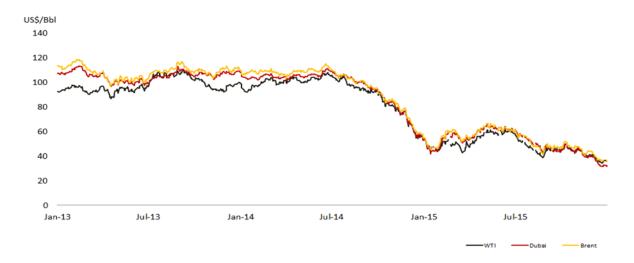
The refining industry in Thailand is highly competitive. As of 31 December 2015, there were eight refineries in Thailand, with a combined refining capacity of 1,251.5 kbpd. We principally compete with five other domestic petroleum refineries in Thailand with a combined capacity of 1,067 kbpd, which are Thai Oil, Esso, Bangchak Petroleum, PTTGC, and IRPC. PTT, which is Thailand's largest oil and gas company, holds significant interests in three of our principal competitors: Thai Oil, PTTGC and IRPC.

2.9 The Oil Refining Industry

2.9.1 Current Oil Price Environment

In 2015, crude prices were volatile with Dubai prices moving between US\$32 and US\$66/bbl, and an average of US\$51/bbl which was lower than the average of US\$97/bbl in 2014. The Dubai crude prices dropped from US\$74/bbl in the fourth quarter 2014 to US\$52/bbl in the first quarter 2015, because of a supply glut in crude oil driven by US production gains and OPEC maintaining its crude oil output. The International Monetary Fund (IMF) also cut forecast global economic growth by 0.3% for year 2015 and 2016 reflecting slowing growth of the global economy. Lower economic growth lowered oil demand growth. Dubai crude price rebounded in the second quarter of 2015 to US\$61/bbl following disruption to Middle East supply due to unrest in Yemen and the expected start in decline of US crude production with a reported decline in the number of US drilling rigs operating. High refinery margins also supported crude oil demand. In the third quarter of the year, Dubai crude prices dropped to US\$50/bbl due to continued high production rates by OPEC. Additionally, the slowdown in China's economic growth led to reduced crude imports. In the last quarter of 2015, average Dubai crude prices further declined to US\$41/bbl, reflecting increased OPEC production and continued oversupply in the crude oil market.





2.9.2 Oil Industry Outlook

The International Monetary Fund (IMF) has projected world economic growth to expand by 3.4% in 2016. Advanced economies are projected to grow by 2.1% in 2016, which is higher than the 1.9% in 2015. Developing countries' economic growth forecast is 4.3% in 2016, higher than 4% in 2015. The Bank of Thailand (BoT) projects Thai economic growth of 2.5% in 2015 and 3.5% in 2016.

The IEA expects continued weak demand growth in 2016 of 1.2 MBPD up to 95.7 MBPD, due to economic slowdowns in Europe, Japan, China and the United States. US oil demand in 2016 is dependent on economic growth and oil price level. Oil prices are expected to stay low, supporting increased demand for transportation fuels, especially gasoline. Most analysts estimate gasoline demand growth will remain relatively strong. Jet, Diesel and Fuel Oil demand growth are expected to remain relatively flat due to slow economic growth.

Excess crude supply is expected to continue in the near term due to increasing Iranian crude shipments of up to 500 kbd by mid-2016 after nuclear sanctions have been lifted. OPEC and non-OPEC countries are maintaining their production levels. However, low oil prices should put pressure on US production.

2.10 Environmental Matters

Our operations are subject to various environmental laws and regulations, including the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992), the Factory Act B.E. 2535 (1992) and Fuel Control Act B.E. 2542 (1999). In 1992, Thailand strengthened environmental laws and regulations in order to promote sustainable development and to better protect the natural environment. Environmental laws and regulations, among other matters, restrict the type, quantities and concentration of various substances that can be released into the environment. Our operations are also subject to laws and regulations relating to the generation, handling, storage and transportation of petroleum products, as well as the treatment of pollutants. These environmental laws and regulations, particularly those relating to waste management, air emissions and water discharged from our operations, affect our oil refining business. The primary governmental bodies which supervise the environmental aspect of our operations are the Office of Natural Resources and Environmental Policy and Planning under the Ministry of Natural Resources and Environment, the Pollution Control Department of the Ministry of Natural Resources and Environment, the Industrial Estate Authority of Thailand, the Industrial Works Department of the Ministry of Industry and the Department of Energy Business of the Ministry of Energy.



