



INDUSTRIAL TRAINING REPORT



PETRONAS REFINERY & PETROCHEMICAL CORPORATION SDN. BHD. (PRPC)



PETRONAS

NURIN SYAHIRAH BINTI MOHD SHAFEK
2021119359
BA242

ASSOCIATE PROFESSOR DR. HALIMAHTON BORHAN



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UNIVERSITI
TEKNOLOGI
MARA

INDUSTRIAL TRAINING REPORT

**PETRONAS REFINERY PETROCHEMICAL & CORPORATION SDN BHD
(PRCP)**

NAME : NURIN SYAHIRAH BINTI MOHD SHAFEK
STUDENT ID : 2021119359
PROGRAMME : BACHELOR OF BUSINESS ADMINISTRATION (HONS.) FINANCE
PROGRAMME CODE : BA242
GROUP : BA242 5D
DURATION : 1st MARCH 2023 – 15th AUGUST 2023
ADVISOR : ASSOCIATE PROFESSOR DR. HALIMAHTON BORHAN

EXECUTIVE SUMMARY

The industrial training report is intended to help students write in-depth reflections on their internship experiences, which include information about the company and industry. At Universiti Teknologi MARA (UiTM), the Faculty of Business Administration has set the Industrial Training (MGT666) as its final semester course, where students are exposed to real-work experience and environment for a period of six months which is equivalent to 24 weeks.

This executive summary highlights key experiences, contributions, and learnings gained throughout my internship timeline. During my six-month internship at PETRONAS Refinery & Petrochemical Corporation Sdn. Bhd. (PRPC), I had the privilege of working in the Strategic Planning team, a crucial division responsible for shaping the organization's long-term objectives, optimizing sustainability efforts as a license to operate, and navigating the dynamic energy landscape.

My role as an intern primarily involved assisting the team with their tasks and continuous learning on strategic sustainability initiatives. Throughout the internship, I actively contributed to the progress of strategic initiatives in the Sustainability Mass Communication Roll Out plan, supporting PRPC's commitment to environmental stewardship and diversification. On the other hand, this report emphasizes how **the oil and gas industry is one of the leading players in the energy power sector. Besides, by further evaluating SWOT for PETRONAS Refinery & Petrochemical Corporation Sdn. Bhd. , I can determine its strengths & weaknesses as the internal variables, along with opportunities & threats as the external variables. Apart from the discussion on SWOT, recent academic citations from no later than the last five years are also included to support recommendations based on my internship observations.**

Overall, this internship has been a transformative learning experience, and I am confident that the skills and knowledge gained will contribute to my future endeavours in career. The experience that provided a hands-on opportunity to contribute to the organization's strategic direction, exposure to the energy industry's challenges and opportunities, coupled with the nurturing environment and supportive teams, has strengthened my passion for strategic management. I am immensely grateful for the learning opportunities and the chance to be part of PRPC's vision for a sustainable future.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
TABLE OF CONTENTS	4
ACKNOWLEDGEMENT	5
STUDENT'S PROFILE	6 - 7
COMPANY'S PROFILE	8 - 11
TRAINING'S REFLECTION	12 - 13
SWOT ANALYSIS	14
DISCUSSION AND RECOMMENDATION	15 - 26
CONCLUSION	27
REFERENCES	28
APPENDICES	29

ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious, The Most Merciful.

Praise be to Allah S.W.T. for providing me the opportunity and strength to complete my internship as part of the final semester requirement. First and foremost, I would like to express my heartfelt gratitude to the people who have made my internship journey at PETRONAS Refinery & Petrochemical Corporation Sdn. Bhd. (PRPC) a truly remarkable and enriching experience.

I am deeply thankful to my internship supervisor, Ms. Mimi Juazlin Binti Md Jaini, for her unwavering support, mentorship, and guidance throughout my internship. She provided me with opportunities to work on challenging tasks, pushing me to step out of my comfort zone and grow professionally and personally. Besides, I would want to acknowledge my Strategic Planning division members as their friendly and collaborative work environment made me feel welcomed from day one. I am forever grateful for their willingness to share knowledge, answer my questions, and assist whenever needed.

I would also like to extend my appreciation to my respected advisor, Associate Professor Dr. Halimahton Borhan, for her assistance, advice, time, and efforts throughout my internship. Her guidance has helped to enlighten me throughout every stage of completing this report. Without her support, this internship opportunity would not have been possible, and I am thankful for the efforts she put into connecting students with real-world experiences.

Lastly, I am indebted to my family and friends for their constant encouragement during my internship journey with PETRONAS Refinery & Petrochemical Corporation Sdn. Bhd. (PRPC). Their prayers have sustained me this far.

In conclusion, I am grateful for the knowledge and experiences gained during this internship, which will help me shape my future career path positively.

STUDENT'S PROFILE

NURIN SYAHIRAH BINTI MOHD SHAFEK



EDUCATION

March 2021 — Present

- **Bachelor of Business Administration (Hons.) Finance, Universiti Teknologi MARA (UiTM) Kampus Bandaraya Melaka**
Current CGPA: 3.58/4.00 MUET: Band 4 Dean's List: 2nd & 4th semesters

June 2018 — February 2021

- **Diploma in Business Studies (Insurance), Universiti Teknologi MARA (UiTM) Kampus Alor Gajah Melaka**
CGPA: 3.76/4.00 Dean's List: 1st, 2nd, 4th & 5th semesters

January 2013 — December 2017

- **High School, Kolej Yayasan Saad Melaka**
SPM: 6A, 1C+, 2C

AWARDS & ACHIEVEMENTS

2022

- **Dean's List for Bachelor of Business Administration (Hons.) Finance, Universiti Teknologi MARA (UiTM) Kampus Bandaraya Melaka**
Awarded for achieving a CGPA of 3.67 for the 4th semester.

