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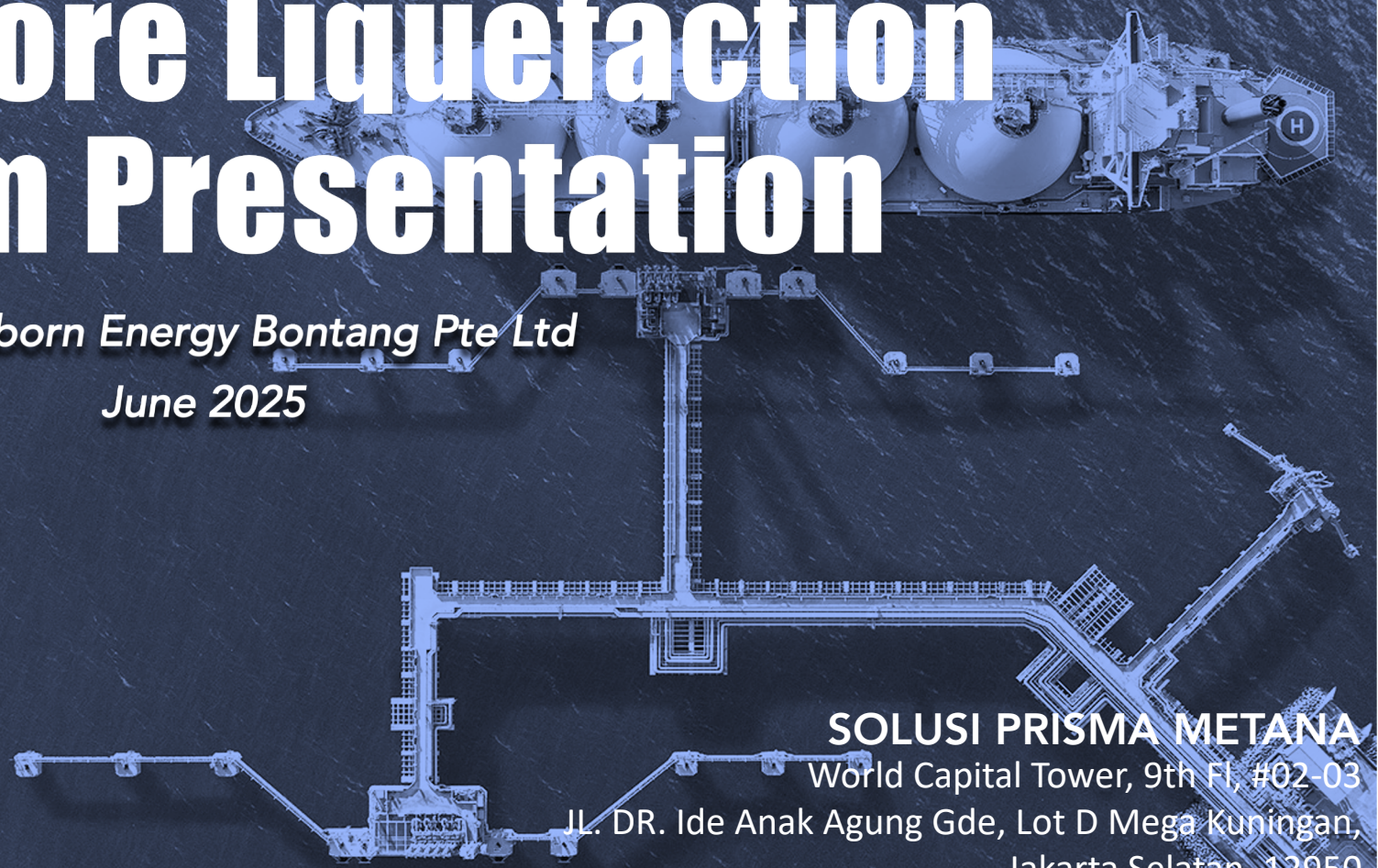
LNG Offshore Liquefaction Platform Presentation

