



**Gorgon Project Briefing**  
**Rick Robinson**  
**Director Perth Operations**  
**Kellogg Joint Venture**

**Karratha, Feb 5 2009**

Operated by Chevron Australia  
in joint venture with



# Downstream Scope – LNG Plant



- 3 x 5 mtpa LNG processing trains using APCI technology
- 2 x 180,000 m<sup>3</sup> LNG Storage tanks
- 4 x 35,000 m<sup>3</sup> Condensate Tanks
- Condensate separated from gas stream and exported separately
- Gas treatment, CO<sub>2</sub> removal, compression and reinjection
- 300 Tj/day Domestic Gas processing plant
- 5 x 118 MW gas–turbine power generation units.
- Modular Construction

# Downstream Scope - Infrastructure

- 2.1 km long Materials Offloading Facility and Causeway
- 1.9 km long LNG Jetty, with two loading berths
- Site preparation & civil works
- Dredging of navigable channel
- Construction Village and Initial Fly Camp
- WAPET Landing development
- Plant utilities, services and telecommunications
  - Water Treatment
  - Waste Disposal
  - Power
  - Diesel Supply
  - Communications
- Temporary construction facilities

# Downstream Scope - Other

## ■ Logistics

- Mainland and BWI Supply Bases
- Tugs and Barges
- Ro-Ro Vessel
- Freight Forwarding
- Personnel movements to and from BWI

## ■ Quarantine

- Quarantine Management
- Inspection Operations
- Training

# Downstream Challenges



- The protection of Barrow Island's environment
  - Class 'A' Nature Reserve
- Creating and maintaining the Incident & Injury Free safety culture
- Timely delivery of materials and equipment
- Cost and schedule
- Minimising re-work and flawless start-up

# Contract Packages - Indicative

Design & Construct	Construct Only	Off-Site Preassembly	Services
LNG Tanks	Site Preparation	Modules	Heavy Lift & Transportation - BWI
Condensate Tanks	Civil & Underground Services	Pre-assembled Racks	Facilities Management
Construction Village	Dredging & Pioneer MOF	Pre-assembled Units	Supply Base Operation
Buildings	Painting & Insulation		RoRo Vessel
Tank Refurbishment	Buildings		Tugs & Barges
LNG Jetty & Marine Structures	Electrical & Instrumentation		Catering & Camp Operations
Telecomms & Electronic Systems	Mechanical, Process & Plant Utilities		Waste Management
	CO <sub>2</sub> Pipeline		Security
	WAPET Landing		Commissioning
			Medical

Out for Bid

Due for release May 09

# Procurement Packages - Indicative

Material	Material	Material
Air Coolers	Pipe	Maintenance Equipment
Pressure Vessels	Pipe Supports	Welding Equipment & Consumables
Heat Exchangers	Fittings	Personal Protection Equipment
Pumps	Electrical Cable	Scaffolding
Compressors	Instrument Cable	Vehicles
Power Generation	Instruments	Small Tools
Water Treatment	DCS and ESD Systems	Office Equipment
Electric Motors	Telecommunications Equipment	Steel Plate and Sections
Engineering Bulk Materials	Switchgear	Cement, Sand, Aggregate and Rock
Control Valves	GT Power Generation	Fuel
Switchrooms & Substations	Marine Loading Arms	IT Networks / LAN / WAN

# Downstream Requests for Quotation

Work Package Title	
SEAWATER INTAKE SUBMARINE CABL	DIESEL FILTERS
LV SWITCHGEAR	PERMANENT REVERSE OSMOSIS UNIT
33KV SWITCHGEAR	PERMANENT W/W TREATMENT PACKAGES
RING MAIN UNITS	BRIDGING WATER TREATMENT
POWER GENERATION TRANSFORMERS	SUBSTATIONS
DISTRIBUTION TRANSFORMERS	FLEXIBLE CONCRETE BLOCK MATS
CONTROL SYSTEM PACKAGE	SATN – TOWERS & STRUCTURES
CONTROL & SHUTDOWN VALVES	LOGISTICS CONTAINER FORKLIFT
VEHICLES FOR SUPPLY BASES	LOGISTICS CRANES – LEASE
TRAILERS (INITIAL)	LOGISTICS DUNNAGE (INITIAL)
UTILITIES API 650 TANKS	CONSTRUCTION VILLAGE LPG
TEMP DIESEL STORAGE & DIESEL	CONSTRUCTION SITE VEHICLES
TEMPORARY WATER TANKAGE	PASSENGER BUS
DIESEL PUMPS	CONSTRUCTION SUPPORT BUSES
ESSENTIAL DIESEL GENERATORS	REFRIGERATION UNITS