We have implemented various pollution control and other environmental impact mitigation measures to control our air emissions as required by applicable law, including applying advanced technologies to reduce emissions and conserve resources. Our refinery has implemented a high efficiency wastewater treatment system consisting of an oil and water separator that permits the recycling of oil, an induced air flotation unit that also improves oil and water separation, an equalization unit that mixes and controls the volume and concentration of contaminant and bio treaters that remove contaminants prior to discharging water.

We conduct regular reviews aimed at achieving compliance with our environmental policies. We believe we are in compliance in all material respects with environmental laws and regulations applicable to us.

SPRC believes in maintaining a good balance between environmental stewardship, financial performance, and social development. We have incorporated this fundamental Sustainable Development belief into the way we do business. Several key Focus Areas for us to continuously improve our performance include Green House Gas Emissions, Air Emissions, Oil Spill Prevention and Response, Water Management and Waste Management.



3. Risk Factors

It is the policy of SPRC to conduct its business in a manner to ensure that risks of SPRC are identified, analyzed, and managed so that they are mitigated to an acceptable level. SPRC has developed and implemented a Risk Management Policy which applies to all aspects of the business and operations of SPRC and is designed to manage, including but not limited to, operational risk, financial risk, trading risk, reputation risk and strategic risk.

The Risk Management Committee includes the Chief Executive Officer, the Deputy Chief Executive Officer - Operations, the Supply and Planning Manager, and the Chief Financial Officer.

SPRC utilizes a risk based approach to internal control and decision making, designed to provide reasonable assurance of achieving our business objectives with fit for purpose risk mitigation measures. SPRC conducts risk assessments annually to identify potential risks to our operations and identify effective ways of responding to and mitigating those risks. Risk response is routinely monitored to ensure plans are progressed on a timely basis and make adjustments as necessary if conditions change. SPRC reviews its Risk Matrix, mitigation plans, and progress on those plans on a regular basis, with reports to the Audit Committee every quarter.

SPRC has developed business processes to provide practical tools for day-to-day risk based decision-making that weighs threats against costs and other business impacts, as well as procedures that set out the nature, role, responsibility and authority of risk assessment processes within SPRC to ensure that risk assessment is conducted in an effective and timely manner.

3.1 Strategic Risk

3.1.1 Market Risk

The refining business can be a volatile and cyclical business with crude oil and product prices fluctuating significantly. Crude and product prices are set by global economic forces and are not in our control. During 2015, Dubai crude oil prices dropped from US\$54/bbl at the start of the year to US\$32/bbl at the end of the year. Product prices tend to follow crude prices as they increase and decrease, which impacts our revenue. However, our profitability is driven by gross hydrocarbon margin — which is the average price of our products less the average price of our crude feed. This margin tends to be less volatile than crude prices. SPRC works diligently in those areas within our control to drive our profitability. These start with focusing on refinery personal and process safety, reliability, and high utilization, all of which ensure that we are continuously capturing the maximum margin available. Due to our excellent safety, reliability and utilization performance, we are also able to use our Bottom Line Improvement Program (BLIP) to drive for increased margins. BLIP focuses on Crude Optimization, Product Slate Optimization, Process Optimization, Energy Efficiency, Oil Loss Reduction, and People Efficiency and Waste Elimination.

To minimize inventory exposure, we ensure good planning when sourcing the feedstock, processing, and sales planning in such a way that we have a good control of the inventory levels. We maintain inventory levels to meet the minimum legal reserve requirement and to provide optimum operating levels to ensure excellent business performance. Good controls on planning and stock management keep the risk of crude oil price exposure to a minimum.

3.1.2. Laws and regulations relating to the environment or product specification requirements

Due to the nature of our business, we are subject to extensive and increasingly stringent environmental laws, regulations and standards relating to air emissions such as particulates, sulfur dioxides, nitrogen



oxides, carbon monoxide and others, as well as tightening product specification requirements. SPRC's policy and practice is to meet or exceed all environmental regulations and product specifications. Through our Sustainable Development Focus Areas, we also develop roadmaps and implement actions to improve the environment. As a result of our incident and injury free culture setting the tone for operational excellence, we had no environmental incidents in 2015.

We make capital expenditures to meet and exceed requirements of environmental laws and regulations. In 2012 we completed our Clean Fuels Project to produce Euro IV gasoline and diesel. In 2014 we finished the Air Preheater Project which reduced refinery greenhouse gas emissions by 2% and reduced NOx emissions; and our FCC Reliability Improvement Project which reduced particulate emissions from the FCC by 63%. We have a Legal Compliance Process to ensure we understand any change in laws and regulations, and develop implementation plans to ensure compliance. SPRC also has an active advocacy program to work with industry, NGO's and the government as new laws and regulations are developed.