- **2nd Place for Bring-To-Light The Investment Portfolio Competition, Faculty of Business and Management Universiti Teknologi MARA (UiTM) Cawangan Melaka Kampus Bandaraya**
Awarded for top three best slides and video presentation among all participants.

2021

- **Dean's List for Bachelor of Business Administration (Hons.) Finance, Universiti Teknologi MARA (UiTM) Kampus Bandaraya Melaka**
Awarded for achieving a CGPA of 3.77 for the 2nd semester.

2020

- **Gold Award Category B for Global Virtue Student Invention, Innovation, Design, & Exhibition 2020 (GV-SIIDE 2020), Universiti Teknologi MARA (UiTM) Cawangan Melaka Kampus Alor Gajah**
Awarded for excellent project innovation category, proposing an innovative product called the Morse Code Bracelet.

- **Dean's List for Diploma in Business Studies (Insurance), Universiti Teknologi MARA (UiTM) Kampus Alor Gajah Melaka**
Awarded for achieving CGPA of 3.83 and 3.89 for the 4th and 5th semesters, respectively.

2019

- **Anugerah Emas, Anugerah Remaja Perdana Rakan Muda The Duke Of Edinburgh's International Award**
Awarded by the government for the active involvement of students in community service, skills, physical creation, adventurous journey, and residential project within 12-months of participation.

- **Dean's List for Diploma in Business Studies (Insurance), Universiti Teknologi MARA (UiTM) Kampus Alor Gajah Melaka**
Awarded for achieving a CGPA of 3.80 for the 2nd semester.

2018

- **Dean's List for Diploma in Business Studies (Insurance), Universiti Teknologi MARA (UiTM) Kampus Alor Gajah Melaka**
Awarded for achieving a CGPA of 3.84 for the 1st semester.

2016

- **Anugerah Perak, Anugerah Remaja Perdana Rakan Muda The Duke Of Edinburgh's International Award**
Awarded by the government for the active involvement of students in community service, skills, physical creation, and adventurous journey within 6-months of participation.

2014

- **Anugerah Gangsa, Anugerah Remaja Perdana Rakan Muda The Duke Of Edinburgh's International Award**
Awarded by the government for the active involvement of students in community service, skills, physical creation, and adventurous journey within 3-months of participation.

RELEVANT EXPERIENCES

December 2022

- **Secretary of Money Sense Competition Week Without Wall**
 - Assisted in identifying the meeting location and admittance of 58 students.
 - Prepared the agenda, recorded minutes of meetings, and alerted the project manager of any matter which might invalidate proceedings.
 - Prepared final report regarding the event.

June 2022

- **Secretary of Webinar Of Professional Hotel Etiquettes**
 - Prepared the agenda for meetings.
 - Prepared formal letters for the invitation of three external guest speakers and respected lecturers of the faculty.
 - Informed of all important correspondence received at the meeting.
 - Prepared final report regarding the event.

May 2022

- **Assistant Project Manager of Bring-To-Light The Investment Portfolio Competition.**
 - Assisted with giving ideas for the name of the competition event.

- Proposed the chosen name of the competition event to the advisor.
- Assisted four class representatives involved with the competition requirements.
- Assigned 126 participants into 23 groups.
- Scheduled weekly meetings to check up on the progress of every committee.
- Oversaw 25 committee members, which resulted in efficient coordination of the competition event.
- Directed cue for Group 3 on the day of the competition event.

November 2021

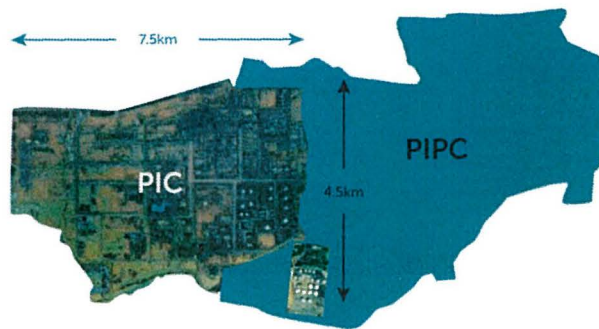
Career Journey With Bank Islam Programme

- Participant.

SOFT SKILLS	Leadership Communication Problem-Solving	Creativity Teamwork Critical Thinking				
HARD SKILLS	Microsoft Word Microsoft PowerPoint Microsoft Excel	Intermediate Intermediate Intermediate	Adobe Photoshop Chart Nexus Canva	Beginner Beginner Intermediate	Tableau	Beginner
LANGUAGES	Malay Native Speaker		English Proficient		Arabic	Beginner
REFERENCES	<p>Miss Nurhaslinda Hashim Programme Coordinator BA242 (Finance) Faculty of Business and Management Universiti Teknologi MARA (UiTM), Cawangan Melaka Kampus Bandaraya Melaka, 110 Off Jalan Hang Tuah, 75350 Melaka Malaysia. +60173743170 nurhaslinda@uitm.edu.my</p>		<p>Miss Nur Amirah Hazimah Borhanordin Lecturer Faculty of Business and Management Universiti Teknologi MARA (UiTM), Melaka Kampus Bandaraya Melaka, Jalan Hang Tuah, Melaka, Malaysia. 8497 amirah@uitm.edu.my</p>			

COMPANY'S PROFILE

- **Company's Name**
 - PETRONAS Refinery and Petrochemical Corporation Sdn. Bhd. (PRPC)
- **Location (Kuala Lumpur)**
 - Level 16, Menara Permata Sapura, Lot 91, Kuala Lumpur City Centre, 50088 Kuala Lumpur, Malaysia.
- **Location (Johor)**
 - PETRONAS Refinery and Petrochemical Corporation Sdn. Bhd. , Block C, The HIVE Management Office, Kompleks Bersepadu Pengerang (PIC), 81600 Pengerang, Johor.
- **Background of Establishment**



