LNG Export Hub

Darwin, the capital of the Northern Territory of Australia is an established LNG export hub. The Darwin LNG and Ichthys LNG projects support three trains capable of producing 12.6 million tonnes per annum (Mtpa), over 10% of Japan’s annual global gas imports. The Prelude Floating LNG facility, 900km to the west, is also serviced from Darwin.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>COMMENCEMENT DATE</th>
<th>NAMEPLATE CAPACITY</th>
<th>LNG TRAINS</th>
<th>EXPANSION TRAINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darwin LNG</td>
<td>Q1 2006</td>
<td>3.7 Mtpa</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ichthys LNG</td>
<td>Q4 2018</td>
<td>8.9 Mtpa</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Prelude FLNG</td>
<td>Q4 2018</td>
<td>3.6 Mtpa</td>
<td>1</td>
<td>–</td>
</tr>
</tbody>
</table>

First commercial gas flows from the Northern Territory to eastern Australia commenced in Q1 2019. Stakeholders are investigating new and expanded gas pipeline options from onshore resources to east coast markets and north to Darwin.

Supply chains are managed and supported from the East Arm Logistics Precinct.

At Middle Arm, 500 Ha of industrial land is available for a gas-based manufacturing industry. Darwin is linked by a transcontinental rail service, national highway, international airport, and is home to an oil and gas research, innovation and training centre.

5 Point Plan

1. Expand the world-scale Darwin LNG export hub
2. Grow the Northern Territory’s service and supply industry
3. Establish gas-based processing and manufacturing
4. Grow local research, innovation and training capacity
5. Contribute to Australia’s energy security

By 2030, the Territory is a world-class gas production, manufacturing and services hub.

Strategic Oil and Gas Industry Development
Department of Trade, Business and Innovation
Northern Territory Government, Darwin
Email: gasdevelopment@nt.gov.au
Phone: +61 8 8946 9540

March 2019
Investment Opportunities

Development of offshore gas fields
- 30 Tcf in undeveloped offshore gas reserves
- Backfill of Darwin LNG facility required by 2023 - two separate joint-ventures, led by ConocoPhillips and Eni, are actively developing projects to backfill Darwin LNG - FID Q1 2020

Expansion of Darwin’s LNG Export Hub
- Gas to expand the LNG hub could be sourced from offshore reserves, onshore gas developments, or both
- Land is secured for five additional trains - one at Darwin LNG and four at Ichthys LNG

Development of onshore gas fields
- Existing wells drilled by Origin, Santos and Pangaea, and associated discovery reports, indicate a P50 Gas-In-Place Resource of at least 500 Tcf for the Beetaloo Sub-basin in the Velkerri B shale alone. There are further prospective layers in the Beetaloo Sub-basin, and other basins, yet to be assessed
- Proposed 2019 petroleum exploration in the Beetaloo Sub-basin will focus on gas resource definition and testing for liquids rich gas
- Opportunities for water management facilities, civil works and other supporting infrastructure, services and supplies such as proppants

Development of gas-based manufacturing
- Opportunities exist for methane-based products, energy intensive industries, condensate refining and production of ethane-based products
- Early opportunities from offshore gas fields lend themselves to methane-based products
- Future opportunities from onshore gas fields may expand opportunities to include ethane-based petrochemicals
- Land is available for gas-based manufacturing industries near existing LNG facilities

Service and supply for the gas industry
- The NT Government has invested in dedicated infrastructure at the East Arm Logistics Precinct to support offshore projects
- Opportunities to support the offshore gas industry, including the operations of Darwin LNG, Ichthys LNG and Prelude FLNG
- Opportunities to support the onshore industry, particularly shale gas
- The NT Government is partnering with operators and the Industry Capability Network Northern Territory to identify opportunities to grow the service and supply industry

Research, innovation and training
- Opportunities for strategic engagement and partnerships with Charles Darwin University, including through the North Australian Centre for Oil & Gas, the Advanced Manufacturing Alliance and Vocational Education and Training