

# ConocoPhillips Optimized Cascade® Process

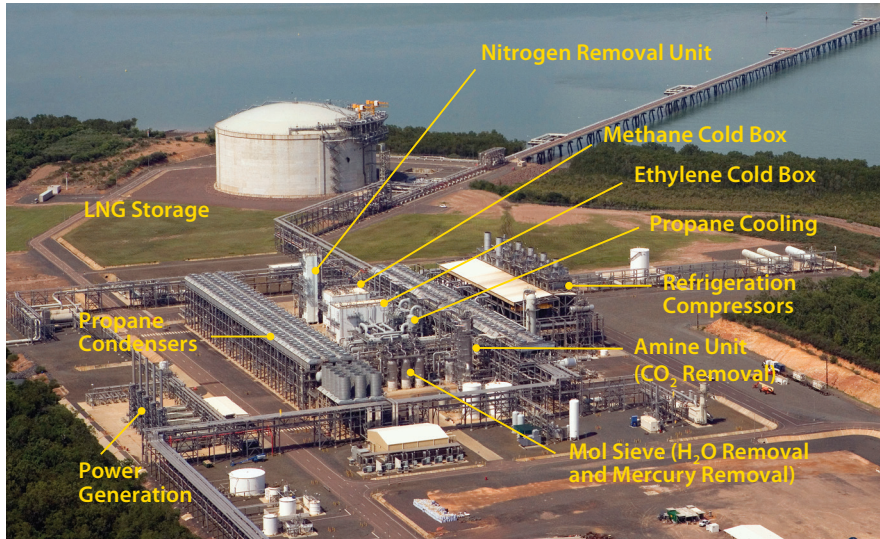
## Advantages of the Optimized Cascade Process Technology

<b>High availability</b>	<ul style="list-style-type: none"><li>• “Two-trains-in-one” configuration yields approximately 95% plant availability, with high efficiency during turndown</li></ul>
<b>Proven technology</b>	<ul style="list-style-type: none"><li>• More than 45 years of operation</li><li>• 25 trains licensed at 12 plants, in excess of 100 MTPA of capacity</li><li>• Designed and built plants with broad range of ambient temperatures and feed compositions</li></ul>
<b>Flexible operations</b>	<ul style="list-style-type: none"><li>• Easy to start up, shut down, operate and maintain, with fast startup cycles and wide operating range</li><li>• Cold boxes retain cold temperatures during extended outages, which greatly facilitate faster startup cycles</li><li>• Highest plant turndown capability</li><li>• Rebalancing between refrigeration circuits allows for quick response to changes in operating conditions</li></ul>
<b>High thermal efficiency and low emissions</b>	<ul style="list-style-type: none"><li>• Use of brazed aluminum heat exchangers, aeroderivative gas turbines, and waste heat recovery integration, yields up to 96% LNG facility thermal efficiency and lower emissions</li><li>• Refrigerants retained in process and not flared during shutdowns</li></ul>
<b>Integrated design options</b>	<ul style="list-style-type: none"><li>• Improve overall LNG plant efficiency and economics with integrated heavies removal and/or nitrogen rejection units</li><li>• Increase LNG production and efficiency with:<ul style="list-style-type: none"><li>– Combined cycle/cogeneration</li><li>– Gas turbine power augmentation</li><li>– Gas and flashing liquid expanders</li></ul></li></ul>

## Advantages of the Global LNG Collaboration

<b>Reputable licensor and EPC contractor</b> — “One Team”	<ul style="list-style-type: none"><li>• ConocoPhillips as an owner, licensor and operator of LNG facilities, and Bechtel as a world class EPC contractor offer:<ul style="list-style-type: none"><li>– consistent development and application of best practices for more than 20 years</li><li>– credibility to LNG developers and their financial institutions</li></ul></li></ul>
<b>Predictable outcomes</b>	<ul style="list-style-type: none"><li>• Bechtel’s unparalleled track record of constructing successful projects on time and within budget</li><li>• Together, ConocoPhillips and Bechtel provide a performance guarantee for LNG production</li></ul>
<b>Owner’s perspective</b>	<ul style="list-style-type: none"><li>• As an owner and operator of multiple LNG facilities, ConocoPhillips has broad experience in all aspects of the LNG value chain and shares valuable design and operational insight with licensees</li></ul>
<b>Services and support expertise</b>	<ul style="list-style-type: none"><li>• The Collaboration provides experienced subject matter experts to:<ul style="list-style-type: none"><li>– contribute in all project phases</li><li>– provide quality assurance of key equipment</li><li>– ensure safe, successful commissioning and startups</li><li>– train operators and provide post startup operational support</li></ul></li></ul>

## Typical Facility Layout



*Key components of the Optimized Cascade process in use at Darwin LNG*

## Optimized Cascade Process Reference List

<b>Kenai LNG</b>	1 train	1.5 MTPA	Kenai, Alaska, USA
<b>Atlantic LNG</b>	4 trains	14.8 MTPA	Point Fortin, Trinidad and Tobago
<b>Egyptian LNG</b>	2 trains	7.2 MTPA	Idku, Egypt
<b>Darwin LNG</b>	1 train	3.7 MTPA	Darwin, Australia
<b>Equatorial Guinea LNG</b>	1 train	3.7 MTPA	Malabo, Equatorial Guinea
<b>Angola LNG</b>	1 train	5.2 MTPA	Soyo, Angola
<b>Queensland Curtis LNG</b>	2 trains	8.5 MTPA	Curtis Island, Australia
<b>GLNG</b>	2 trains	7.8 MTPA	Curtis Island, Australia
<b>Australia Pacific LNG</b>	2 trains	9.0 MTPA	Curtis Island, Australia
<b>Sabine Pass Liquefaction</b>	5 trains	22.5 MTPA	Cameron Parish, Louisiana, USA
<b>Wheatstone LNG</b>	2 trains	8.9 MTPA	Ashburton North, Australia
<b>Corpus Christi Liquefaction</b>	2 trains	9.0 MTPA	San Patricio County, Texas, USA
<b>TOTAL</b>	25 trains	101.8 MTPA	

### CAUTIONARY STATEMENT

These materials contain forward-looking statements. We based the forward-looking statements on our current expectations, estimates and projections about ourselves and the industries in which we operate in general. We caution you these statements are not guarantees of future performance as they involve assumptions that, while made in good faith, may prove to be incorrect, and involve risks and uncertainties we cannot predict. In addition, we based the forward-looking statements on assumptions about future events that may prove to be inaccurate. Our actual outcomes and results may differ materially from what we have expressed or forecast in the forward-looking statements. Economic, business, competitive and regulatory factors that may affect ConocoPhillips' business are set forth in ConocoPhillips' filings with the Securities and Exchange Commission, which may be accessed at the SEC's website at [www.sec.gov](http://www.sec.gov).

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## Optimized Cascade Process — Train Size Progression