3.1.3 Refinery Competitive Position

We operate in highly competitive markets with respect to the sale of petroleum products in the Thai domestic market and in the export market. To ensure that we remain competitive, we continually review our competitive position to ensure we can compete well in our business. We believe the key to our success is to focus on Operational Excellence and margin improvement through BLIP.

We utilize our "One Family" culture as a strong foundation to deliver great performance on safety, reliability and utilization. Our efforts and programs in 2015 allowed us to have our best ever performance in these 3 areas. We also achieved our best ever margin uplift through our BLIP program. Our senior management is held accountable by the Board of Directors to meet an extensive list of key performance indicators in Operational Excellence, Shareholder and People key result areas. Responsibilities for various activities are cascaded throughout the organization and are tied to employees' reward and recognition schemes.

We had a planned refinery shutdown in Q1 2014 to do routine maintenance and inspections, and complete a variety of projects to improve performance. We have targeted to run the refinery for 5 years without a shutdown of any of the major process units. This 5 year duration between shutdowns is longer than many of our peers, and allows us to capture the maximum margin and profit and improves our competitiveness.

SPRC also believes that a key to our long term competitiveness and success is to maintain our commitment to sustainably manage our business with a good balance between financial performance, stewardship of the environment, and social development. SPRC uses Sustainable Development as a guiding principle with 9 focus areas, which are built into our ongoing action plans for the company.

One of the key areas we focus on to ensure our competitiveness is to place as much of our product into the higher value domestic market place. Through one of our Sustainable Development Focus Areas, "Being the Supplier of Choice" and our "Crude to Customer" work process, we engage with our primary customers, PTT and Chevron, to place products through various channels in Thailand. We have the highest gasoline production yield among our domestic peers, providing 26% of the domestic market, which is a net importer of gasoline. In 2015, SPRC only exported 13% of its total production, the lowest amount among our domestic peers.



3.2 Financial Risk

We use the U.S. dollar as our functional currency. This reduces our exposure to foreign exchange rate fluctuations because a substantial portion of our revenues, costs and expenses are directly linked to, or denominated in U.S. dollars. We have a relatively small exposure to the relative value of the Baht on account of employee-related and some other expenses, as well as timing of payments.

We have also negotiated for U.S. dollar denominated loans to minimize our foreign exchange exposure and we have received very low, fixed interest rates.

3.3 Operational Risk

3.3.1. A significant interruption in the operations

All of our production facilities are located in the Map Ta Phut Industrial Estate in Rayong, Thailand. Refining, transporting and storing crude oil and other feedstocks and petroleum products involve many significant hazards that could result in fires, explosions, spills and other unexpected or dangerous conditions or accidents.

To mitigate and control these risks, our goal is to "Set the Standard" globally in Operational Excellence. We use our strong "one family culture" to support and build incident and injury free operations which delivers exceptional safety, reliability, utilization and environmental performance. Our Board of Directors and top executives provide a strong top-down commitment to our safety, reliability and Operational Excellence, communicating it throughout the workforce. SPRC has a robust Refinery Management System, including an Asset Management System, Environmental, Health and Safety Management System and Hydrocarbon Management System, which provide a structured set of policies, procedures and work instruction to ensure that operational risks are identified, addressed and mitigated in a systematic way. These management systems include a robust risk based inspection program and an incident investigation system to help drive our superior safety and reliability performance.

3.3.2. Shortage of Water

Water is critical to our ability to operate our refinery and power plant. We source water from the public utility that services the Map Ta Phut Industrial Estate. In recognition of the dependence of communities surrounding us on that same water, and that there have been shortages of water in the past, SPRC has included Water Management as one of our Sustainable Development Focus Areas. We have set up a road map to reduce our water usage, with an ultimate goal of being a "Net Zero Water User". During 2014 and 2015, we progressed several projects to reduce refinery water usage.



4. Operating Asset

The Company's Major Assets

As of 31 December 2015, the company's property, plant and equipment, which the company has the right of ownership, and its net book value after accumulated depreciation as presented in the company's financial statement are as follows:

Major assets	Book	Obligation	
	US\$ million	Baht Million	
Land	73	2,663	No
Buildings	54	1,958	No
Refinery plant & machinery	1,970	71,409	No
Furniture, fixtures and equipment	71	2,571	No
Construction in progress	14	493	No
Total cost	2,182	79,093	
Less Accumulated depreciation	(1,106)	(40,088)	
Net book amount after accumulated	1,076	39,006	
depreciation			

Land

The company's refinery is located on its own land of approximately 1,200 rai in Map Ta Phut Industrial Estate. The company also leases certain parcels of land of approximately 115 rai for the operation relating to the refinery such as the company's product piers.