For Starborn Energy Bontang Pte Ltd

June 2025



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World Capital Tower, 9th Fl, #02-03
Jl. DR. Ide Anak Agung Gde, Lot D Mega Kuningan,
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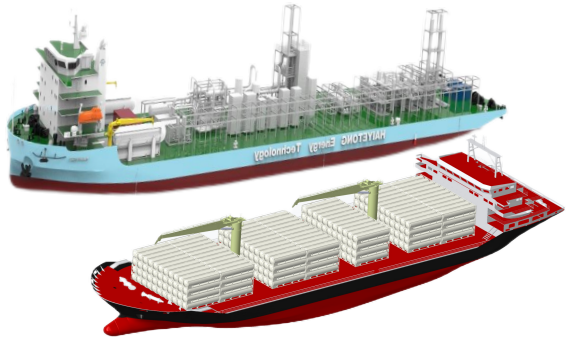
01

LNG Liquefaction Vessel as an Innovative Solution for Gas Supply in Indonesia

Why It Matters for Indonesia

- 17,500 islands
- **>60** stranded gas fields
- **30%** of gas underutilized due to onshore plant economics
- LV/DV = efficient & rapid solution
- Target: 1 LV per stranded well = **National Production Growth**

Scalability



- More **cost effective** than onshore LNG plants
- Vessels can relocate to new stranded gas wells
- Continuous utilization = optimal value

Technical Fit for Indonesia's Gas Landscape

- Indonesia, as an archipelagic country, has many stranded gas fields with small reserves
- LV with **10–20 MMSCFD** capacity offers ideal solution for small field monetization
- Once depleted, the vessel relocates to new gas fields

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02

Offshore Liquefaction Platform

Introduction To Offshore Liquefaction Platform

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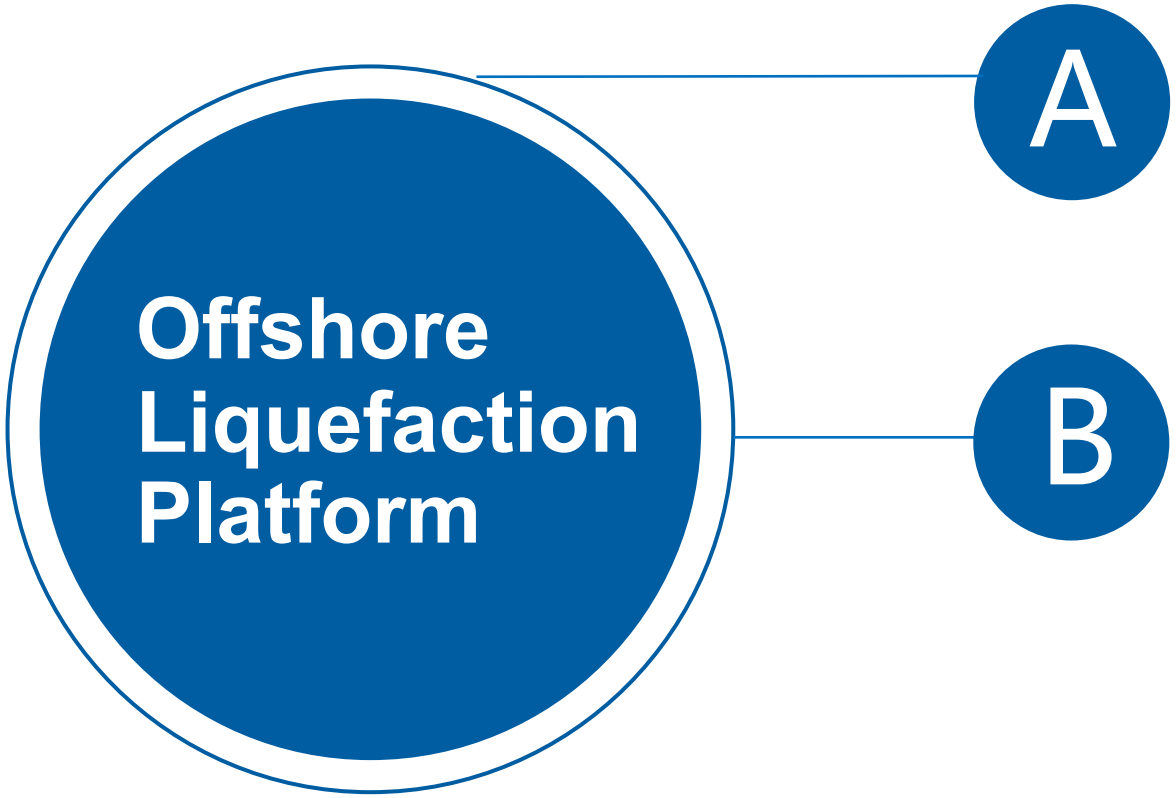