- The company, PETRONAS Refinery & Petrochemical Corporation Sdn. Bhd. (PRPC) is the park developer, park manager, and park services of its park named Pengerang Integrated Complex (PIC) situated in Pengerang, Johor. It ensures all operations and activities are being executed safely. Its subsidiary, PRPC Utilities and Facilities Sdn. Bhd. acts as the centre to distribute reliable and effective utilities for manufacturing processes within PIC. It provides essential services such as water, natural gas, industrial wastewater treatment, centralised maintenance and controls, and analytical and product development laboratory services. The PIC is situated within the larger Pengerang Integrated Petroleum Complex (PIPC), which is under the control of the Johor Petroleum Development Corporation Berhad (JPDC), a government organisation tasked with coordinating, facilitating, and promoting the development of the downstream oil and gas industries in the state of Johor. The PIPC gathers liquefied natural gas (LNG) terminals, petrochemical facilities, liquefied naphtha crackers, oil refineries, and a regasification facility over an

area of 80 km². On the other hand, the PIC is thus far PETRONAS' greatest downstream investment and greenfield development in a single location. Moreover, the Refinery and Petrochemical Integrated Development Project (RAPID) worth USD 16 billion is part of the development. Besides, this includes the accompanying utilities and facilities worth USD 11 billion, such as centralised utilities, raw water supply facility, deepwater terminal, liquified natural gas terminal, cogeneration power plant, and air separation unit. Hence, the project cost USD 27 billion in total. Upon completion in 2019, the PIC consists of a daily refining capacity of 300,000 barrels and petrochemical plants producing an estimated 3.6 million tonnes of petrochemical products annually.

- **Vision**

- To become the regional petrochemical park.

- **Mission**

- We are a dynamic global energy group with presence in over 50 countries. We produce and deliver energy and solutions that power society's progress in a responsible and sustainable manner.

We seek energy potential across the globe, optimising value through our integrated business model. Our portfolio includes cleaner conventional and renewable resources, a ready range of advanced products and adaptive solutions.

▪ Organizational Structure (PRPC Strategy, Business Development and Commercial)

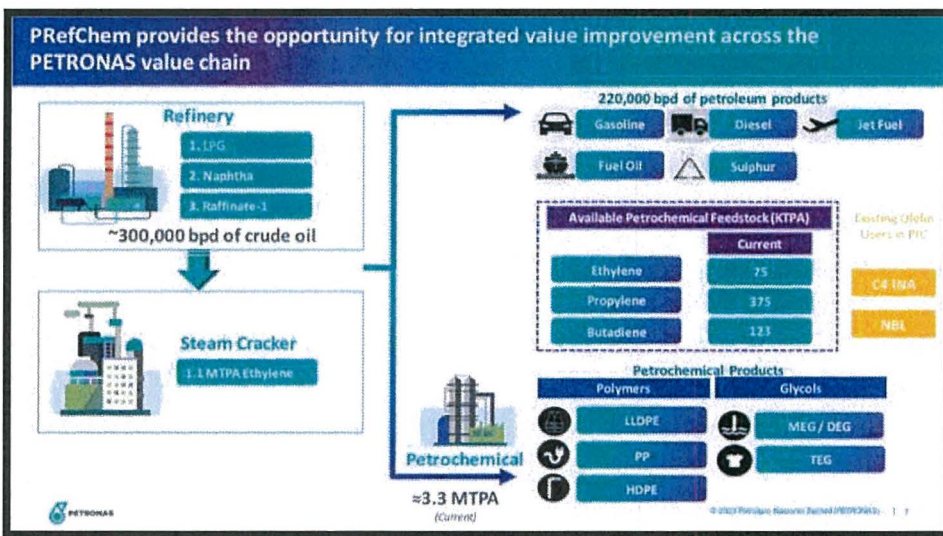


Products and Services

<p>1 Common Facilities & Amenities (CFA)</p> <p>Critical Services</p> <p>Security Arrangement*</p> <ul style="list-style-type: none"> Site access control Site policing & patrol Perimeter surveillance & CCTV <p>Provision of Access Roads within Complex complete with</p> <ul style="list-style-type: none"> Lighting Traffic Light Other appearance <p>Storm Water Drainage & Flood abatement facilities</p> <p>Basic Services</p> <table border="1"> <tr> <td>MPH</td> <td rowspan="4">Common Sport Facilities</td> </tr> <tr> <td>Mosque</td> </tr> <tr> <td>Cafeterias</td> </tr> <tr> <td>Training Centre</td> </tr> </table> <p>Clubhouse</p> <p>Sport Pitches i.e. Cricket, Football, Futsal, Tennis</p>	MPH	Common Sport Facilities	Mosque	Cafeterias	Training Centre	<p>2 Building Office Rental (BOR)</p> <p>Offices & Space rental</p> <p>The Hive Management Office (THMO)</p> <p>SPC Office</p> <p>Engineering & Maintenance Building (EB)</p>	<p>4 HSE</p> <ol style="list-style-type: none"> HSE Standard and Guidelines HSE Assurance & Performance Management Occupational Health (OH)/Industrial Hygiene (IH) & Medical Services Environment Authority Liaison & Management Incident, Emergency & Crisis Management
MPH	Common Sport Facilities						
Mosque							
Cafeterias							
Training Centre							
	<p>3 Accommodation</p> <p>The Small Package Camp (SPC)</p> <p>The Hive Residence</p> <p>Single Occupancy, Twin & Dormitories</p> <p>Single Occupancy Type A & B</p>	<p>5 Security</p> <p>Area Monitoring & Surveillance</p> <p>Enforcement & Policing</p> <p>Drone, AES & Marine Pontoon</p> <p>Auxiliary Services/Activities</p>					

* The security arrangement under critical services only benchmarked for access card, CCTV, guardhouse & fencing