Visit: [www.projectconnect.com.au](http://www.projectconnect.com.au)

# Material Quantities - Indicative

Material	Quantities (Scale of Works)
Major Equipment Count	1,000
Bulk Earthworks	Excavation - 6.5 million m <sup>3</sup> Backfill - 2.0 million m <sup>3</sup> MOF Fill - 2.3 million m <sup>3</sup>
Piling Steel Sections	15,000 tonnes
Concrete	190,000 m <sup>3</sup>
Rock Armour	50,000 tonnes
Pre-cast Concrete Armour	300,000 tonnes
Dredging	7.6 million m <sup>3</sup>
Electrical & Instrument Cable	2,100 km
Insulation & Painting	300,000 m <sup>2</sup>

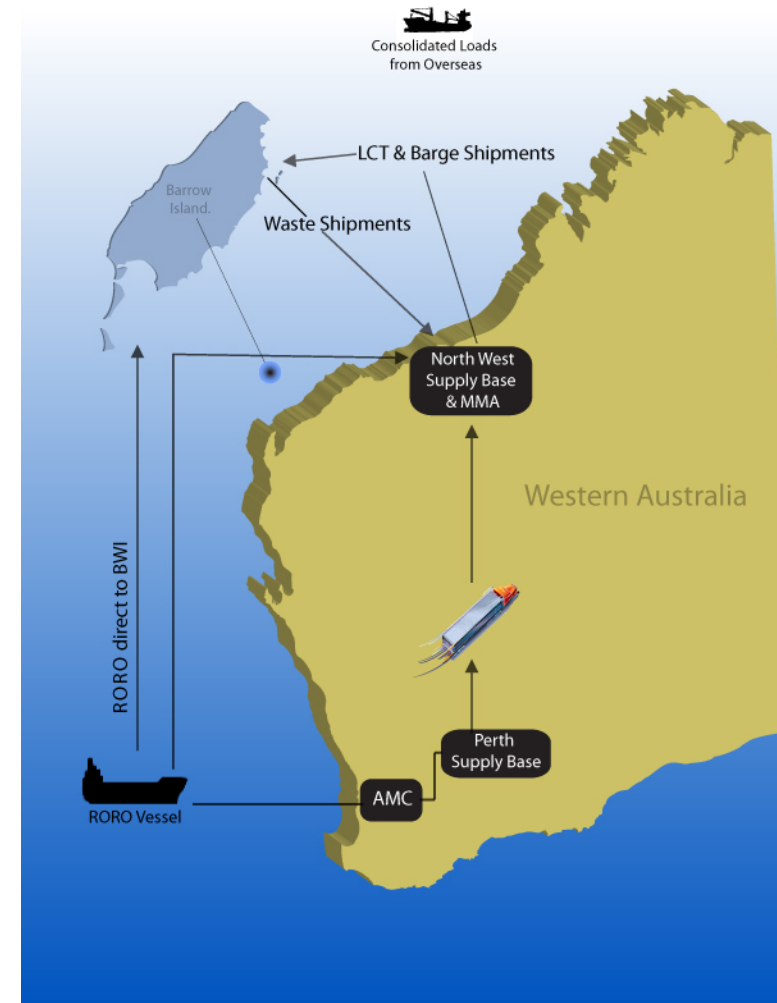
# Logistics & Materials Movements

- 2 Mainland supply bases

- Perth & Dampier

- Key Activities

- Quarantine
- Road Transport
- Heavy Lift, Cranes & Storage
- Marine cargo vessels
- Air Transport
  - ▶ People
  - ▶ Cargo



