



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

Perth, August 12 2008

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.

## 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 and services
  - Water Treatment
  - Waste Disposal
  - Power
- 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

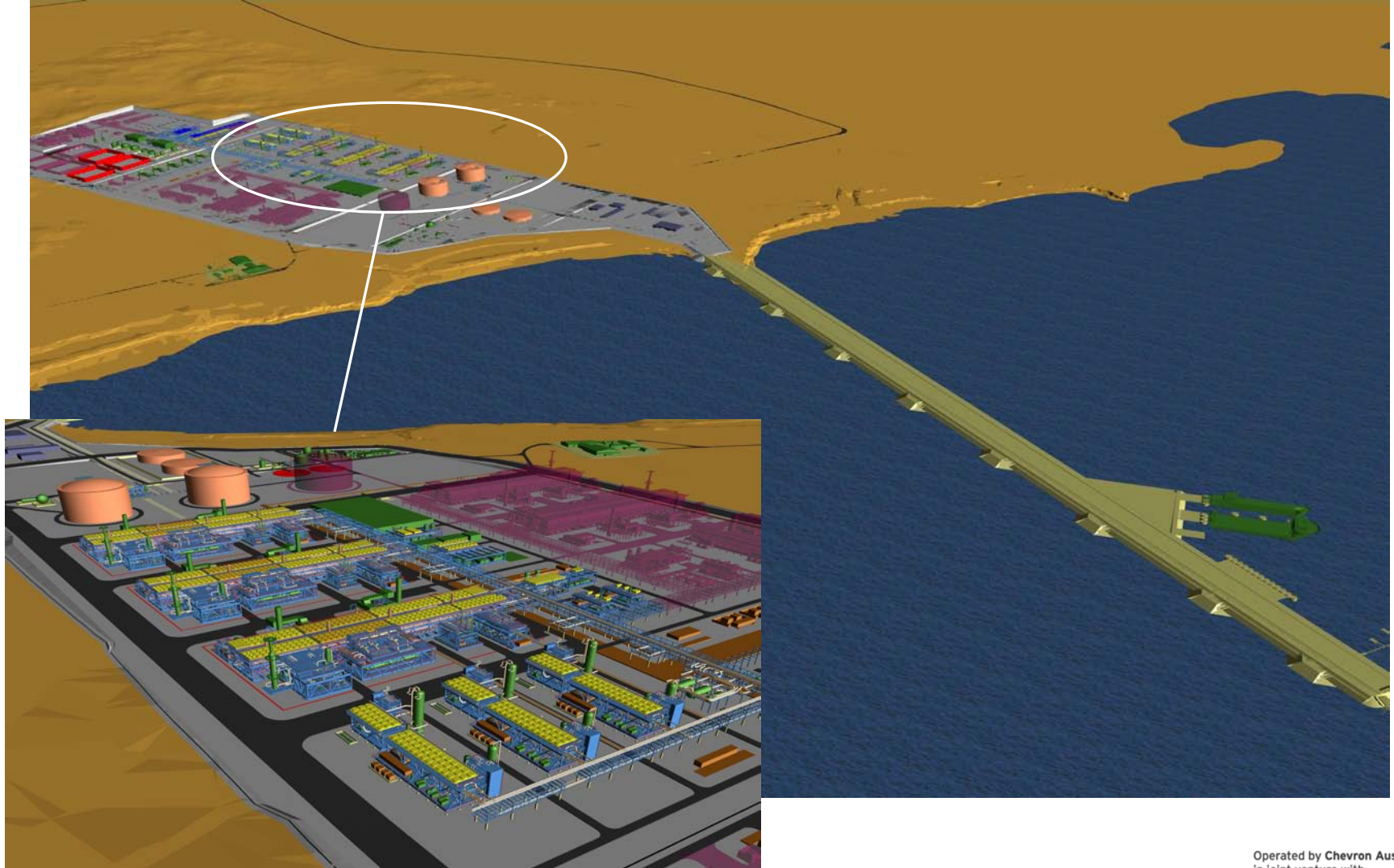
- Quarantine Management
- Inspection Operations
- Training

## Downstream Challenges



- The protection of Barrow Island's environment
- 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

# Barrow Island LNG Plant



Operated by Chevron Australia  
in joint venture with

# 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		Medical
Telecomms & Electronic Systems	Mechanical, Process & Plant Utilities		Waste Management
	CO <sub>2</sub> Pipeline		Security
	WAPET Landing		Commissioning
			Catering & Camp Operations