<p>1 Process Control Buildings</p> <p>Dedicated & shared areas, security, general maintenance & upkeep.</p>	<p>2 Plant Communication System Network</p> <p>Fibre optic network, broadcast system, radio communication, etc.</p>	<p>3 Laboratory</p> <p>Analytical testing of samples & Product development support</p>
<p>4 Product Interconnecting</p> <p>Interconnecting pipelines & associated ancillaries.</p>	<p>5 Fire Water Supply</p> <p>Fire water supply</p>	<p>6 Caustic Distribution</p> <p>Facility to receive, store & distribute Caustic Soda.</p>
<p>7 Maintenance Workshop</p> <p>Workshop with associated fittings, work & office space.</p>	<p>8 Solid Product Warehouse</p> <p>Storage & handling of multi-grade solid petrochemical products</p>	<p>9 Solid Product Jetty</p> <p>Port facilities for solids & containerized products.</p>
<p>10 Effluent Treatment</p> <p>Handling, treating & disposal of miscellaneous waste.</p>	<p>11 Chemicals & Spare parts Warehouse</p> <p>Storage facilities & Inventory management</p>	



TRAINING REFLECTION

a) Duration

- **Specific Date**
 - 1st March 2023 - 15th August 2023
- **Working Day**
 - Monday - Friday
- **Time**
 - 8:00 am - 6:00 pm

b) Details

- **Department**
 - Strategic Planning, Venture and Business Development (SPVBD)
- **Division**
 - Strategy, Business Development and Commercial (SBDC)
- **Role**
 - Intern (Strategic Planning)
- **Responsibilities**
 - Assisted the Strategic Planning team with tasks given.
 - Continuous learning throughout the internship period.
- **Assignments and Tasks**
 - Prepared Sustainability Mass Communication Roll Out posters.
 - Conducted a research on ZOPA and BATNA and presented it to the team.
 - Contributed to the preparation of meeting minutes.
 - Facilitated Sustainability 101 sharing sessions to raise awareness and build capacity for sustainable practices across PRPC and PIC.
 - Collaborated with cross-functional teams to foster a culture of sustainability awareness throughout PRPC and PIC.
 - Engaged with Head of Departments from various departments among PRPC UF, to garner support and participation in sustainability initiatives.
 - Obtained floor listing per month, listing period, listing occupancy rate, and exposure to early termination.

c) **Gains (intrinsic & extrinsic benefits):**

▪ **Allowance & Benefits**

- RM 1,000 per month.
- 1 day off per month.
- Travel to site, Pengerang Integrated Complex (PIC).

▪ **Experiences**

- Exposed to sustainability efforts by Strategic Planning division.
- Assessed the organization's current sustainability practices, including environmental impact, social responsibility, and economic viability.
- Involved in Mass Communication Roll Out Plan sharing sessions.
- Visited PETRONAS Leadership Centre in Bangi.
- Sustainability Day 2023.
- Took part in the SUCCESS Cohort 3 program and visited the Pengerang Integrated Complex (PIC) to experience on-site operations.
- Participated with cross-functional teams to develop strategic initiatives and action plans aligned with PRPC's corporate goals.
- Supported data analysis and modeling efforts to assess the feasibility and potential impacts of various strategic scenarios.
- Participated in strategy review meetings and brainstorming sessions, providing valuable insights and recommendations.

▪ **Knowledge & Skills**

- Microsoft Excel - Learned new shortcuts and formulas.
- Microsoft Teams - Learned to adapt with new features.
- Time management - Managed to complete tasks in a timely manner.
- Communication - Liaised with staff to arrange a workshop.
- Teamwork - Worked closely with my team and a few other departments to complete tasks given.

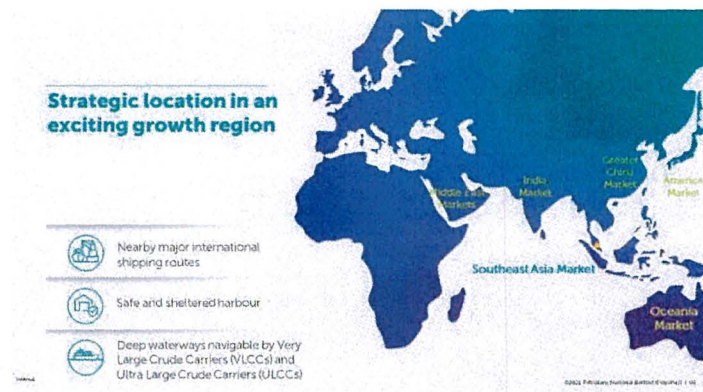
SWOT ANALYSIS

<p style="text-align: center;">STRENGTHS</p> <ol style="list-style-type: none">1) Strategic Location2) Minimal Leverage Ratio3) Business Diversification4) State of Ownership5) World Class Efficiency and Sustainability	<p style="text-align: center;">WEAKNESSES</p> <ol style="list-style-type: none">1) Reduction in Revenue2) Incapable of Generating Profit
<p style="text-align: center;">OPPORTUNITIES</p> <ol style="list-style-type: none">1) Strong Demand in Recovery and Profitability2) Growing Petrochemical Products Demand3) A Single Point of Contact for Investors	<p style="text-align: center;">THREATS</p> <ol style="list-style-type: none">1) Fluctuation in Oil Prices2) High-Risk Sector

DISCUSSION AND RECOMMENDATION

STRENGTHS

1) Strategic Location



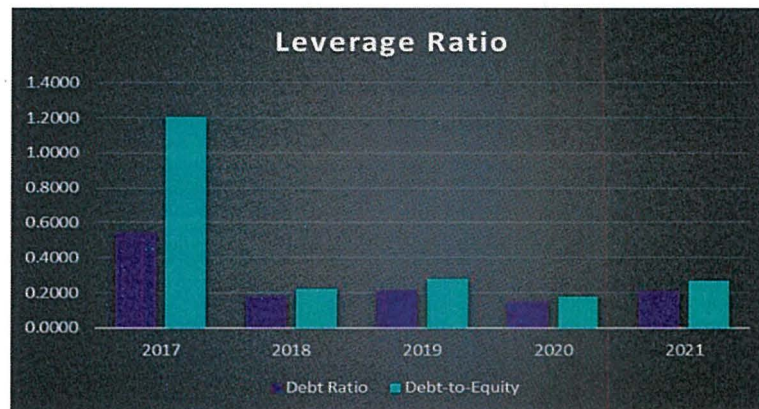
The Pengerang Integrated Complex (PIC) which is situated in the middle of Asia Pacific, has many advantages over its competitors. To be exact, PIC is strategically located in the southernmost point of Peninsular Malaysia in the state of Johor. Hence, it is believed as one of the most exciting growth zones for petrochemicals worldwide. Other strong reasons are that the PIC covers 6,303 acres and has easy access to primary shipping lanes and a secure harbor in sheltered waters close to busy international shipping lanes and demand centres (PETRONAS, 2023).