Liquefaction vessel

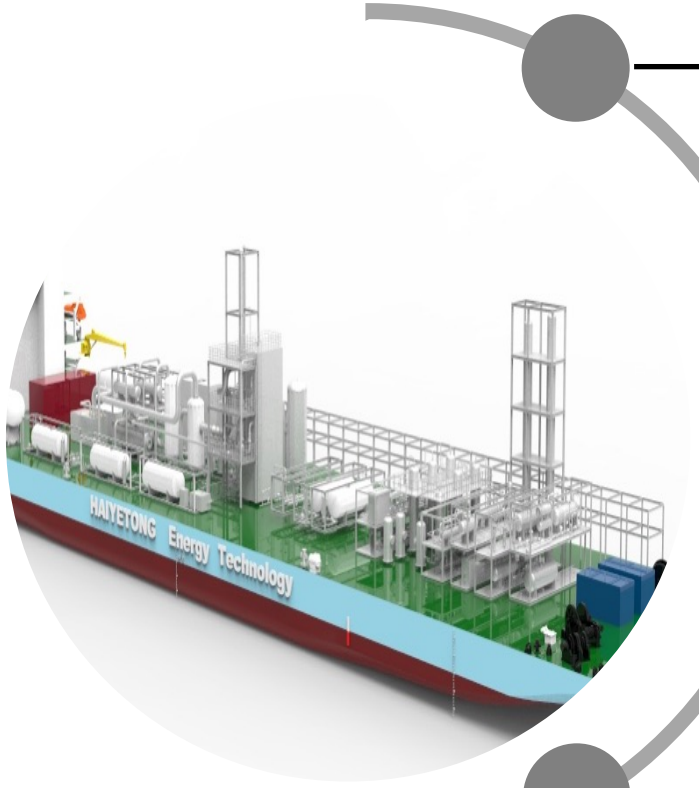
LNG Liquefaction Unit: Converts natural gas to LNG, 50,000 to 150,000 tons per year.

Depot vessel

LNG Tank Container Storage & Buffer Unit:Equipped with cranes to replace the functions of the wharf and storage yard.

The vessel, multi-functional facility integrating liquefaction, storage, filling, and transportation.

A—Liquefaction vessel



1 Liquefaction Module

2×200,000 m³ skid-mounted processing units.

2 LNG Tank Container Filling Module

2 sets of skid-mounted LNG tank container filling systems.

3 Gas Pressure Regulation & Power Generation Module

10MW gas-powered generator set.

4 Gas Processing

Desulfurization, dehydration, mercury removal, condensate extraction.

