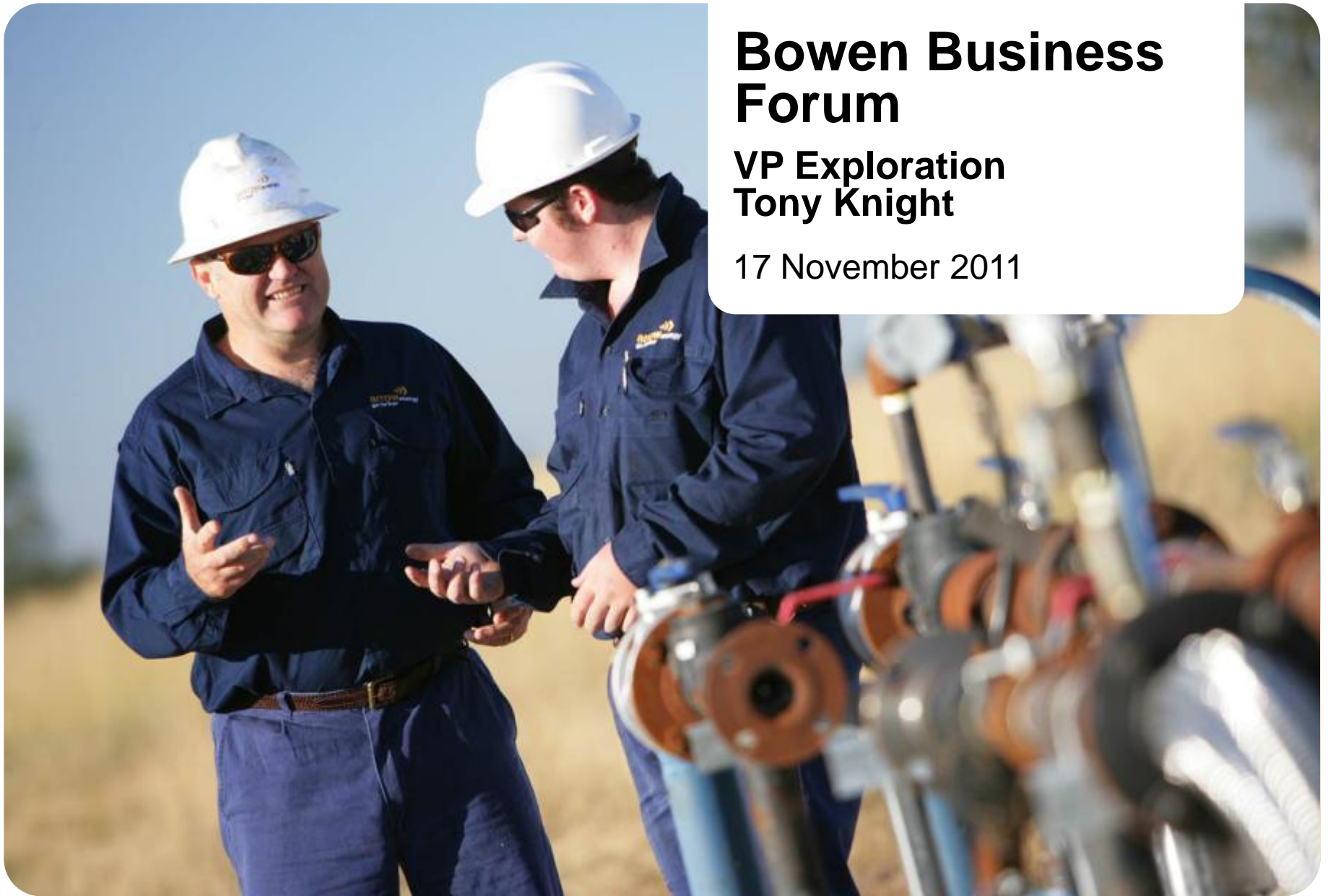


Bowen Business Forum

VP Exploration
Tony Knight

17 November 2011



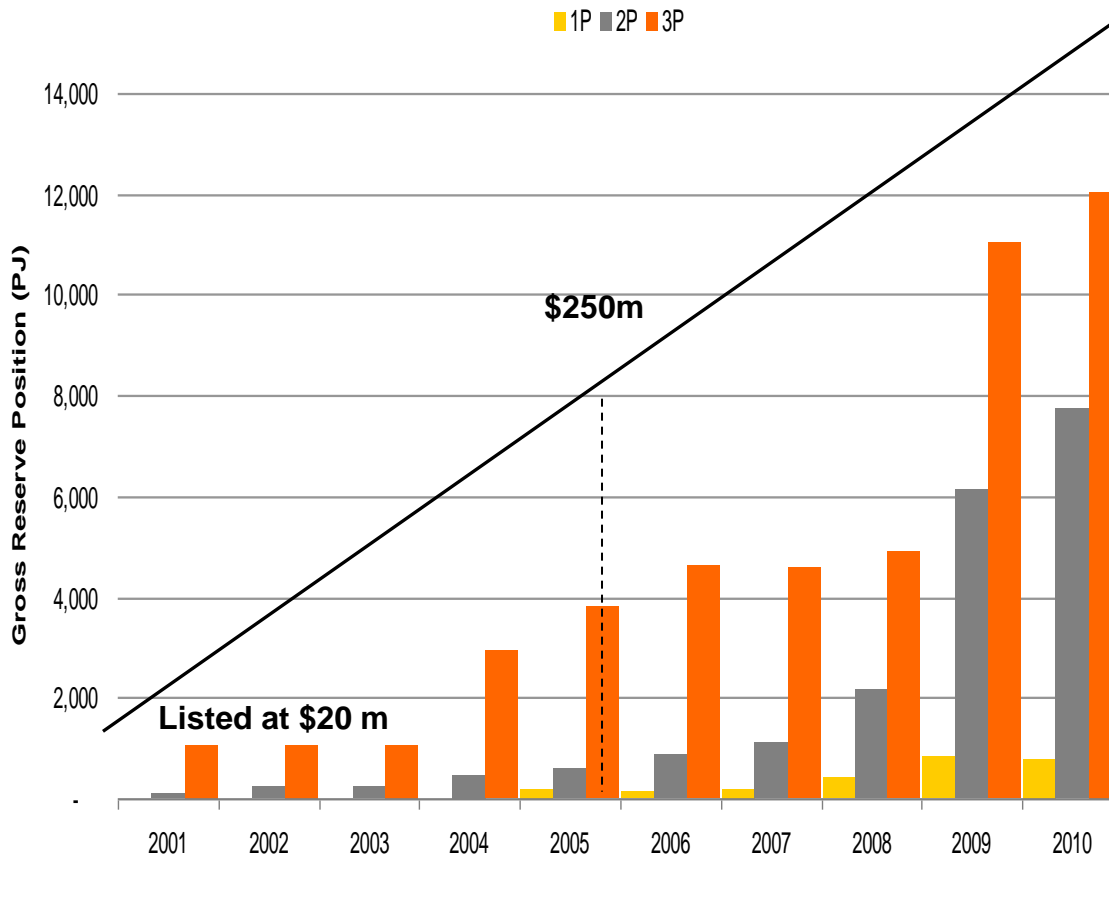
ARROW ENERGY

TODAY'S AGENDA

- Overview of Arrow Energy
- Moranbah Gas Project (MGP)
- Arrow Bowen Pipeline (ABP) Update
- Coal Seam Gas to Liquefied Natural Gas (CSG – LNG Project)
- Community Engagement
- Questions

ARROW ENERGY

OUR JOURNEY



2000 Start Up

- QLD based company - upstream E&A

2010 Acquisition

- Valued at \$5 billion, with 434 staff

Now

