

### MODULE TRANSPORTATION SOLUTIONS



# WHO WE

# MODULE TRANSPORTATION SOLUTIONS

## WHO WE ARE

Darwin, Australia LNG project, including 19 transports of modules with Finesse from different fabrication yards to the LNG plant in Darwin



Boskalis is a world leader in heavy marine transport solutions.

We offer significant value to your module transport projects by collectively realizing the lowest overall cost, managing risk, coordinating logistics and optimizing schedules amongst fabrication yards, subcontractors and clients. We focus on maintaining consistency and quality to ensure the success in managing projects of all types and sizes, all over the world. Our unique and personalized approach to project execution and management is the key to our successful track record.

Following the acquisition of Dockwise, we will continue to strengthen our position in heavy marine transport under the name Boskalis. As Boskalis, we are involved with the development, construction, transport, installation, inspection, repair & maintenance (IRM) and decommissioning of offshore and onshore facilities in the international energy industry. With a versatile fleet of more than 900 vessels and floating equipment Boskalis operates in around 90 countries across six continents with 10,700 employees.

With our integrated capabilities and innovative power, we offer a truly unparalleled combination of people, vessels and activities which enables us to break new grounds and create new horizons for our clients.



No Accidents. This is embedded in our company's culture and supported through Values and Rules. All employees, including our sub-contractors, are expected to take these values and rules to heart.

#### **VALUES**

I AM RESPONSIBLE FOR MY OWN SAFETY

I APPROACH OTHERS ABOUT WORKING SAFELY

I TAKE ACTION IN CASE OF UNSAFE OPERATIONS
IF NECESSARY, I WILL STOP THE WORK

I ACCEPT FEEDBACK ABOUT MY SAFETY BEHAVIOUR REGARDLESS OF RANK AND POSITION

I REPORT ALL INCIDENTS, INCLUDING
NEAR-MISSES, TO INFORM OTHERS AND BUILD
ON LESSONS LEARNED

#### RULES

PREPARE A RISK ASSESSMENT FOR EACH PROJECT, VESSEL OR LOCATION

OBTAIN A PERMIT TO WORK FOR DEFINED HIGH-RISK ACTIVITIES

MAKE A JOB HAZARD ANALYSIS FOR HAZARDOUS NON-ROUTINE ACTIVITIES

BE INFORMED ABOUT RISK & CONTROL MEASURES

BE FIT FOR DUTY AND WEAR THE PPE REQUIRED

# YOUR RELIABLE PARTNER

"EARLY PROJECT INVOLVEMENT ALLOWS US TO ENSURE THAT OUR CLIENT'S REQUIREMENTS FOR OPTIMIZATION AND FLEXIBILITY ARE MET."

We have an unrivaled track record of providing innovative solutions for our clients' onshore processing plant and terminal developments. As your partner you can rely on our expertise, experience and commitment to executing operations safely, on time and within budget.

Our multidisciplinary engineering, project management, procurement and SHEQ capabilities, combined with our versatile fleet of assets, means we can support you in developing onshore oil and gas processing plants and terminals. With our semi-submersible heavy transport vessel and dredgers fallpipe vessels and sheerlegs we deliver total port development, land reclamation, landfall construction, pipeline trenching and logistical management solutions.

During the Pre Front-End Engineering Design (Pre-FEED) phase we can test different concepts you may have regarding the feasibility of designs for both cargos and material offloading facility (MOF) development. Once the Front-End Engineering Design (FEED) phase is underway we collaborate with you to develop a strategy for the MOF development and the delivery of modules from fabrication yards to the offloading facility. During this phase we can streamline subcontractors and eliminate interfaces.







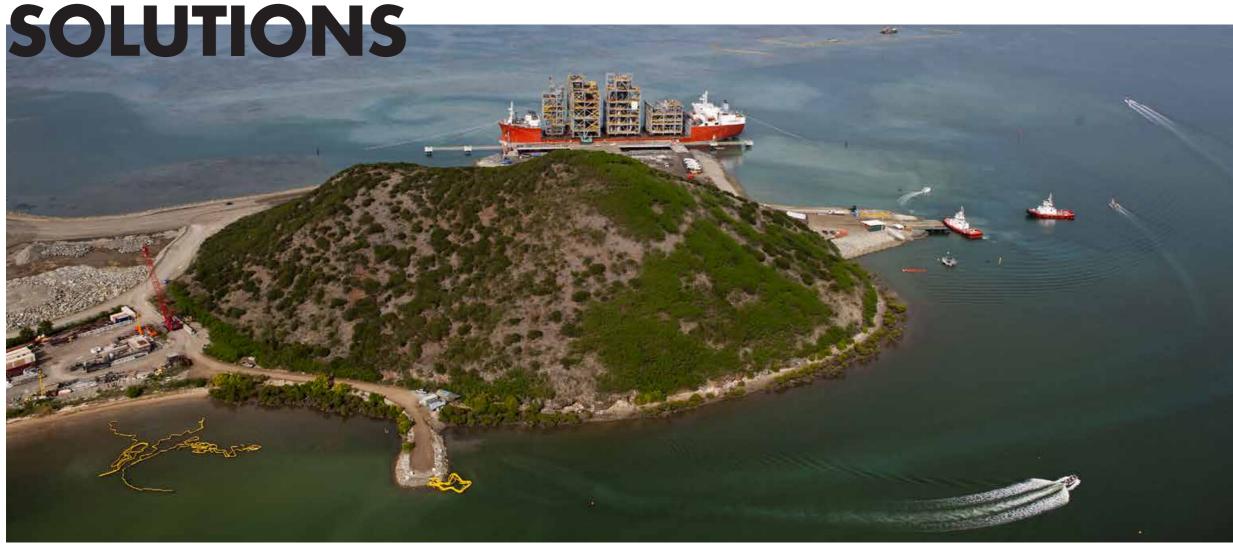
# MODULE TRANSPORTATION SOLUTIONS

Boskalis has a proven track record in executing the largest modular transportation projects. We own a fleet of 22 OVID registered semi-submersible heavy lift and flat deck vessels, 13 large ocean going barges, 5 specialized ocean going tugs and 16 anchor handling tug and supply vessels as well as having