With the presence of a well-equipped jetty for reliable product transfers, the Pengerang Deepwater Terminals 2 (PDT2) has brought extra advantages to the strategic position. The establishment of Pengerang Deepwater Terminals 2 (PDT2) is a specialized industrial terminal with a 2 million m³ storage capacity for petroleum products, including crude, refined petroleum, and petrochemicals. It has a dedicated deepwater jetty facility that can accommodate Very Large Crude Carriers (VLCC) with a maximum water depth of 24 meters. Besides, the Pengerang Terminals 2 (Two) Sdn. Bhd. (PT2SB) is on pace to be developing into a downstream hub for the petrochemical, oil, and gas sectors in the region.

Based on my observation, two recommendations that I would suggest for PIC are to engage with local communities and to sustain environmental stewardship. Firstly, since the park is still surrounded by some of the local communities around it, both PRPC and PIC have to play their roles by building and maintaining strong relationships with the local communities in Pengerang. For example, engaging in transparent and open communication can help gain community support and reduce the risk of protest, social opposition, and regulatory hurdles that could disrupt operations in PIC. Secondly, both PRPC and PIC have to keep on

working on environmental stewardship by implementing robust environmental management practices to minimize the impact on the surrounding environment. This includes responsible waste disposal, emissions reduction, and adherence to environmental regulations. Demonstrating a commitment to sustainability can improve the company's reputation and strengthen its strategic location.

2) Minimal Leverage Ratio



Based on the leverage ratio of PRPC above, the company has a low leverage ratio. Generally, a lower financial leverage ratio is a sign of a financially responsible business with a steady revenue stream. Therefore, a low leverage ratio will benefit PRPC. However, a company is more likely to fail on loans if its financial leverage ratio is too high because most of its cash flow is going toward debt repayment (Fuchs, 2023).

In this part, I have calculated the Debt Ratio (DR) and the Debt-to-Equity Ratio (DER). A low Debt Ratio will consume a smaller portion of the company's cash flow for the principal and interest payments. Hence, PRPC's business is less susceptible to changes in the economy or interest rates. Moreover, lenders and investors often favour low leverage ratios. In the case of a liquidation, the shareholders are more likely to receive at least a portion of their initial investment. This reason is that their interests are better protected if the firm underperforms.

Based on my research, to maintain its minimal leverage ratio, I would recommend PRPC to focus on efficient capital allocation. For example, PRPC could prioritize investments in projects that generate high returns and have a relatively short payback period. Whereas, PRPC could avoid excessive spending on projects with uncertain outcomes or long payback periods because it can strain the company's cash flow

and increase debt. Overall, sustaining a minimal leverage ratio is significant for an oil and gas company to ensure financial stability and lessen the risks associated with excessive debt.

3) Business Diversification

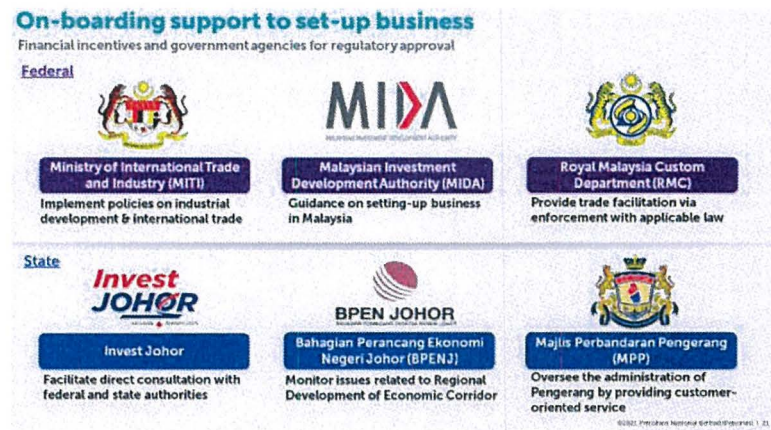


The PRPC Group has a diverse portfolio of ventures outside of the oil and gas industry. Every operating unit has a distinct primary business. For instance, the PRPC's primary business is as a utilities and facilities provider, where it provides **accommodations and office buildings rental**. Meanwhile, the **PRPC Utilities and Facilities (UF)** supplies **treated water to the plant**, **PRPC Water** supplies **raw water**, and **Pengerang Power Sdn. Bhd. (PePSB)** supplies **power and steam** to generate electricity. Furthermore, PRefChem, a Joint Venture (JV) between PRPC and Saudi Aramco is in charge of producing **petrochemical products** (PETRONAS, 2023).

With the availability of these goods and services, PRPC expands its ability to assemble broad revenue streams that are advantageous to the business. Nevertheless, PRPC should step further beyond to understand ways in making the most of the resources to generate income and be profitable if it wants to be the best among competitors and remains competitive in the oil and gas industry.

In my opinion, to sustain its business diversification, an oil and gas company should adopt strategies that leverage its existing strengths while exploring new opportunities. For example, PRPC could further allocate resources to research and development efforts to explore new technologies and innovative solutions, leading to enhancing PRPC's operations and opportunities for new sector entry.