B—Depot vessel

1 **LNG Container Storage Area**

100-600 × 40 FT containers

2 **Lifting Equipment for LNG Tank container**

2sets × 35-ton cranes

3 **Crew Capacity**

30 personnel staffing

4 **Structure (Dimension)**

Length : 150m
Width : 32m
Draft : 3-4m

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03 Scenarios Simulation

Scenario Overview

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Applicable Scenarios

1

Liquefaction Vessel (A) + Depot Vessel (B) + Transfer

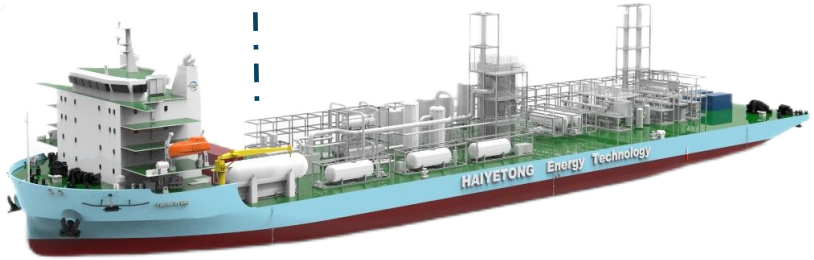
Designed for island/offshore/nearshore applications, addressing gas field production and export supply chain challenges. Pure containerized model.

Application Scenarios Simulation:
Liquefaction Vessel (A) + Depot Vessel (B) + Transfer

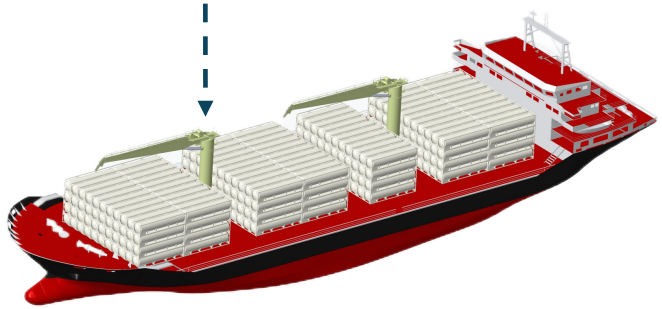
- Scenario: Offshore island natural gas liquefaction and local supply.

  Advantages: Widely applicable to small-scale gas development, integrating LNG liquefaction and LNG tank container depot.

Natural gas pipelines or floating corridors.



LNG Tank Container Storage



Scenarios Simulation

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04 Operation Simulation

Implementation Timeline for Tank-type Offshore LNG Liquefaction Platform

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Months 1-9

Vessel Construction

Months 4-9

Gas Well Gathering System Installation

Months 7-9

Waterway & Anchorage Area Upgrades

Months 9-10

Equipment Transportation

Months 11-12

Commissioning & Production Testing

Complete Retrofit Process for Existing Vessels

1.Project Preparation & Planning

15-20days

- Procurement of LNG liquefaction plant equipment and vessel dimension screening based on design specifications
- In-depth technical coordination with classification societies and shipyards to analyze vessel retrofit requirements and finalize the modification plan through detailed design drawing reviews.

2.Equipment Removal & Dry Dock Repairs

10-15days

- Carry out dismantling work, remove unnecessary auxiliary machinery and pipelines, and redesign and construct according to the offshore liquefaction platform drawings.
- Perform dry dock repair work, including rudder-propeller shaft and underwater engine compartment repairs.

3.Essential Structural Modifications & Module Installation

20-30days

- Conduct steel structure repairs and modifications for the entire vessel, including hull structure alterations and reinforcements to adapt to the offshore liquefaction platform requirements.
- Complete module lifting operations, such as skid-mounted liquefaction equipment installation, hoisting of LNG generators, etc.

4.Equipment Installation & System Commissioning

30-40days

- Perform equipment installation, including mechanical, piping, and electrical works, cable laying, and water, power, oil, and gas pipeline engineering.
- Carry out system commissioning to ensure all systems operate normally.

5.Project Close-out & Delivery Acceptance

20-30days

- Organize inspection and testing to ensure project quality, safety, and processes meet requirements.
- Complete project delivery by self-navigating the offshore liquefaction platform to the designated gas field for seabed anchoring, pipeline connections, and other pre-production preparations.