# 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

# 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	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>

# Modularisation - Indicative

Material	Quantities (Scale of Works)
No. of Modules	50
No. of PAUs & PARs	270
Modules	180,000 tonnes
PARs	40,000 tonnes
PAUs	20,000 tonnes
Largest Module (weight)	7,000 tonnes
Largest Module (dimensions)	40m wide x 35m high x 72m long

# Downstream ITB's and Contracts 2008

- Over the next five months, many procurement and contract packages will be moving ahead. These include:
  - Initial Fly Camp
  - General Utilities
  - Rock Armour Supply
  - NW Supply Base Lease
  - Telecomms and Electronic Equipment
  - BWI Warehousing and Logistics
  - Site Preparation and Civil Works
  - Temporary Construction Facilities
  - Offsite Module fabrication
  - Construction Village
- The key is to access opportunities via ProjectConnect [www.projectconnect.com.au](http://www.projectconnect.com.au)

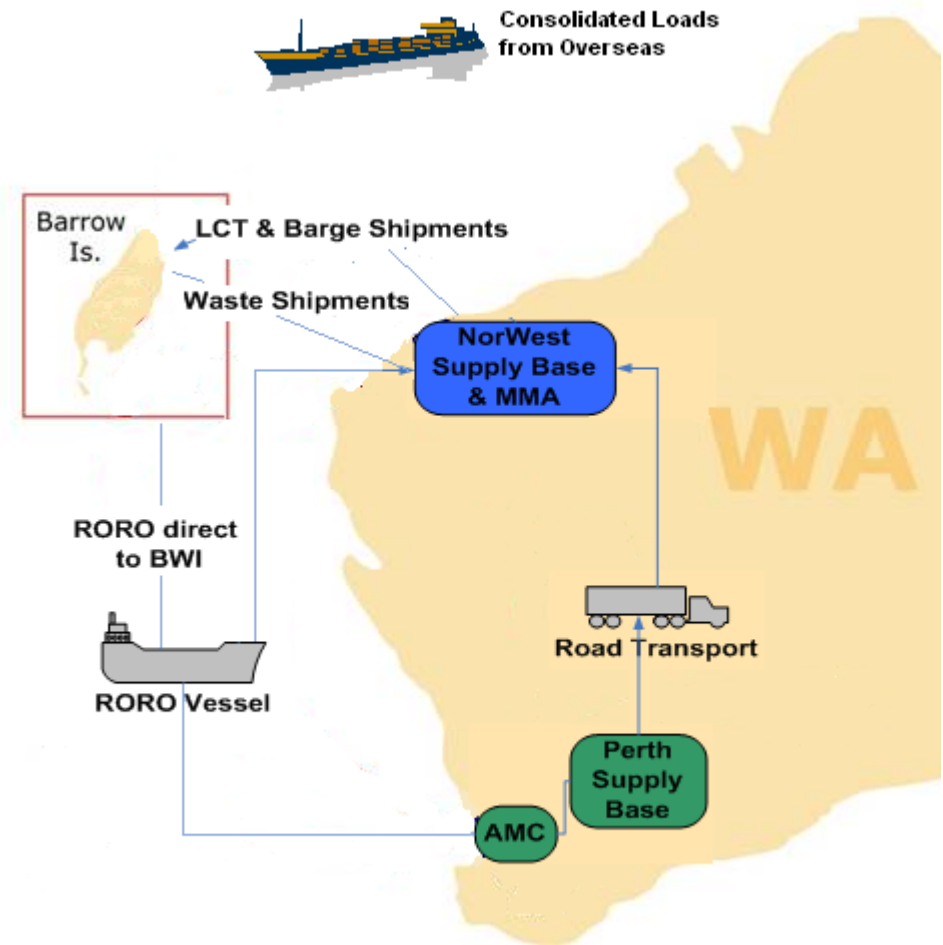
# Logistics & Materials Movements

- 2 Mainland supply bases

- Perth & Dampier

- Key Activities

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



# Regional Business Opportunities

- Construction and Operational Workforce
  - Use of local labour & professional services
- Quarantine Services
  - Washdown, wrap & pack, and documentation
- Logistics relating to supply, staging and shipping
  - Domestic transport (road, sea and air)
  - Warehousing & security
- Aggregate and pre-cast concrete
  - Mainland pre-cast facility, local quarrying
- Waste Management
  - Mainland and BWI waste management & landfill
- Support Services
  - Vehicle maintenance support, workshop services, maintenance

## 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
- ProjectConnect provides the best mechanism for industry to communicate with, and register for, the Gorgon Project. [www.projectconnect.co.au](http://www.projectconnect.co.au)