







Purpose:

- Identify key Capital Projects with a long-term view on infrastructure needs and market demands to meet the goals and objectives of the Port and ensure the success of current and future industry partners.
- Determine the Capital Project Cost of key projects
- Determine sources of funds to meet objectives in support of current and future industry partners for the next 7-10 years
- Prioritize Capital Projects based on highest and best use of Port assets and sufficient and sustainable returns on invested capital



Conoco Phillips produced Eagle Ford Crude which Sailed from NuStar Dock at Port Corpus Christi 12.31.2015 to Trieste Italy and pipelined to Germany





Largest PTA/PET Resin Facility in the World \$1.1 Billion Investment

410 – acres that will house the M&G operations in Corpus Christi
2012 – year the property was bought from the Driscoll Foundation
Over \$800 million – total cost of the project
1.1 million –tons a year of PET throughput
1.3 million –tons a year of PTA throughput
Up to 3,000 – jobs during the construction phase
250 – permanent facility jobs
700 – indirect jobs

M&G Chemicals is strategically located in Port Corpus Christi with close proximity to railroads, highways and the Gulf of Mexico. The plant, on a 410-acre property along the port's north bank of the Inner Harbor, is also situated within a couple of miles from plenty of refineries that produce feedstock needed to manufacture PET and PTA.

The new PET plant will have a nominal production capacity of 1.1 million tons per year, while the plant for integrated PTA, the primary raw material used to make PET, will have a nominal production capacity of 1.3 million tons per year. In January 2016 the project has been upgraded in order to increase both nominal and actual expected production by over 100kMT. All necessary State and Federal permits for the added capacity have been completed.

The plant will implement the M&G Chemicals Easy-Up PET technology and IntegRex PTA technology for the production of PET and PTA respectively. The M&G Chemicals Easy-up process (also known as "Horizontal Continuous Inclined Reactor - "HCIRR") requires just half the equipment compared to conventional technologies for the production of PET. The HCIRR takes advantage of the energy coming from the previous step of the process (Continuous Polymerization "CP"), in which the base monomer is first generated from raw materials and then polymerized in melted phase.

The HCIRR reactor works in a special gas atmosphere, which allows the use of smaller size equipment. Core of the technology is the horizontal kiln reactor, which allows the perfect plug flow, equivalent to 500 Continuously Stirred Tank Reactor ("CSTR") in series. The product is finally cooled and is ready to be shipped to costumers.



Extension of La Quinta Channel provides waterside access.

Roadside access provided by PCC through the Sen. Kay Bailey Hutchison Road.

PCC Cost for Improvements to Road, Water Line, and Relocation of Pipelines - \$9 Million.

The Project is voestalpine's largest foreign direct investment and a major step in achieving a lowcarbon economy

voestalpine is investing in a natural gas based direct reduction plant with an annual capacity of 2 million metric tons of Hot Briquetted Iron (HBI). HBI is a high-grade feedstock for the production of high-quality steel grades.

Half of the production volume will be shipped to our existing Austrian steel mills in Linz and Donawitz for the production of sophisticated steel grades. The remainder will serve as a strategic reserve and will also be sold to partners interested in longer-term contracts.

Facts & Figures

Investment: \$740 million Calculated additional economic impact to the region: \$1 billion Groundbreaking: April 2014 Projected Startup: First Quarter 2016

The Process: The natural gas fueled direct reduction process is the modern and green alternative to coke-based blast furnaces



LNG

\$10-13 billion, First 2 trains

Up to \$20 billion at full build out

Waterside access provided via Port Corpus Christi La Quinta Channel Extension

Stage 1: Trains 1&2 – Under Construction

Stage 2: Train 3 – Fully Permitted

Stage 1 and Stage 2 of the project are designed for up to three trains with expected aggregate nominal production capacity of approximately 13.5 million tonnes per annum (mtpa), three LNG storage tanks with capacity of approximately 10.1 Bcfe, two LNG carrier docks and a 23-mile, 48" natural gas supply pipeline. The first train is expected to start operations as early as 2018.

Stage 1

The Stage 1 EPC contract includes two LNG trains, two tanks, one complete berth and a second partial berth. The contract price of the Stage 1 EPC contract is approximately \$5.6 billion. Total project costs of approximately \$11.5 billion for the first two trains, two LNG storage tanks, one dock and the natural gas supply pipeline.

Stage 2

Cheniere entered into a Lump Sum Turnkey EPC contract with Bechtel for Stage 2, including one LNG train, one additional tank and the completion of a second berth.

Stage 3 Expansion Project (Trains 4 & 5)

The Stage 3 expansion project would increase the expected aggregate nominal LNG production capacity to approximately 22.5 mtpa over a total of five trains, each with a nominal capacity of 4.5 mtpa. The targeted CCL Project in-service date for stage three is for the 1st Quarter of 2021.



Seamless Steel Pipe \$1 Billion Phase 2 underway Completion Q4 2016

TPCO America is currently building a state-of-the-art seamless steel pipe manufacturing facility in the heart of the US energy market. Located on a 253 acre site east of Gregory, Texas, TPCO America is the largest single investment by a Chinese company in a US manufacturing facility. Utilizing Best Available Control Technology, TPCO America will rely on natural gas and electricity to maximize environmental protection.

At full capacity, TPCO America will require 600-800 full time employees to reach maximum production of 500,000 metric tons of 4" - $10\frac{3}{4}$ " seamless steel pipe annually. According to a preliminary study, the total economic impact of the TPCO America project will reach \$2.7 billion dollars in the first decade.



Operational, Q1 2017 1.5 Million Tons Ethane→ Ethylene→ VMC Joint venture with MexiChem



Permian Oil LPG export facility Operational Q2 2016

Under construction, and with an investment of \$55M, Oxy Ingleside Energy Center, LLC (OIEC) is located at the former Naval Station Ingleside. The property was purchased from Port Corpus Christi in 2012. OIEC has plans for an LPG/LNG export plant and will utilize the 1100 foot pier and wharf constructed by the US Navy in 1992. Operations at OIEC are anticipated to begin in 2015 for LPG and 2016 for oil.