05

Cooperation Schemes Options with Starborn Energy Bontang Pte Ltd

All Schemes

All Possible Schemes

A

Processing Fee Scheme

Processing fee is the cost paid by the charterer to the FLNG owner in exchange for processing natural gas into LNG, typically calculated based on the volume of gas processed.

B

Time Charter Party

The **daily charter fee** is a fixed cost paid by the charterer to the FLNG vessel owner **per day of vessel use**, regardless of the actual gas volume processed, and usually covers the vessel's availability, crew, maintenance, and basic operational readiness.

A Option-1 : Processing Fee Scheme

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UPSTREAM

Starborn Energy Bontang Pte Ltd

GAS WELL

GAS SPA

GAS

$ 5.1

MIDSTREAM

SPM & Gema Supra Abadi
SE MAX 49% (OPTIONAL)

$ 3.5

LIQUEFACTION VESSEL (LV)
+
DEPOT VESSEL (DV)

+ MINIMUM USE OR PAY

LNG SPA

LNG

$ 8.6

DOWNSTREAM

SPM JV

LNG OFF TAKER

OVERSEAS BUYER

DOMESTIC BUYER

PROCESSING FEE

LIQUEFACTION: USD 3.5 / MMBTU

A Option-2 : Time Charter Party

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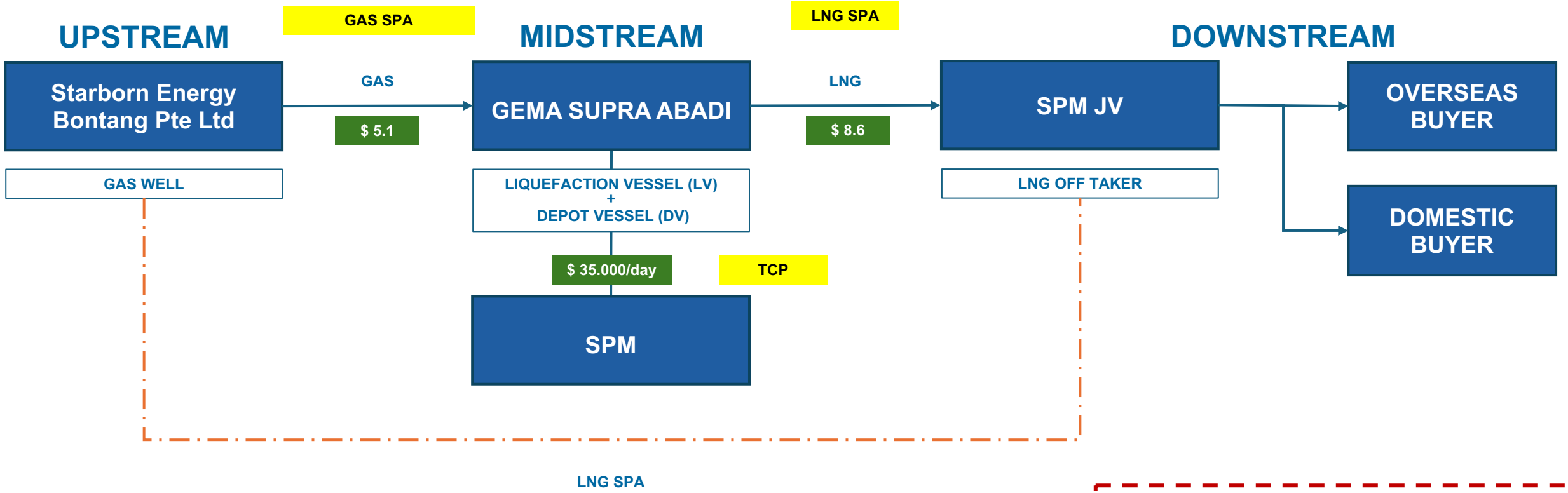

TIME CHARTER

LIQUEFACTION: USD 35.000 / day

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THANK YOU

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