- 900 employees
- Steady and continued reserves growth
- Five producing fields
- Power generation

Shell/PetroChina
50/50 private JV



ARROW ENERGY

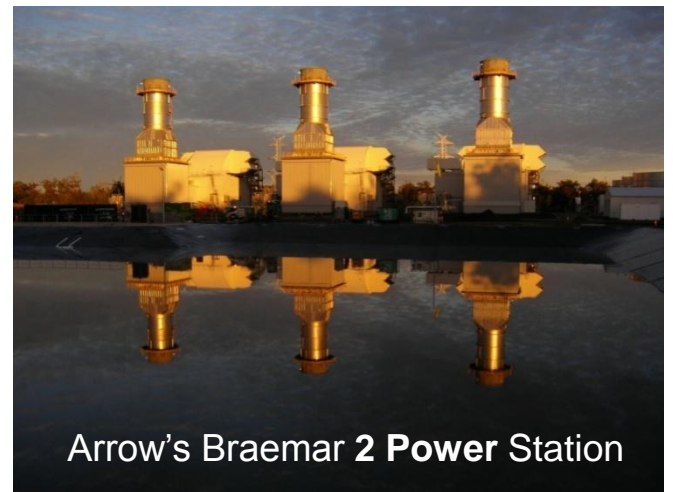
ARROW TODAY

Our scope

- 54,000 km² exploration acreage
- 206,000 private land holders
- > 140,000 stakeholders in 22 towns

Guaranteed results

- Fully integrated gas business
- Financial stability of parent companies, Shell/PetroChina
- CSG – LNG focus (+ continued delivery of domestic commitments)
- Guaranteed off-take by parents



