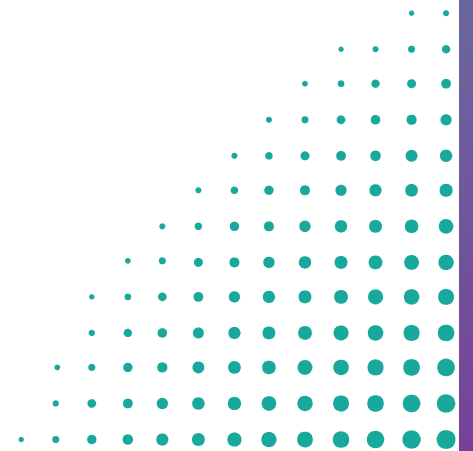




Pengerang Integrated Complex

Your Partner for Growth



Your Partner for Growth



Leveraging Optimal Location

Nestled within the **Strait of Malacca, Pengerang Integrated Complex (PIC)** connects seamlessly to **global networks** creating access to supply chains and growing **market demands**.



Highly Integrated & Self-Sufficient

Our complex creates **value chain synergy** and **supply reliability** for greater **cost optimisation** and **business continuity**.



Financial Incentives

We entice you with **gazetted tax incentives** and **attractive value propositions**.



Skilled Workforce

PIC offers a **vast** talent pool comprising a **highly skilled and resilient workforce** with our technical **training programmes** and adhering with compliance to **global standards** of safety and security.



Collaborative Stakeholder Relationships

We are supported by **governments, authorities**, as well as **reputable partners** in the energy and chemicals market.



Designed with Sustainability in Mind

We incorporated sustainability into our design philosophy by utilising **efficient, lower carbon technologies to minimise our environmental footprint**.



Concerted Environmental, Social and Governance (ESG) Efforts

We are **committed to environmental sustainability** through reduced emissions and exploring renewable energy, while **building a stronger community**.



Inclusive Living

PIC enhances community living by providing **essential services and utilities** to support seamless integration, **conveniently located near amenities** essential for residents' needs.

Leveraging Optimal Location

Positioned at the heart of the Asia Pacific region and at the crossroads of major international waterways, PIC ensures convenient accessibility.

Investors stand to benefit by being able to supply products to surrounding regions whilst optimising logistical costs.

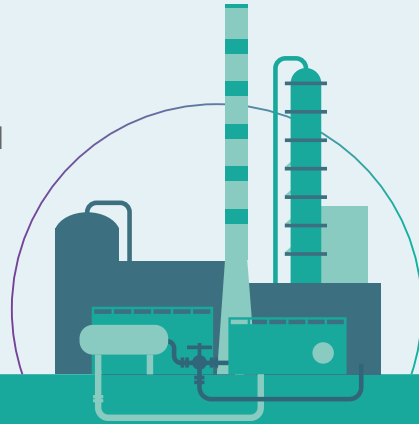
Our infrastructure boasts efficient deep water terminals in the bustling trade routes accessible to Very Large Crude Carriers (VLCCs), ensuring swift and convenient logistics and operations.



 Pengerang Integrated Complex (PIC)

Harnessing Value Chain Synergies

Our highly integrated complex, comprising refinery, steam cracker, and petrochemical plants, is meticulously designed to maximise value.



Refinery

300,000 bpd

Petroleum Products

Gasoline

Diesel

Jet A1

Fuel Oil

Sulphur



Steam Cracker

3.4 mtpa

Ethylene

Propylene

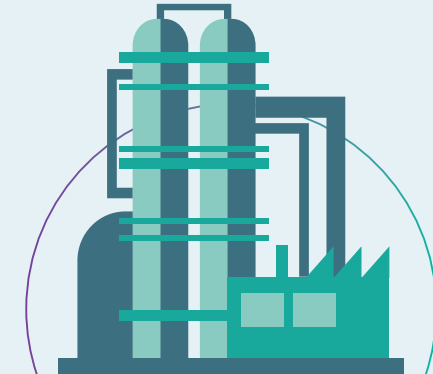
Benzene

Butadiene

Raffinate-2

C4 Olefins

Pygas



Petrochemical

3.3 mtpa

Petrochemical Products

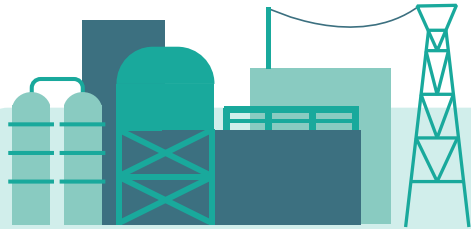
Polymers:
LLDPE, HDPE, PP

Glycols:
MEG, DEG, TEG

C4 INA

Nitrile Butadiene Latex

Highly Integrated & Self-Sufficient



Cogen Plant

Reliable Power & Steam

Our natural gas cogeneration plant has a **design capacity of 1,220 megawatts (MW) of electricity and up to 1,250 tonnes per hour (tph) of steam** is

20%  more efficient

than most combined cycle technology.