4) State of Ownership

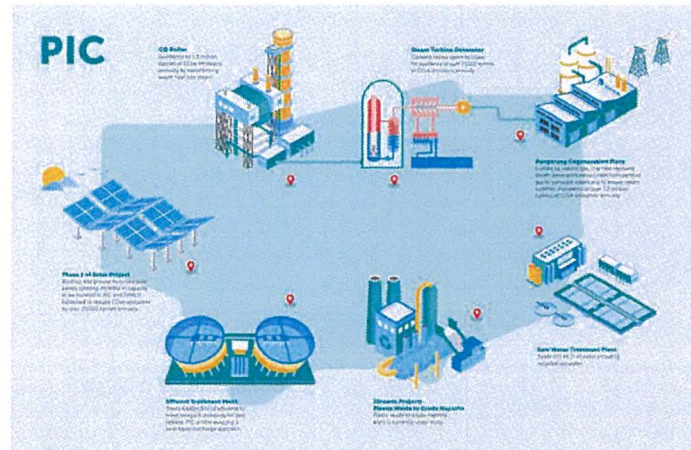


Entirely owned by the government of Malaysia and established in 1974, PETRONAS is in charge of developing and enhancing the value of all of Malaysia's oil and gas resources. Besides, it is also listed under the Government-Linked Companies (GLCs) in Malaysia. Since 1976, PETRONAS has contributed about RM1.2 trillion to national development, especially when the nation is battling the COVID-19 outbreak, as reported by Bernama.com (Hamzah, 2021). Apart from financial contributions, PETRONAS has been providing scholarships to more than 38,000 deserving students through its PESP programme to uphold the aspirations and growth of the country (PETRONAS, 2023).

Moreover, being listed as a GLC has brought many benefits to PETRONAS in terms of capitalization, market presence, socio-political mandate, most dominant in the entire nation, as well as receiving benefits from governmental assistance for investment activities. Government support is seen as a strength for the corporation because certain rules and requirements must be approved before proceeding. Therefore, PETRONAS is fortunate enough to have gained government support as its source of strength.

According to my research, one general recommendation for PRPC to sustain its state of ownership with the government is through social responsibility. For example, PRPC must be persistent in its efforts toward progressive and continuous corporate social responsibility that benefit the local communities, environment, and nation. Likewise, demonstrating a commitment to sustainable development and local well-being can positively influence government support.

5) World Class Efficiency and Sustainability



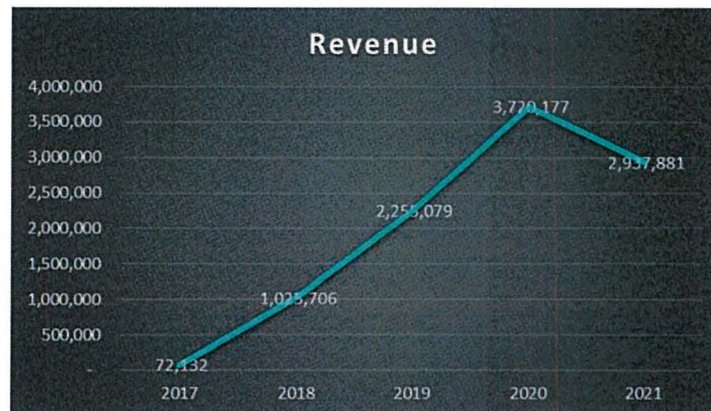
PIC is ranked among the world's best due to its unprecedented scope and intricacy. The PIC Refinery and the Refinery and Petrochemical Integrated Development (RAPID) are ranked at 9.48 and 12.03, respectively, according to the Nelson Complexity Index (NCI), a rating that takes complexity, replacement costs, and relative value-adding capability into account. This is on par with facilities of the highest caliber, and PIC is ideally situated to maximise the value of oil and gas resources (Tiing & Lim, 2021).

The facility is powered by Pengerang Cogeneration Plant (PCP), the biggest and most effective power plant in the area that burns natural gas as a step towards greener fuels. An LNG regasification terminal, an air separation unit, common utilities, off-site facilities, water supply facilities, solid product handling facilities, and a jetty, as well as a liquid bulk terminal with storage facilities for crude, petroleum products, and petrochemicals, are some additional supporting facilities. The engineering approach maximises each molecule for maximum profit and makes sure of the highest energy and plant efficiencies to reduce carbon footprint.

As a recommendation to sustain the park's world-class efficiency and sustainability, PRPC must always maintain its comprehensive approach that considers the environmental, social, and economic aspects of its operations. For example, PRPC can provide transparent and accurate reporting on sustainability efforts and performance. Transparent reporting helps build trust with investors, regulators, and the public.

WEAKNESSES

1) Reduction in Revenue

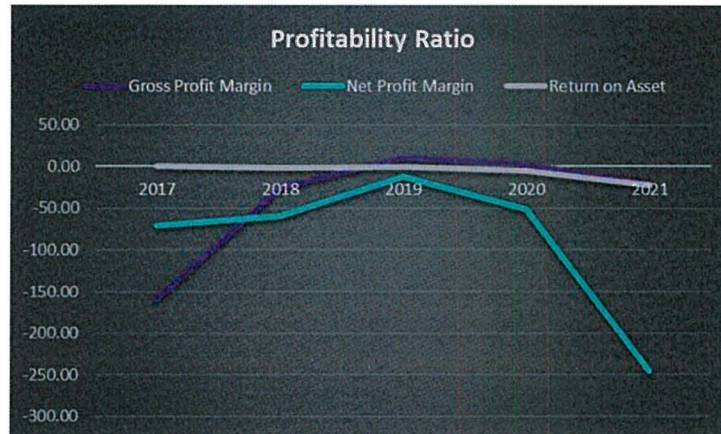


Since 2017 up until 2020, the PRPC's revenue had increased steadily. However, a little decline of RM 782,296 occurred in 2021. This might be the result of decreasing sales volumes for utilities and services, according to the company's annual financial statement. As a service provider, PRPC essentially relies upon purchases of utilities and other services to the tenants. As a result, when sales volume declines, so does revenue. Another potential cause of the issue might be due to the lower fixed tariff rate than the previous year for power and steam.