Arrow's Braemar 2 Power Station

ARROW ENERGY

BOW ENERGY ACQUISITION

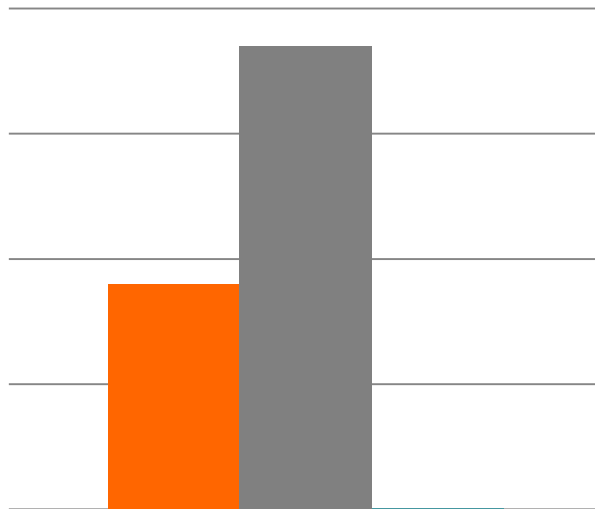
- Arrow has entered definitive agreement to acquire Bow Energy via a Scheme of Arrangement
- Offer subject to customary conditions including regulatory, court and shareholder approvals
- Acquisition of Bow enhances our opportunity to expand size of project trains at planned LNG plant on Curtis Island



ARROW ENERGY

GAS RESOURCES

	Bowen Basin	All Qld Arrow tenements	Current Qld usage
Gas resources:	36 000 PJ	74 000 PJ	150 PJ
Equivalent to:	6 billion barrels of oil	12 billion barrels of oil	25 million barrels of oil



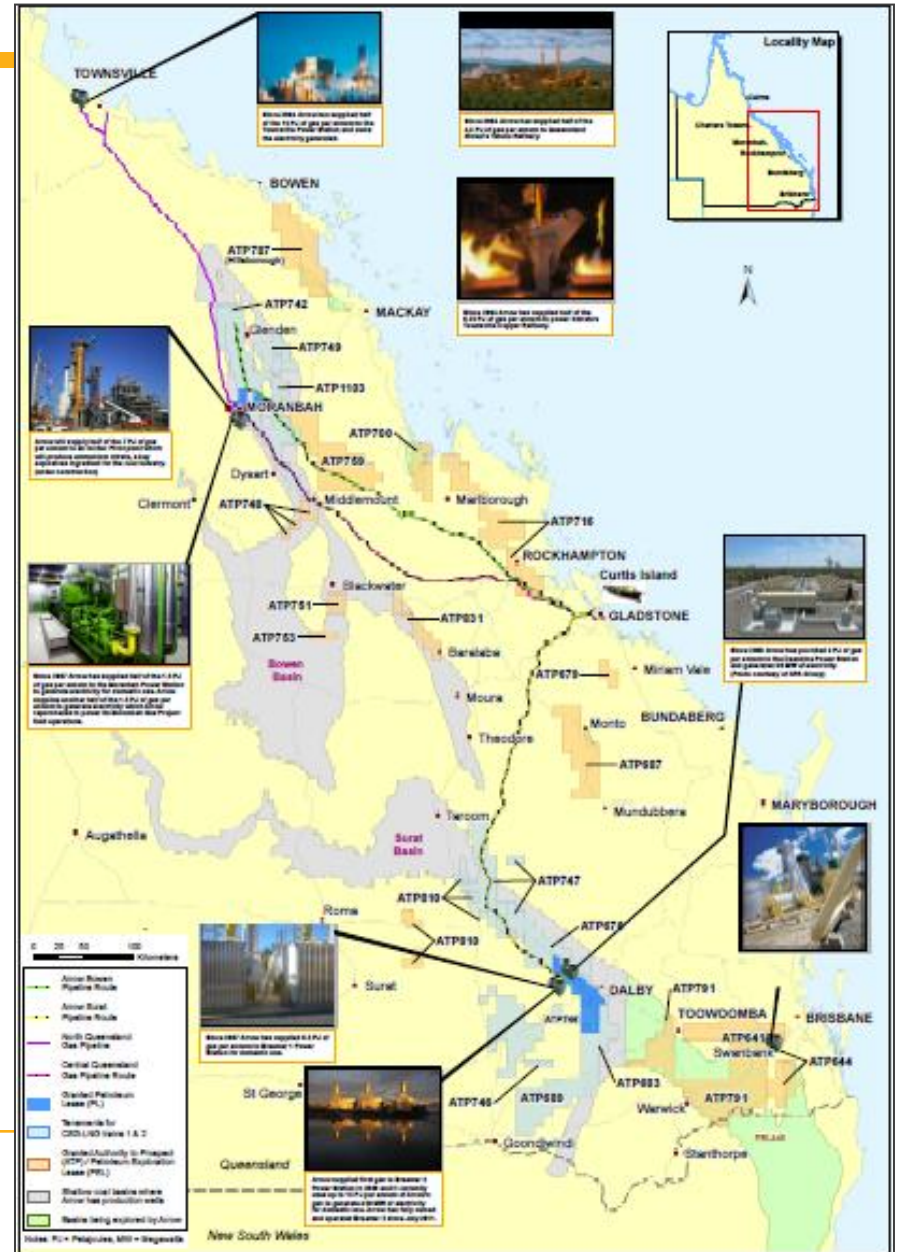
- Bowen Basin
- All Qld Arrow tenements
- Current Qld use