# Dampier Supply Base Manager



## Adrian Whiting

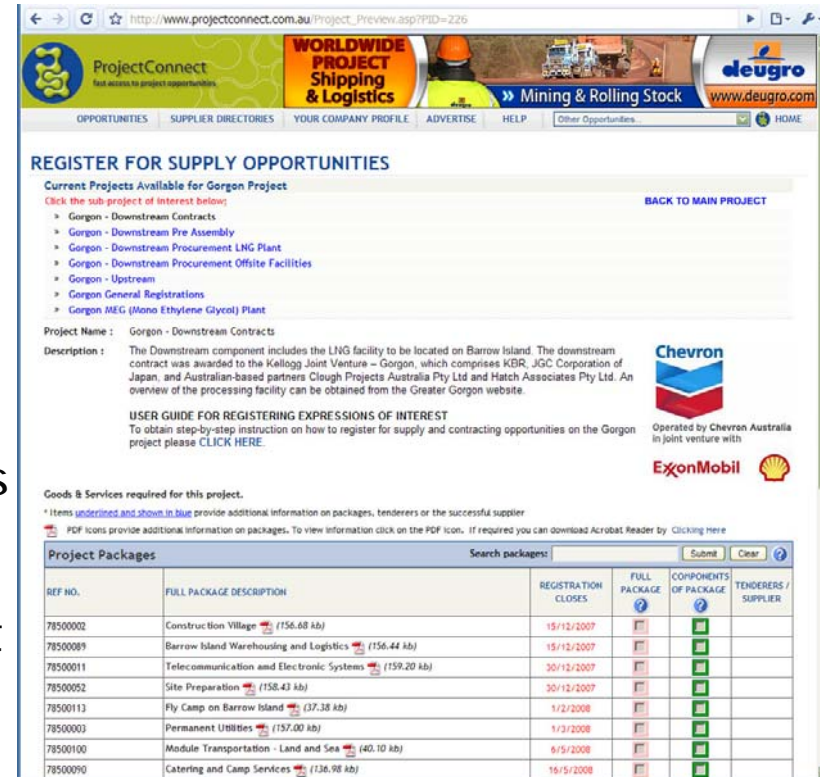
- Supply Base Manager - Dampier

# Summary

- KJVG is committed to working with Australian companies that can help us build a world class, safe and competitive project.
- KJVG is providing suppliers and contractors with information to enable them to identify opportunities and establish a competitive position
- ePilbara accessed via ProjectConnect provides the best mechanism for industry to communicate with, and register for, the Gorgon Project.

[www.epilbara.com.au](http://www.epilbara.com.au)

[www.projectconnect.com.au](http://www.projectconnect.com.au)



The screenshot shows the ProjectConnect website interface. At the top, there are navigation links for 'OPPORTUNITIES', 'SUPPLIER DIRECTORIES', 'YOUR COMPANY PROFILE', 'ADVERTISE', 'HELP', and 'Other Opportunities'. A banner for 'WORLDWIDE PROJECT Shipping & Logistics' is visible, along with logos for 'ProjectConnect' and 'deugro'. The main heading is 'REGISTER FOR SUPPLY OPPORTUNITIES'. Below this, it lists 'Current Projects Available for Gorgon Project' with a list of sub-projects: Gorgon - Downstream Contracts, Gorgon - Downstream Pre Assembly, Gorgon - Downstream Procurement LNG Plant, Gorgon - Downstream Procurement Offsite Facilities, Gorgon - Upstream, Gorgon General Registrations, and Gorgon MEG (Mono Ethylene Glycol) Plant. A 'Project Name' field shows 'Gorgon - Downstream Contracts'. The 'Description' states: 'The Downstream component includes the LNG facility to be located on Barrow Island. The downstream contract was awarded to the Kellogg Joint Venture - Gorgon, which comprises KBR, JGC Corporation of Japan, and Australian-based partners Clough Projects Australia Pty Ltd and Hatch Associates Pty Ltd. An overview of the processing facility can be obtained from the Greater Gorgon website.' There is a 'USER GUIDE FOR REGISTERING EXPRESSIONS OF INTEREST' link. Logos for Chevron and ExxonMobil are present. A table titled 'Project Packages' is shown below, with columns for REF NO., FULL PACKAGE DESCRIPTION, REGISTRATION CLOSURES, FULL PACKAGE, COMPONENTS OF PACKAGE, and TENDERS / SUPPLIER.

REF NO.	FULL PACKAGE DESCRIPTION	REGISTRATION CLOSURES	FULL PACKAGE	COMPONENTS OF PACKAGE	TENDERS / SUPPLIER
7850002	Construction Village (156.68 kb)	15/12/2007	[PDF]	[PDF]	
7850009	Barrow Island Warehousing and Logistics (156.44 kb)	15/12/2007	[PDF]	[PDF]	
7850011	Telecommunication and Electronic Systems (159.20 kb)	30/12/2007	[PDF]	[PDF]	
7850052	Site Preparation (158.43 kb)	30/12/2007	[PDF]	[PDF]	
7850013	Fly Camp on Barrow Island (37.38 kb)	1/2/2008	[PDF]	[PDF]	
7850003	Permanent Utilities (157.00 kb)	1/3/2008	[PDF]	[PDF]	
78500100	Module Transportation - Land and Sea (40.10 kb)	6/5/2008	[PDF]	[PDF]	
78500090	Catering and Camp Services (136.98 kb)	16/5/2008	[PDF]	[PDF]	

Projectconnect website