Furthermore, in 2020, the accounts receivable went from RM 1,970,412 to RM 2,031,783 in 2021. If the number of accounts receivable increases after a year onwards, it signifies that more sales are being made on credit, resulting in less revenue and decreasing the company's cash flow.

As a recommendation, PRPC should be aware of its cost optimization. For instance, the company must conduct a thorough review of all operational costs and identify areas where efficiencies could be achieved. Additionally, this may involve renegotiating contracts with suppliers, tenants, optimizing logistics, implementing energy-saving initiatives, and streamlining internal processes.

2) Incapable of Generating Profit



The profitability ratio helps to determine if a business can turn a profit from sales or operations, assets on the balance sheet, or shareholder's equity. Based on my findings after examining the Gross Profit Margin (GPM), Net Profit Margin (NPM), and Return on Asset (ROA) of PPRC, these three showed a declining trend after 2019. The unanticipated COVID-19 outbreak and global lockdown in 2020 and 2021 had brought numerous obstacles and difficulties. Therefore, the restriction impacted the oil and gas industry and PPRC as well.

This challenge reduced the company's profit as it mainly provides utilities and services. For instance, the Work From Home policy had an impact on PPRC's primary source of income from accommodations. The majority of residents and tenants chose to work from home as a result, which decreased the rental income from the accommodation.

Though overcoming the incapability of generating profit can be a challenging task, several strategies can be employed to improve financial performance and steer the company in the right direction. One of the strategies I would recommend is through market research and competitive analysis. For example, PPRC could conduct market research to identify trends, potential areas of growth, and customer needs. Also, this method assists in analyzing competitors, understanding their strategies, and obtaining insights into best practices that could be applied to PPRC.

OPPORTUNITIES

1) Strong Demand in Recovery and Profitability



First Quarter 2022 GDP Grew By 5 Per Cent: Malaysia's Economy Continued Its Recovery Momentum

PRESS RELEASE | 13 MAY 2022



**YB SENATOR TENGKU DATUK SERI UTAMA ZAFRUL
TENGKU ABDUL AZIZ**

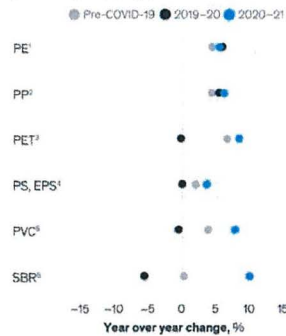
As featured in The Star on 29th October 2021, following the COVID-19 recovery phase, Malaysia's economic growth is anticipated to grow between 5.5% to 6.5% in 2022. Concerning to the Ministry of Finance, the GDP increased by 5% in the first quarter of 2022 as a result of rising local and global demand as well as a strengthening labour market. Moreover, indeed, substantial growth in the economy is a crucial key indicator for businesses to support national development. Correspondingly, PRPC will anticipate using this chance to draw in more foreign and domestic investment. Additionally, this will be a prime opportunity for the company to grow its consumer base and make up for its financial losses.

As a recommendation, to take advantage on strong demand in recovery and profitability, PIC could optimize its production efficiency. For example, by streamlining operations and implementing advanced technologies to maximize production while minimizing costs. Besides, utilizing data analytics and automation also helps to improve decision-making and enhance operational efficiency.

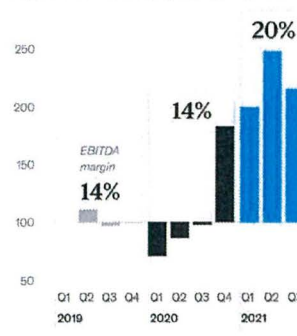
2) Growing Petrochemical Products Demand

The petrochemicals industry enjoyed strong revenue and profits in 2021.

Growth in demand for key petrochemicals, year over year change, %



Top 100 petrochemical players, EBITDA by market cap, Q1 2019 to Q4 2020, indexed to Q1 2019 = 100



¹Polyethylene, ²Polypropylene, ³Polyethylene terephthalate, ⁴PS is polystyrene; EPS is extracellular polymeric substances, ⁵Polyvinyl chloride, ⁶Styrene-butadiene rubber.
Source: IHS Market, McKinsey Corporate Performance Analysis Tool

In spite of unanticipated obstacles of the COVID-19 outbreak, increased commodity prices, and supply chain interferences in 2021, the petrochemical industry still showed resiliency. Due to that, the petrochemical market had become tightened, creating a new record volume of financial in 2022. In general, the industry as a whole has had solid demand growth and demonstrated strong momentum for plastics recycling and decarbonization.

Since its construction on petrochemicals in May 2022, this may be a good key indicator for PRPC to benefit from revenue. Even so, the fact that Pengerang Integrated Complex (PIC) is an integrated complex and depends on the safe startup of both the refinery and the petrochemicals cracker presents a hurdle in accomplishing this goal. Therefore, PRPC must carefully watch over the start-up procedure to ensure that there are zero delays and that it proceeds smoothly. To prevent unwelcome events, all safety and security protocols must be complied.

On the other hand, to prevent delays in procedures and cater to the growing demand for petrochemical products, PRPC could employ supply chain management techniques to minimize delays and inefficiencies. For example, by utilizing technology to track and manage inventory, streamlining logistics, and ensuring timely deliveries.

3) A Single Point of Contact for Investors

DON'T MISS OUT
on this investment opportunity

You are invited to be a player in this state-of-the-art regional hub to tap into high-growth markets. Join us on the journey of re-imagining the power of petrochemicals.