ARROW ENERGY

DOMESTIC GAS OPERATIONS

- Our domestic gas and electricity supply business has been in operation since 2004
- We currently supply approximately 20 per cent of Queensland's gas needs which is primarily used to generate electricity



ARROW ENERGY IN THE BOWEN BASIN

OVERVIEW

- Moranbah Gas Project produced its first gas in 2004
- Supply gas to power homes, businesses and industry:
 - ❖ Moranbah Power Station
 - ❖ Yabulu Power Station in Townsville
 - ❖ Dyno Nobel
 - ❖ Xstrata copper refinery
 - ❖ Queensland Nickel in Townsville
- Approximately 160 staff in Moranbah
- Our business partners are AGL Energy and QGC
- 100% overlapping tenure with 30 major coal companies
- 18 co-development agreements with coal companies



ARROW ENERGY

TWO BASINS, TWO PIPELINES, LNG PLANT

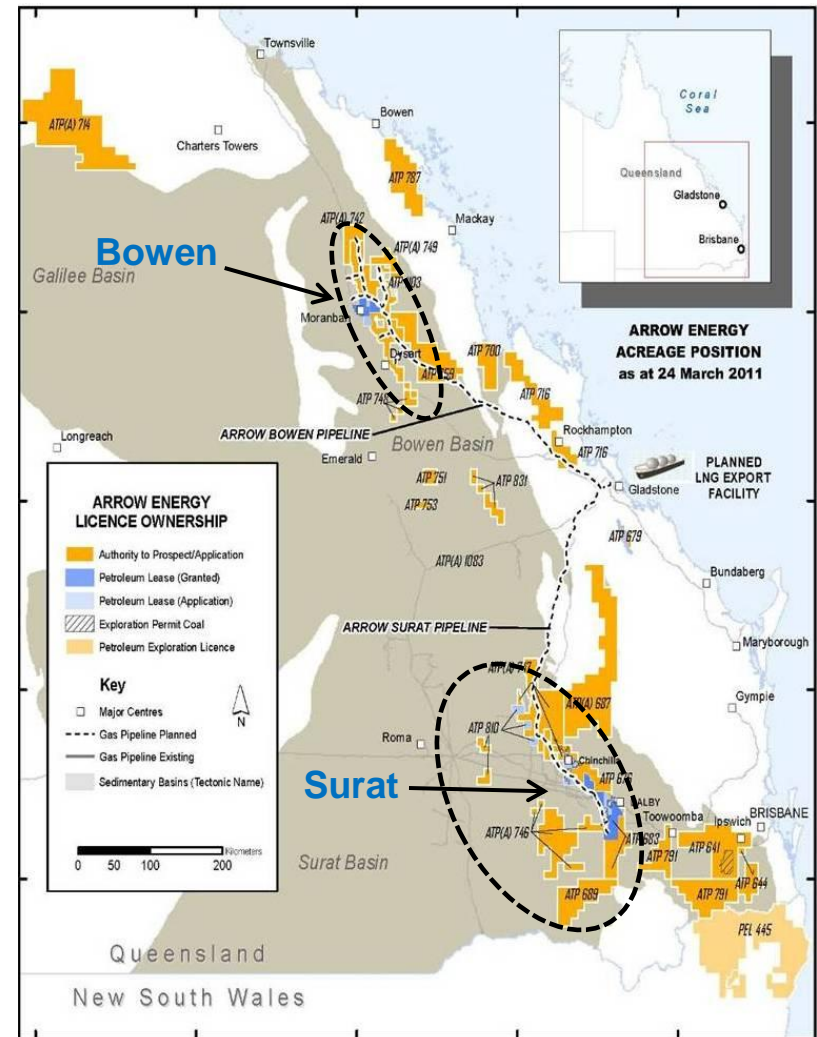
Domestic Gas Projects**

- Tipton
- Daandine
- Kogan
- Stratheden
- Moranbah Gas Project
- Braemar 2 Power Station