experience in sourcing and managing third-party assets where necessary. Our in-house project management and engineering personnel are experienced in delivering world class onshore modularized projects and a SHEQ system in line with all major oil and gas companies.

# **PROVEN TRANSPORTATION**

**"OUR STRENGTH IS SELECTING THE** RIGHT TRANSPORTATION ASSET FOR EACH MODULE GROUPING"



Qingdao, China – New Caledonia Multiple consecutive transports of 15 modules aboard the Trustee and Transporter



#### SINGLE INTERFACE **TRANSPORTATION MANAGEMENT**

- In-house semi-submersible vessels
- In-house tug and barge
- Dock type vessels
- Ballastable vessels
- Self geared ships



#### **COMPLETE PROJECT MANAGEMENT**

- · Grillage & sea-fastening design, fabrication and installation
- Engineering studies
- Management of risk
- Partnering with SPMT providers, freight forwarding, civil engineering
- MOF design support
- Complete scheduling capabilities



#### **SCOPE OUTSIDE OF TRANSPORTATION**

- MOF design and construction
- Land reclamation
- Dredging
- Environmental monitoring
- Offshore installation
- Land fall and pipeline intervention
- Terminal services



#### DIRECT ON DECK OF THE HEAVY TRANSPORT VESSEL

- Boskalis has a fleet of 13 HTV (Heavy Transport Vessels) divided in two categories:
- Closed stern vessels Side load-out
- Open stern vessels Side and stern load-out



#### **PIGGY BACK SOLUTION**

- The piggy back solution is a combination of the HTV with flat top barges. Both the HTV and barges are available within the Boskalis fleet
- This concept is one of the most flexible transportation methods



#### **TUG & BARGE**

 Boskalis has a fleet of 13 large ocean going barges, 5 specialized ocean going tugs and 16 anchor handling tug and supply vessels. The latest addition are two Giant barges with a free deck space of 120 x 36 meters

# PROJECT EXPERIENCE



○ LOADING LOCATIONS● DISCHARGE LOCATIONS

METHANEX METHANOL PLANT

Client: Mammoet / Methanex Corp.
Scope: Transportation of 19 modules in 2 consecutive voyages
Loading location: Punta Arena,

Chile

**Discharge location:** Geismar, Louisiana U.S.

2 ESCRAVOS

Client: KBR & Sanmprogetti JV
Scope: Transportation of 15 EGTL
modules in 3 consecutive voyages
Loading location: Abu Dhabi,
U.A.E

Discharge location: Nigeria

3 CONFIDENTIAL CLIENT

Scope: Transportation of 50+ modules in a long term time charter contract

Loading location: Ulsan, Korea /

Batam, Indonesia / Qingdao, China

Discharge location:

Western, Australia

**Client:** Confidential

4 WHEATSTONE

**Client:** Bechtel for Chevron-operated Wheatstone Project

**Scope:** Transportation of more than 100 modules utilizing 3 transport methods; Direct on-deck, piggy-back and tug & barge

Loading location: Tianjin, China / Batam, Indonesia / Singapore Discharge location: Onslow, Australia **7** KONIAMBO

5 ICHTHYS

**Client:** JKC Ichthys LNG JV / INPEX **Scope:** Transportation of modules in a long term time charter contract **Loading location:** Laem Chabang,

Thailand / Qingdao, China /

Discharge location: Darwin,

6 CONFIDENTIAL CLIENT

via piggy back method due to

**Scope:** Transportation of 7 modules

environmental restrictions in Australia **Loading location:** Peng Lai, China

Batangas, Philippines

**Client:** Confidential

**Discharge location:** Eastern, Australia

Australia

Client: Hatch-Technip on behalf of Koniambo Nickel SAS, a joint venture owned by Xstrata Nickel and Societe Miniere du Sud Pacifique ("SMSP")

**Scope:** Transportation of 18 nickel plan modules in 4 voyages

Loading location: Qingdao, China
Discharge location: Vavouto,

New Caledonia

ULE TRANSPORTATION SOLUTIONS



"BOSKALIS RECOGNIZES ITS RESPONSIBILITY IN CONTRIBUTING TO THE SUCCESS OF OUR CLIENTS"

- Ability to provide transportation solutions to meet your unique projectrequirements via our fleet or with 3rd parties
- A proven track record on all of the most recent and large module transportation projects
- In-house experienced project managers and engineering personnel deliver outstanding quality deliverables - with flexibility for change
- Local project execution teams
- Unrivalled suite of assets for module transportations

Punta Arenas, Chile to Geismar, LA USA Transportation of 19 processing modules aboard Swan/Floating Super Pallet (Barge)



#### Boskalis

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