- Strategic Location
- Comprehensive Services
- Ample Land Areas
- Tax Incentives
- On-site Molecules
- Sustainable Business Environment
- Reliable Utilities
- Ideal Park Ecosystem

The graphic features a background image of an industrial facility with two large vertical storage tanks labeled '5550-V 2' and '5550-V 1'. The tanks are surrounded by a complex network of pipes and scaffolding. In the background, a blue sky and a body of water with a ship are visible.

Bringing new investors into Pengerang Integrated Complex (PIC) is one of PRPC's golden opportunities. The company is designated as a centralised resource for investors, offering solutions and options from site planning and integration within PIC to advising services on governmental and regulatory requirements. This is so that investors or consumers can establish their businesses since PRPC acts as a park developer and manager, utilities and service provider. Hence, all necessary amenities are sufficient according to its pledged business model. As the park developer and park manager, PRPC assures that every operation and activity in PIC are carried out responsibly and harmoniously. In addition, PRPC guarantees that the PIC is safe from any dangers and threats that may compromise the complex's ability to operate properly.

Besides, due to its status as PETRONAS's mega project, the Pengerang Integrated Complex (PIC) has the potential to be transforming into the regional petrochemical park, parallel to its vision. The USD 27 billion worth project of Pengerang Integrated Complex (PIC) is the extensive investment ever allocated in the national oil and gas business national history. With the potential for growth and the benefits mentioned above, PRPC seems to be attainable to entice investors to come and invest in Pengerang Integrated Complex (PIC) in order to realise its mission.

As a recommendation, to sustain PIC's position as a one-stop centre for investors, the company, PRPC has to strengthen communication and transparency with investors by providing clear and timely information about the company's financial performance, operations, and strategic plans. In addition, PRPC has to

regularly engage with investors through conferences and reports to ensure they are well-informed about the company's activities and prospects.

THREATS

1) Fluctuation in Oil Prices



Since their production costs are often fixed but the price at which they sell their oil is determined by the market, hence oil and gas companies suffer the most when oil prices decline. The PIC refinery plant transforms crude oil into useful products such as gasoline (petrol), diesel fuel, fuel oils, asphalt base, liquefied petroleum gas, petroleum naphtha, heating oil, and kerosene.

Nevertheless, although PRPC lies under a downstream business, the company will be less impacted since it generates money by buying crude oil and selling refined goods for a greater price. In addition, the profit margins should stay mostly stable despite changes in oil prices. Although the volatility of the oil price has less of an effect on PRPC because it is an integrated organisation, this can nonetheless pose a threat to the company if it is not appropriately addressed.

In order to cope with fluctuations in oil prices, PRPC could apply robust management practices to identify, access, and mitigate various risks that may enhance PRPC's ability to navigate through volatile market conditions.

2) High-Risk Sector



The oil and gas industry is considered to be at high risk due to the nature of the work done. As of June 2022, there had been three (3) fatalities occurred and 65 in the previous 10 years, as released on the PETRONAS website. Referring to the above fatalities, extensive follow-up safety surveillance is necessary to be implemented daily at the site to prevent future fatalities. For instance, in Pengerang Integrated Complex (PIC), the Health, Safety, Security, and Environment (HSSE) regulations must be implemented effectively and under strict supervision.

Putting the safety of people, assets and the environment at the Pengerang Integrated Complex (PIC) is of PRPC's utmost importance. The company adheres to the PETRONAS policies which ensures that everyone always does the right thing. Throughout my internship period, I had the opportunity to be selected to take part in the SBDC Utility Complex Comprehension & Experience Site Surroundings (SUCCESS) Cohort 3 programme at the Pengerang Integrated Complex (PIC). During my 3-day 2-night stay at the site, each instructor from a different department would briefly explain HSSE regulations before conducting their presentations and site visits.

As an oil and gas company operating in high-risk sector, it is essential to implement robust strategies to cope with the challenges and uncertainties. Therefore, implementing strong safety measures is crucial to protect employees, assets, and the environment. For instance, prevent similar occurrences in the future, PRPC and PIC should always practice a clear incident reporting and investigation process. Both PRPC and PIC must work hand in hand to encourage employees to report near misses and incidents without fear of reprisal. Additionally, they must thoroughly investigate incidents to comprehend their root causes and implement corrective actions.

CONCLUSION

In conclusion, my internship experience in the Strategic Planning division has been both enriching and rewarding. Throughout this period, I have gained valuable insights into the complexities of strategic decision-making and its critical role in shaping an organization's success. The exposure to real-world projects and interactions between the team and other divisions like Business Development, Venture Management, Commercial, and Finance has not only enhanced my understanding of strategic planning. However, it has also honed my analytical, problem-solving, and communication skills.

During my internship, I actively participated in sustainability strategic initiatives. The experience has widened my knowledge with a deeper appreciation for the importance of data-driven insights in formulating effective sustainability strategies. Moreover, working collaboratively with cross-functional teams has taught me the significance of fostering active interdepartmental relationships to align objectives and execute strategies seamlessly.

Undertaking this internship has allowed me to witness firsthand how the strategic planning division plays a crucial role in guiding the organization toward its long-term goals, especially in being a central role in maintaining sustainability as a license for PRPC to operate its business. Subsequently, the experience has solidified my passion for strategic management and reinforced my determination to pursue a career in this field.

Furthermore, I am grateful for the mentorship and support I have received from my senior manager, Ms. Mimi Juazlin, manager, Mohd Faiz, and executive, Lee Yan, and colleagues, whose guidance and encouragement have been instrumental in my growth as a professional. I am eager to apply the knowledge and skills acquired during this internship to contribute positively to any future organization I join.

In conclusion, this internship has been a transformative journey that has deepened my understanding of strategic planning, provided practical exposure to its applications, and reinforced my dedication to a career in this dynamic field. Besides, I am confident that the insights gained throughout this experience help to serve as a strong foundation as I pursue my academic and professional aspirations in strategic planning and beyond.

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APPENDICES



Figure 1: SUCCESS Cohort 3 Programme