** (20% of QLD's gas needs)

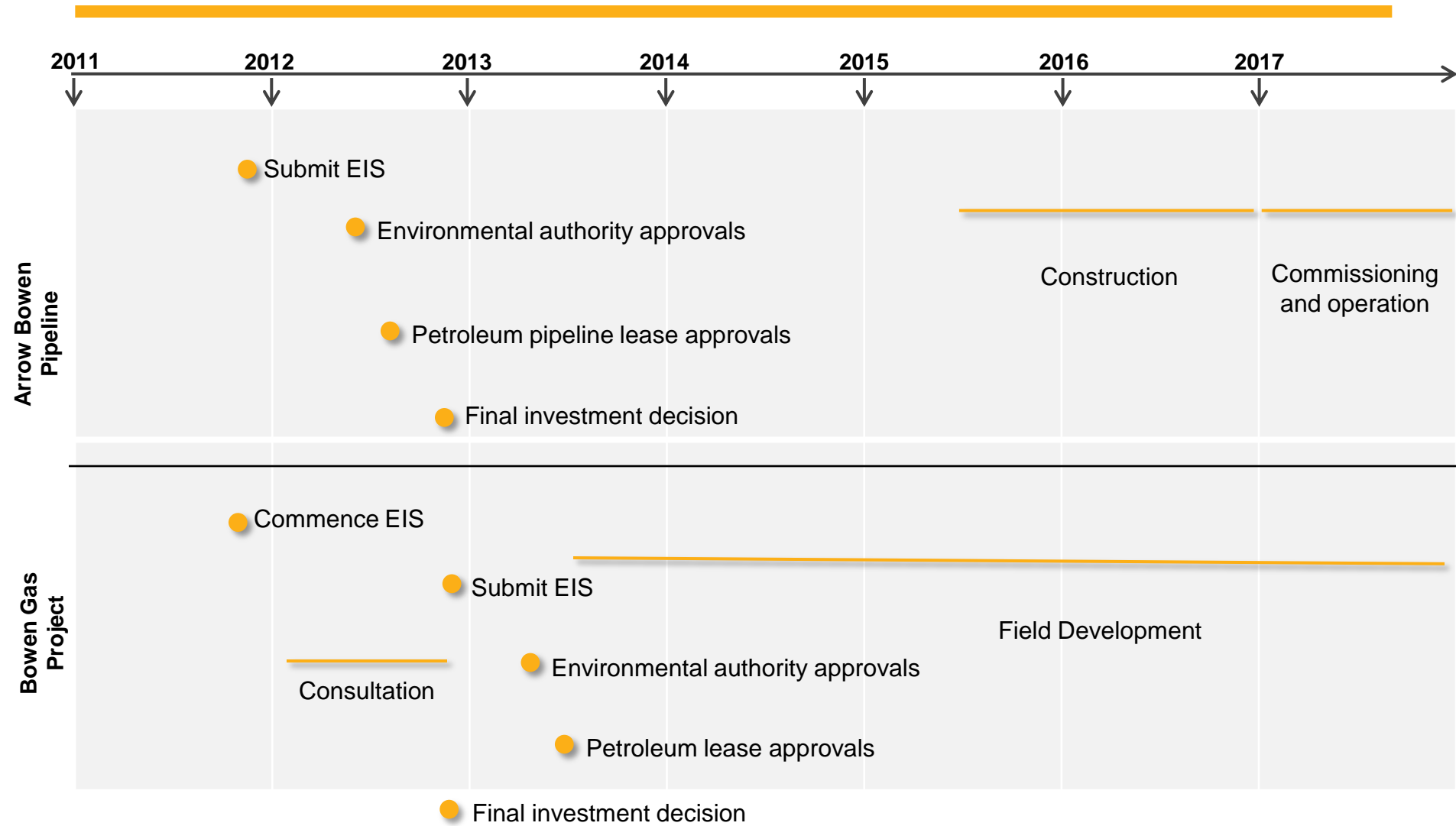
Arrow LNG Project

- Arrow LNG Plant
- Surat Gas Project
- Bowen Gas Project
- Arrow Surat Pipeline
- Arrow Bowen Pipeline
- Power Development



ARROW ENERGY

OUR CSG TO LNG PLAN IN THE BOWEN BASIN



ARROW ENERGY

PROPOSED ARROW BOWEN PIPELINE (ABP) ROUTE



ARROW ENERGY

ARROW BOWEN PIPELINE IMPACTS

Arrow Bowen Pipeline (ABP)

- Proposed 500km long buried steel transmission pipeline
- Up to **650** jobs during construction
- Five temporary camps along pipeline route

Roads

- Under the Petroleum & Gas Act, Arrow must adhere to “notifiable road use” standard
 - ❖ Compensation and upgrade/maintenance requirements over 10 000 tonnes per year
- Road and traffic management plans will be developed in collaboration with local Councils

ARROW ENERGY

WORKING WITH LANDHOLDERS

Arrow recognises every property is unique and we are committed to working with landholders to ensure our work practices minimise impacts on land and existing agricultural activities

- All staff and contractors are required to abide by 12 Land Access Rules
- Landholders have asked us to 'add value' not just compensate for impacts
- Arrow has:
 - ❖ a Standard Compensation agreement
 - ❖ removed the privacy provisions (landholder can request inclusion)
 - ❖ implemented new compensation framework for exploration activities



ARROW ENERGY

WORKING WITH LANDHOLDERS

12 Land Access Rules



01

Only enter a property with the approval of your supervisor, who has cleared access with the landholder.



02

Only conduct activities that are approved within the access conditions.



03

Follow the directions of the landholders. Report any directions that are not within the access conditions.



04

Report landholder discussions, complaints or incidents to your supervisor or Land Liaison Officer.