Water Supply



Uninterrupted Water Supply

Our Projek Air Mentah RAPID (PAMER) facility supplies

260  million litres of raw water/day

while the Raw Water Treatment Plant (RWTP) treats water for PIC use.



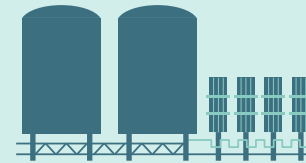
Raw Water Treatment Plant



Emergency Fire & Medical

Critical Services

Our services includes Fire & Medical, ensuring **comprehensive assistance.**



Air Separation Unit

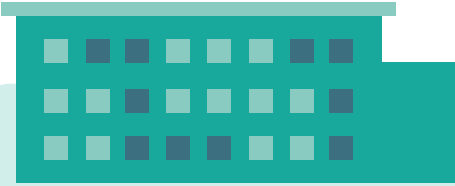
On-site O₂ and N₂ Supply

Our Air Separation Unit (ASU) ensures a continuous supply of oxygen and nitrogen to support complex operations.

1,400 tonnes/day oxygen (O₂) | **750** tonnes/day nitrogen (N₂)



Highly Integrated & Self-Sufficient



Centralised Laboratory

Centre for Quality & Product Development

Our laboratory, staffed by

200 certified professionals, 

including chemists and technicians, operating 24/7, conducts over **900,000 test frequencies annually.**



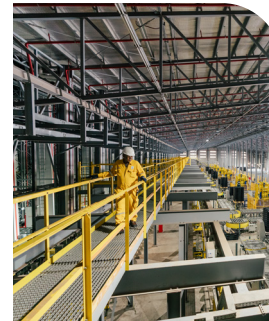
Solid Product Warehouse

Fully Automated Warehouse

Our Solid Product Warehouse (SPW) utilises Automated Storage and Retrieval System (ASRS) providing an extensive **storage capacity of over**

84,000

pallet addresses up to a 21-day inventory. 



Integrated Terminal

Dedicated Port Facilities

PIC's deepwater terminals support both VLCCs and liquid product tanks. Our tank farm facilities have a storage capacity of up to

1.5 million cubic metres 

for petroleum products and petrochemicals.

Meanwhile, our ports are able to handle solid and containerised products as well as easily accommodate up to **1,200 twenty-foot equivalent unit (TEU) container vessels and sulphur ships, between 5,000 and 15,000 deadweight tonnage (DWT)**, at our Solid Product Jetty (SPJ).



Maximising Investor Experience

We are backed by PETRONAS, a global Fortune 500 company, providing a secure and stable foundation for your growth opportunities.



Return on Investment

We prioritise investor success by offering competitive tariffs and attractive value propositions such as **gazetted tax incentives exclusively for PIC investors.**



Culture of Excellence

Our strength and efficiency of operations anchors in **a team of highly competent and professional individuals** upholding rigorous compliance with **global standards of safety and security.**



Collaborative Stakeholder Relationships

Our commitment is reinforced by strong support from both the **government authorities**, as well as valued partnerships with **esteemed organisations** such as Aramco, LG Chem, DIALOG, Vopak, Linde, Gentari, etc.



Designed with Sustainability in Mind

Sustainability cuts across the blueprint of the PIC and is deeply embedded in its operational and management practices guided by United Nations Sustainable Development Goals (UN SDGs). PIC focuses on capitalising on its design advantage to deliver cleaner energy and promote responsible consumption while pledging for operational excellence.

Pengerang Cogeneration Plant (PCP) is one of the most efficient power plants in the region, utilising high efficiency turbines to produce power and steam with reduced emissions. The Heat Recovery Steam Generators (HRSG) extract heat from exhaust gas to generate steam for plant consumption and to run steam

turbines for additional power, **avoiding 1.3 mil tonnes of CO₂ emission a year.**

In our efforts to ensure responsible consumption, PIC has implemented steam condensate recovery up to 80% to reduce overall freshwater withdrawal rate, as well as adopted efficient waste management efforts via 3R across our facilities. Currently, 40% of the make-up water to our Raw Water

Treatment Plant (RWTP) comes from recycled storm water.

