



PENGERANG MARITIME INDUSTRIAL PARK

BY BENALEC HOLDINGS BERHAD

Malaysia's 2020 Budget tabled by Finance Minister Lim Guan Eng in October 2019 presents a new economic direction for the country, providing catalysts for the country to compete on the global stage.

Meanwhile, the local government's ambition to elevate Johor into a world-class oil and gas hub in Southeast Asia while at the same time, complementing land-restricted Singapore has prompted the development of the **Pengerang Integrated Petroleum Complex (PIPC)**.

The government has gazetted 22,000 acres of land in Pengerang within the Kota Tinggi district of Johor to house the complex. PIPC's masterplan is targeted to achieve 1 million bpd of refining capacity, 11.8MTA of petrochemical production and 5 million cbm of oil and gas storage capacity – all of which will place Johor on the world map as one of the most significant oil and gas hubs in the world.

This ambition is spearheaded by the Malaysian National Oil Company, Petroliaam Nasional Berhad's (Petronas) \$27 billion investment into Pengerang Integrated Complex (PIC), which consists of the Refinery and Petrochemicals Integrated

Development (RAPID) and six associated facilities, all within the PIPC. RAPID itself is jointly owned by Petronas and Saudi Aramco and comprises an oil refinery with a capacity to process 300,000 bpd of crude oil, a 1.2MTA naphtha cracker, and a petrochemical complex with a combined production capacity of approximately 3.3MTA of ethylene, propylene, and C4 - C6 olefins products. In addition, the refinery will also produce naphtha and liquid petroleum gas (LPG) required as feedstock for the petrochemical complex. RAPID will also produce Euro V standard gasoline and diesel fuel products.

DEIA
APPROVAL

Construction of the RAPID project began since 2014 and as of January 2019, the refinery has been fully commissioned, marking the beginning of start-ups in subsequent facilities within the integrated development. The commercial operation date is expected to be by the end of 2019.

Pengerang Maritime Industrial Park

Encouraged by the local government's development policy, Benalec has proposed and undertaken the development of Pengerang Maritime Industrial Park (PMIP) as part of the PIPC masterplan on a joint venture basis with the state government.

In January 2016, Benalec received the Department of Environment's (DoE) approval for the Detailed Environmental Impact Assessment (DEIA) submitted for the project, which will see the reclamation of 1,673 acres of industrial land zoned for heavy industries particularly for the oil, gas and petrochemical industries. Benalec's DoE

approval also readily provides for the immediate construction and operations of certain topside developments, providing significant savings in terms of timeline and costs to customers who set up their facilities within PMIP.

PMIP will be a part of the entire PIPC ecosystem where the overall development strategy of PMIP is to create a fully integrated industrial park focusing on downstream oil & gas industries including refineries, petrochemical plants and tank farms which will complement Petronas RAPID through the trading of feedstock or products. Some areas of PMIP have been earmarked for light to medium industries, focusing on marine, logistics and support services such as supply bases, warehouses, shipyards and fabrication yards.

NATURAL
DEEPWATER

Competitive Advantages

PMIP's vibrant and strategic location allows itself to be positioned as a downstream services and logistical support base for the up-and-coming RAPID project due to its extremely close proximity of just five kilometres as well as the availability of direct access to the seafront which is very limited within the Pengerang area.

The availability of the 3.7-kilometre stretch of valuable seafront land allows

PMIP to boast its access to natural deep water of between 20-24 metres which borders the site. Its deepwater jetty, which will be within a naturally sheltered harbour free from adverse weather conditions 365 days a year, will be able to accommodate up to 20 berths ranging from 2,000 DWT and 350,000 DWT. This enables it to handle Very Large Crude Carriers (VLCC), Ultra Large Crude Carriers (ULCC) and even ValeMax Bulk Carriers with the construction of a short jetty trestle that requires minimal capital and maintenance dredging.

The entire development of PMIP will be situated on reclaimed land and will be undertaken in two phases, whereby Phase 1 covers an area of 1,180 acres while Phase 2 is 493 acres. Benalec has begun reclaiming part of its Phase 1 since early 2019. It estimates that the overall completion of entire PMIP reclamation will take between 8 to 10 years, subject to commercial demand.

Benalec is currently in discussions with several interested terminal operators who are planning to build oil, gas and chemical storage tanks on identified plots in PMIP. Most of these tank farms will act as supporting facilities to various processing plants which will be built by customers within PMIP to

store feedstock and/or products in and out of the processing plants, while some will be additional independent storage tanks targeting third party use and can be customised to the requirements of the storage off-takers. With vast land that is to be reclaimed, PMIP is also able to accommodate customers within other segments of the oil and gas value chain, looking to extend their footprint in this part of the world.

Benalec, founded in 1978, has in a short span of time emerged as one of Malaysia's top homegrown integrated marine construction solutions provider. Listed on the Main Board of Bursa Malaysia since 2011, Benalec has proven its capability in undertaking large scale reclamation projects locally as well as regionally. It is a class "A" Civil and Marine Engineering Contractor registered with Sijil Perolehan Kerja Kerajaan (SPKK) and Construction Industry Development Board Malaysia (CIDB) and is an ISO 9001:2008 certified company. Benalec has also further expanded its operations into Singapore with the setting up of Benalec Sdn Bhd Singapore Branch, which has also achieved ISO 9001:2008 and OHSAS 18001:2007 accreditation.

For more information visit
www.pengerangmaritime.com.my
www.benalec.com.my

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