05

Carry personal and vehicle identification showing that you are an employee or contractor of Arrow.



06

Keep sites tidy, ensure all rubbish is removed from site.



07

Do not interfere with the landholder's property, equipment or operations. Use approved tracks and laydown areas. Drive at less than 10kph within 200m of buildings. Leave gates as signed or found.



08

Do not take firearms, weapons, animals, illicit drugs or alcohol onto the property.



09

Do not light fires unless authorised. Smoking is only permitted in the designated locations.



10

Do not enter a site during or after wet weather without consent of the Land Liaison Officer (who has cleared access with the landholder) except in the case of a declared emergency.



11

Do not negotiate with landholders. Only Land Liaison Officers are permitted to negotiate activities and access conditions.



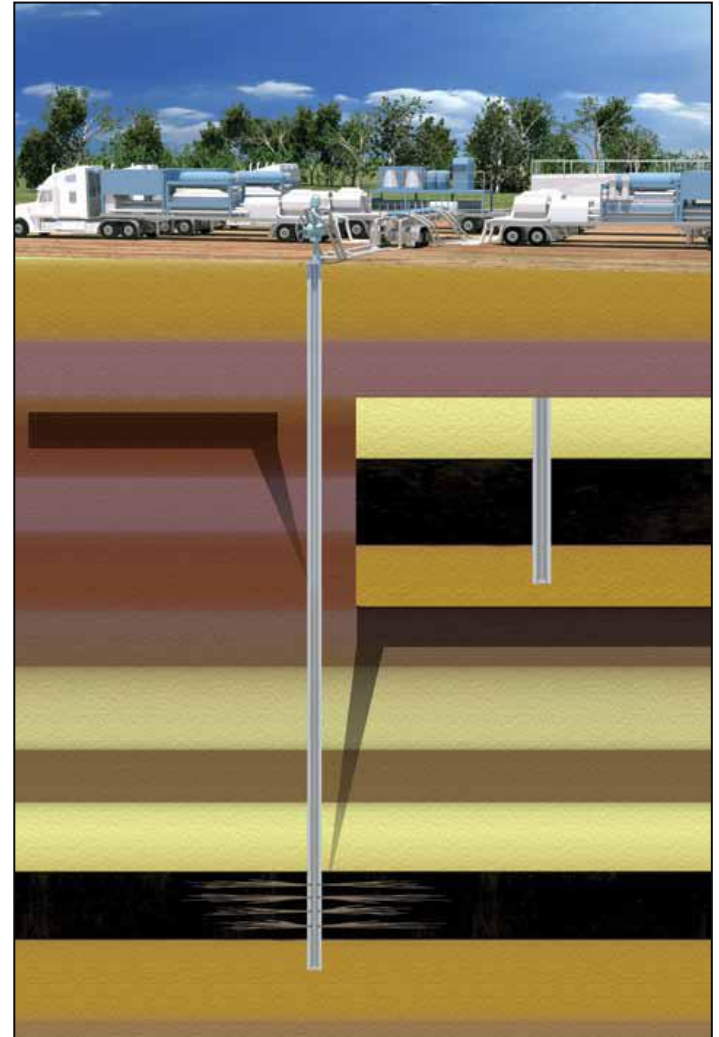
12

Do not threaten or pressure landholders or other people on the property.

ARROW ENERGY

COMMUNITY CONCERNS - FRACCCING

- Fraccing has been used in the Bowen Basin since the late 1980s
 - ❖ MGCRA at Broadmeadow and Capcoal at German Creek
- Arrow is currently trialling fraccing at our Bowen Basin operations
- Fraccing fluid consists of 99.5 per cent water and sand
- Arrow does not use fraccing fluids that contain Benzene, Toluene, Ethylbenzene or Xylenes (BTEX)



ARROW ENERGY

ADDRESSING COMMUNITY CONCERNS - WATER MANAGEMENT

- Arrow is committed to the sustainable management of coal seam water
- We understand the importance of groundwater resources to local communities
- We have developed a comprehensive strategy to manage the potential impacts from our activities



ARROW ENERGY

ADDRESSING COMMUNITY CONCERNS - IMPACTS

Local Infrastructure

- Funding housing projects in communities in partnership with other CSG companies
- Upgrade to instrumental landing system at Gladstone Airport

Roads

- Arrow works with councils and other agencies to manage road usage and to ensure a safe environment with minimal community impact
- Road upgrades and activities management to control community interactions