Moreover, our practice of collecting effluents of similar characteristics and segregating them for specific multi-stage treatment process enables efficient and cost-effective treatment of the Refinery and Petrochemical effluent streams for the safe discharge to the environment.



Steam condensate recovery up to

80%



Building A Brighter Future

Our commitment is to prioritise **environment, social, and governance as part of our (ESG) initiatives**. This is achieved through integrated operations and logistics.

PIC embraces **PETRONAS Energy Transition Strategy** by integrating our operations to **streamline logistics**, thereby **reducing our transportation needs, and costs**.

We collaborate with Gentari and other partners to **champion cleaner energy solutions, including renewables and green mobility**. Our complex, featuring Malaysia's largest solar panel installation, generates **44 MWp of electricity for self-consumption**. Additionally, we **operate a fleet of 64 electric vehicles** on-site, with plans to expand this fleet in the near future.

Our renewable solutions also have the added bonus of being able to annually reduce emissions by **12000 metric tons of carbon dioxide equivalent (tCO₂e)**.

Actively **exploring decarbonisation opportunities** for the future and coupled to our unwavering aspiration to create a **lower-carbon energy hub**, PIC is also involved in circular economy investments such as biofuels and cleaner plastic solutions.

In realising these aspirations, PIC will host **Malaysia's first biorefinery**, targeted to be **operational by the second half of 2028**, through a partnership with **Enilive S.p.A** (subsidiary of Eni S.p.A) and **Euglena Sustainable Investment Limited** (subsidiary of Euglena Co. Ltd.).

The facility will **process 650,000 tonnes** of raw material annually to produce biofuels products such as **Sustainable Aviation Fuel (SAF), Hydrogenate Vegetable Oil (HVO) and bio-naphtha**.

Expansion opportunity up to

200MWp ⚡

capacity and the ability to reduce emissions annually.



Nurturing Community and Planetary Well-being

Pengerang is our Home

We are dedicated to fostering strong bonds with our community and environment, both of which are integral to our lives and operations.

Our commitment extends to the welfare of people and nature as we actively contribute to their advancement and prosperity.

Improving Livelihoods

We strive to enhance livelihoods by creating more job opportunities and benefit small businesses in the area by hiring the services

of established cooperatives.

Science, Technology, Engineering, and Mathematics (STEM) and Technical & Vocational Education and Training (TVET) **education act as pillars for progress.**

Upskilling a dedicated pool of talent with these programmes equips businesses to thrive.

We have innovative projects like the green mussel aquaculture, which have successfully **restored and enhanced the livelihoods of Orang Asli Seletar fisherfolk through mussel farming.**

Our Planet, Our Home

Recognising our planet as our home, we embarked on initiatives enhancing our environment through tree planting.

A collaborative 3-year project involving operating companies within PIC, **concerted efforts were taken to safeguard the degraded mangrove areas** while concurrently **enhancing the socio-economic well-being of the local community.**

In line with Johor's development efforts to transform the Sungai Johor Estuary in Pulau

Tanjung Surat into a thriving ecotourism destination.

Additionally, safeguarding marine life is integral to our environmental stewardship. From organising beach clean-ups to ensuring the cleanliness of the water discharged into the ocean.

30,000
mangrove trees in
Pulau Tanjung Surat.



Inclusive Living for Everyone

We ensure we enrich the lives of our residents, offering a lifestyle unlike any other with our attention to detail and creating the ideal environment that **seamlessly combines work, leisure, and the comforting feel of home.**

Relax and Unwind

Indulge in the cosy ambience of our on-site lodging, **The HIVE Residence**, where you can unwind and relax. Explore a variety of leisure amenities, including a **gym, golf experience centre, tennis courts, and swimming pool.**

Thrive at Work

On the professional front, our **well-equipped meeting and training rooms** provide a conducive environment to facilitate productivity and collaboration at the workplace for meetings and knowledge-sharing sessions.

Easy Access to a Balanced Life

With well connected transportations through highways, Desaru coast ferry, and convenient access to global hotels, first-class leisure facilities, international schools, and critical care centres, every aspect of **life is enjoyable and fulfilling.**



We look forward to partnering with you.

 petronas.com/pic/  investpic@petronas.com

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