Refinery Plant and Machinery

The company has the right of ownership in the refinery plant and all machineries used in the company's refinery operation.

Detail of Insurance

The company's significant insurance policies include a "property all risks" policy, which includes coverage of material damage, machinery breakdown and business interruption for the refinery as well as the joint ownership interest in the single point mooring system. The company also carries third-party liability, marine cargo insurance and limited business interruption insurance. The company, insurance broker and shareholders review the company's insurance coverage periodically and the terms and conditions of the insurance policies are in accordance with industry norms and maintained at adequate levels.

All of the above insurance policies are subject to deductibles and are renewed annually. Some of the insurance coverage does not extend to war or acts of terrorism, among other exclusions.

Intangible Assets

As of 31 December 2015, the company's intangible assets and its net book value after accumulated amortization as presented in the company's financial statement are as follows:



Intangible assets	Book	Book value			
	US\$ million	Baht Million			
Computer Programs	7	249			
Total cost	7	249			
Less Accumulated amortization	(5)	(170)			
Net book amount after accumulated amortization	2	78			

Right of Use for Land in Map Ta Phut Industrial Estate and Long Term Lease

Right of Use for Land in Map Ta Phut Industrial Estate

On 20 November 1992 the company entered into an agreement with IEAT for the use of land of approximately 43 rai which is used for the company's marine terminal. The agreement is for a period of 30 years. The company has a plan to extend the agreement before it expires.

The company also entered into a land use agreement dated 23 July 2008 for the piperack used for product pipelines and transmission lines of approximately 5 rai.

The company also entered into a land use agreement for other operations relating to IEAT undertaking dated 23 July 2008 for the piperack used for the petroleum product pipelines and transmission lines. The agreement is for a period from 20 November 1992 to 19 November 2022.

Long Term Lease

The company entered into a land lease agreement with IEAT dated 19 June 2007 for the refinery operation and power generation with an area of approximately 52 rai in IEAT area for a period of 30 years from 6 July 1995 to 5 July 2025.

Investment Policy in Subsidiaries and Associated Companies

As of 31 December 2015 the Company has no investment in subsidiaries or associated companies so the company does not have an investment policy in subsidiaries and associated companies.



5. Legal disputes

As of 31 December 2015, there is no material litigation against the Company which could have a negative effect on our assets exceeding 5% of shareholder's equity. In addition, there is no lawsuit, which could have a significant effect on our business.



6. General information and other important information

6.1 General information

Company Name Star Petroleum Refining Public Company Limited

Initial SPRC

Business Founded in 1992, SPRC is one of the leading petroleum product producers and

oil refiners in Thailand and the Asia Pacific region.

SPRC owns and operates a complex refinery with a capacity, as of 31 December 2015, of 165,000 barrels per day of crude oil, which represents 13.2% of the

refining capacity in Thailand.

SPRC is strategically located in Map Ta Phut, Thailand's premier petrochemicals

hub and our key products consist of LPG, gasoline, jet fuel and diesel.

Our unique configuration and flexibility in production enables us to produce

more gasoline compared to other Thai refineries.

Registration number 0107555000155

Address No.1, I-3B Road, Map Ta Phut, Muang Rayong, Rayong 21150

Tel: +66 (0) 38 699 000 Fax: +66 (0)38 699 999

Website <u>www.sprc.co.th</u>

Listing Date Trading commencement on 8 December 2015

Capital as of 31 December 2015

- Registered Capital Baht 33,038,453,580.76 comprising common shares 4,774,343,003 shares

at Baht 6.92 per share

- Paid-up Capital Baht 30,004,442,705.00 comprising common Shares 4,335,902,125 shares

at Baht 6.92 per share

Secondary Market Stock Exchange of Thailand (SET)

Investor Relations Telephone number +66 (0) 38 699 887, Website http://investor.sprc.co.th/



6.2 Reference

Securities Registrar Thailand Securities Depository Co., Ltd.

93 Ratchadaphisek Road, Dindaeng, Bangkok 10400, Thailand

Tel: +66 (0) 2 009 9000, Fax: +66 (0) 2 009 9991

SET Contact Center: +66 (0) 2 009 9999 Website: http://www.set.or.th/tsd E-mail: SETContactCenter@set.or.th

External Auditor PricewaterhouseCoopers ABAS Ltd.

15th Floor Bangkok City Tower, 179/74-80 South Sathorn Road,

Bangkok 10120, Thailand