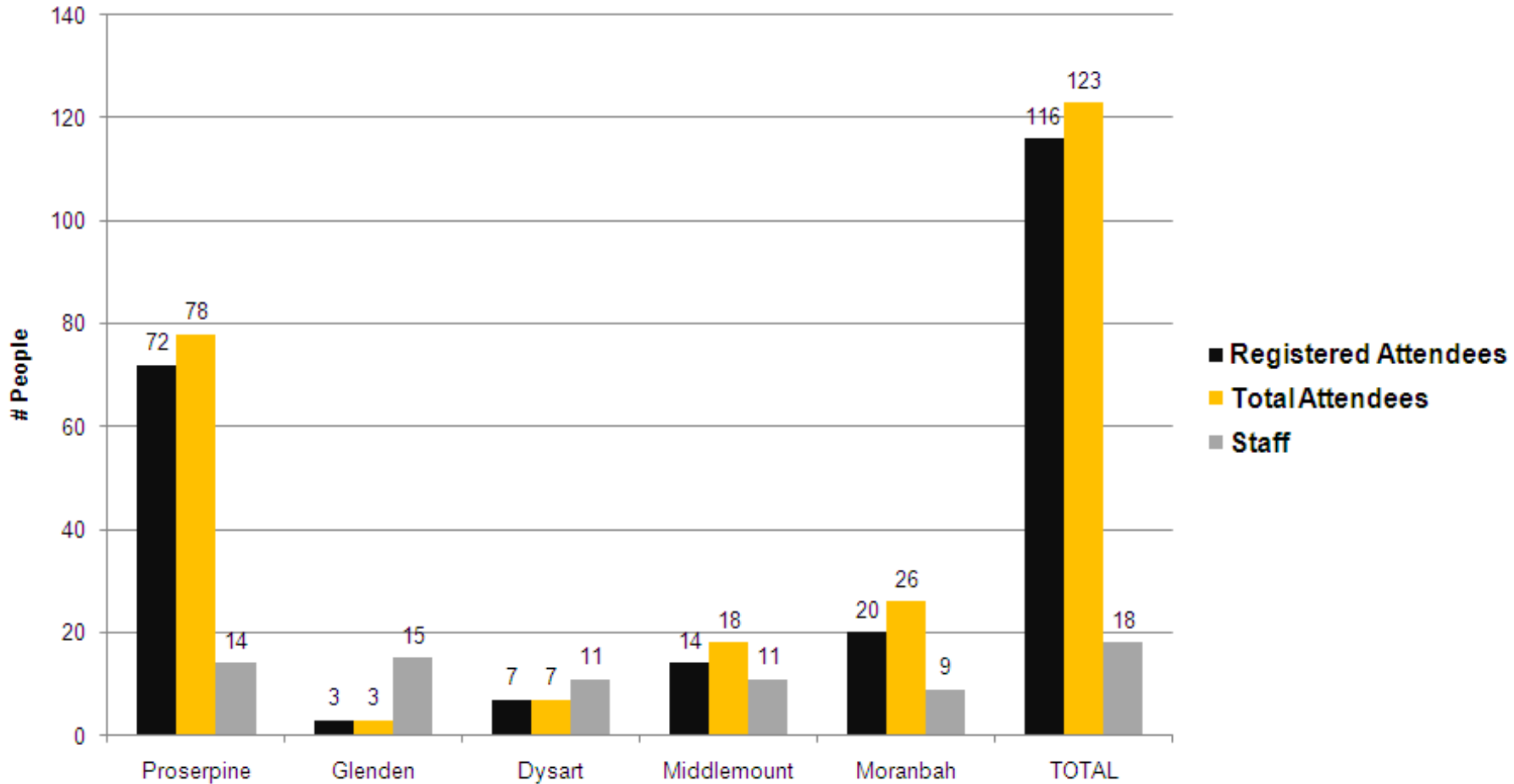
Security

- Arrow takes asset security very seriously – our security meets industry standards
- Unauthorised entry to our sites is discouraged for community safety

