

OPTIMISING GLOBAL CAPACITY

Keppel FELS Brasil

- The dredging of the Jacuecanga channel in front of BrasFELS yard was permitted by Rio's State Foundation of Engineering & Environment
- Dredged 12.25 m deep, 1,100 m long and 150 m wide so that P-51 & P-52 can move in and out of the yard
- BrasFELS can execute future mega projects requiring deep draft

Keppel FELS
Detailed engineering

Keppel Shipyard / Arab Heavy Industries
Fabrication of the lower and upper hulls as well as modules jointly with Keppel Verolme

Keppel Verolme
Overall integration, repair & maintenance of *Blackford Dolphin*

Keppel FELS
Fabrication of entire hull in five strips

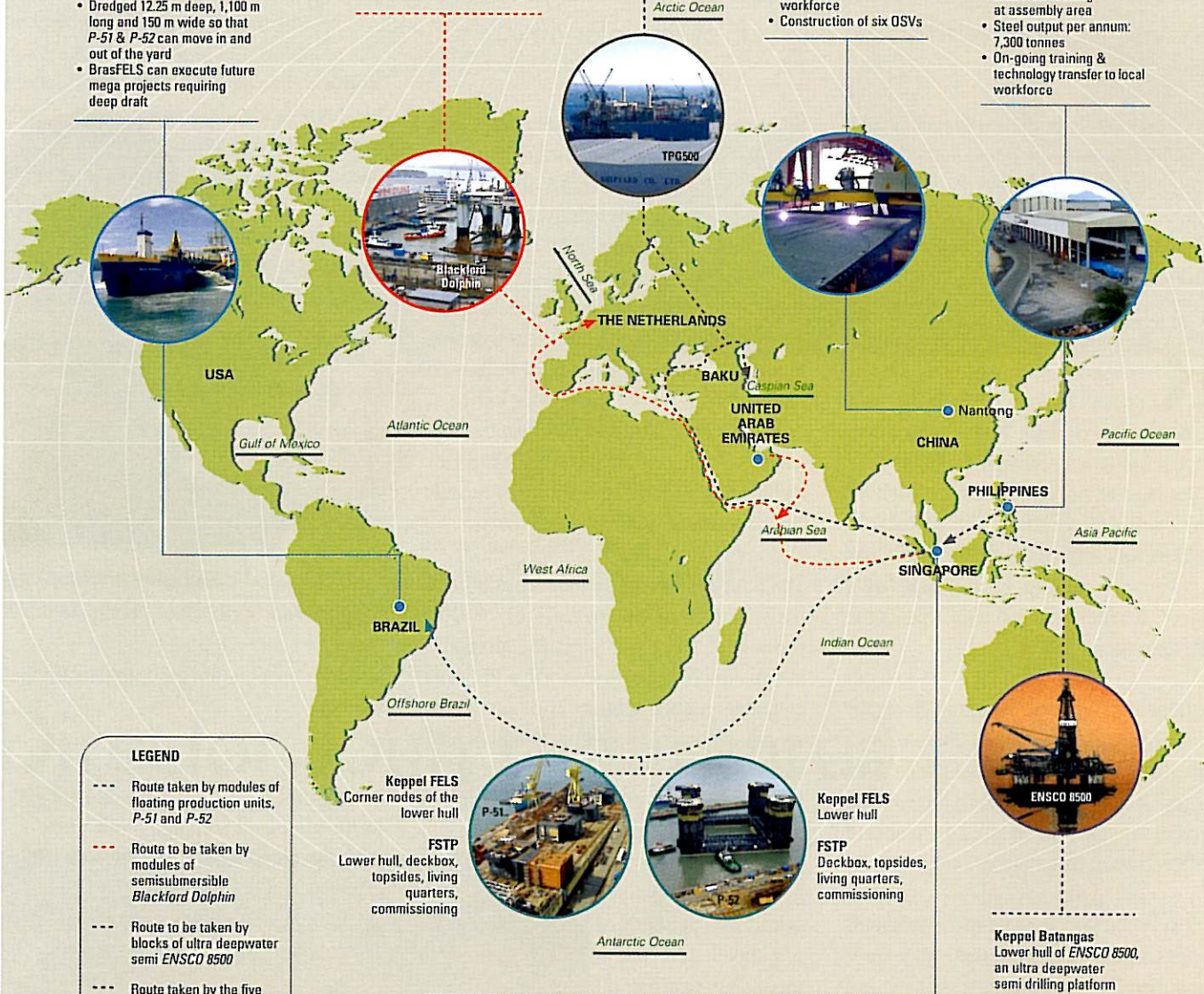
Caspian Shipyard Company
Integration of hull & installation of jackhouse, machining & inter-strip outfitting work

Keppel Nantong Shipyard

- Upgraded with new facilities including a mechanical launching system, mechanical transfer system, additional craneage, pipe-bending and steelplate-cutting machines
- Employment of skilled workforce
- Construction of six OSVs

Keppel Batangas

- Installed facilities such as panel line system, block assembly areas and heavy construction equipment & additional craneage
- Concrete flooring at assembly area
- Steel output per annum: 7,300 tonnes
- On-going training & technology transfer to local workforce



LEGEND

- Route taken by modules of floating production units, P-51 and P-52
- Route to be taken by modules of semisubmersible *Blackford Dolphin*
- Route to be taken by blocks of ultra deepwater semi *ENSCO 8500*
- Route taken by the five strips of the BP Shah Deniz *TPG500*

FSTP Consortium comprising Keppel FELS, Keppel FELS Brasil and Technip

Keppel FELS
Corner nodes of the lower hull

FSTP
Lower hull, deckbox, topsides, living quarters, commissioning



Keppel FELS
Lower hull

FSTP
Deckbox, topsides, living quarters, commissioning



Keppel Batangas
Lower hull of *ENSCO 8500*, an ultra deepwater semi drilling platform

- Keppel FELS**
- Upgraded facilities, increasing capacity by 100%
 - More panel lines, upping steel output by 45,000 tonnes
 - Greater craneage at new assembly areas
 - Added two more blasting and painting halls, bringing the total to seven environment protection halls
 - Added a 800-tonne transporter

- Keppel Shipyard**
- Installed a total of 16 new mobile shelters, eight gantry cranes, five overhead travelling cranes, and a twin-hoist gantry crane, and built new fabrication sites

- Keppel Singmarine**
- Introduced new pipe bender machine
 - New panel line
 - Widened slipway mouth and strengthened structures for concurrent construction of larger vessels and jackup rigs
 - Transferred some shipbuilding activities to Keppel Nantong yard, freeing up space for rigbuilding

Keppel FELS
The rest of the work integration of the blocks