ARROW ENERGY

COMMUNITY ENGAGEMENT – BOWEN BASIN

Bowen Basin CIS - October 10-14

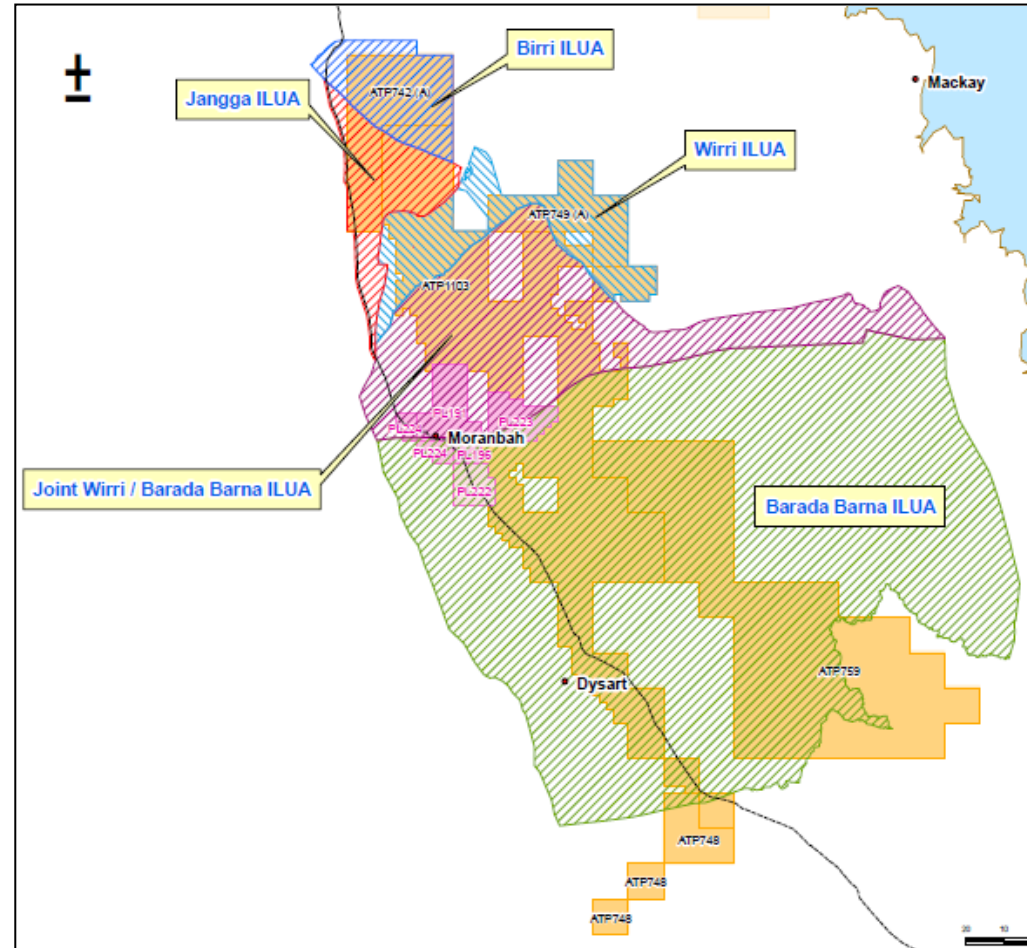


ARROW ENERGY

COMMUNITY ENGAGEMENT

Indigenous Relations in the Bowen Basin

- Indigenous Land Use Agreements (ILUA) executed and are being lodged with the National Native Title Tribunal and we continue to work closely with these communities:
 - ❖ Jangga
 - ❖ Barada Barna
 - ❖ Wiri
 - ❖ Birri
- Cultural heritage is a significant component of each ILUA



ARROW ENERGY

COMMUNITY ENGAGEMENT

BRIGHTER FUTURES – COMMUNITY INVESTMENT PLAN

Local employee committees assess applications for donations, sponsorships and partnerships on the following focus areas:

- Health and safety
- Education
- Environment

Successful applicants in the Bowen Basin to date include:

- Moranbah District & Support Services
 - Moranbah State High School
 - Moranbah Athletics club
 - Moranbah East State School
 - Moranbah MyTime Group
 - Moranbah Arts Council
 - QLD Arts Council
-



ARROW ENERGY

COMMUNITY ENGAGEMENT

Local Schools and Training

- Speaking at local Primary and High schools
- Identifying opportunities to support established training institutions, for example:
 - Students manufacturing guards for our wells as part of the Moranbah Advanced Skills Program
- School based traineeships:
 - Year 11 at Moranbah State High School
 - Two administration traineeships
 - Two engineering traineeships
 - Certificate II level
 - Indigenous traineeships
- University scholarships
- Vacation employment
 - 12 weeks paid employment
 - 2nd year university students



ARROW ENERGY

CONTRACTING OPPORTUNITY AREAS IN OUR GAS PROJECTS

- Arrow expect to tender significant contracts to support operations and maintenance activities
- Other packages may include:
 - Civil works
 - Security
 - Catering
 - Logistics and warehousing
 - Construction
 - Accommodation
 - Cleaning/laundry
 - Training
- Arrow expects significant opportunities to exist for local businesses in a range of categories throughout the life of the projects

ARROW ENERGY

HOW TO BECOME AN ARROW SUPPLIER PARTNER

Register your interest directly with Arrow

- Download vendor approval and evaluation form from Arrow web-site: www.arrowenergy.com.au
- Complete and return to our supply department: supply@arrowenergy.com.au
- Assessment on:
 - HSE and sustainability
 - Technical capabilities and relevant experience
 - Quality standards
 - Insurance coverage
- Maintain dialogue with Arrow on potential opportunities

Register with Industry Capability Network Queensland (ICN)

- Register with ICN and Arrow draws on their database for potential suppliers:
www.gateway.icn.org.au

Strengthen capabilities/establish a network of local and international partners

- Continue to strengthen capabilities
- Partner with local and international companies across Arrow's supply chain

ARROW ENERGY

EXAMPLES OF LOCAL SUPPLIER PARTNERSHIPS

Sustainable, long-term partnerships contributing to competitive advantage



OSTWALD BROS

- Earthworks
- Dam construction
- RO plant civil works



OZCON INDUSTRIES

- Casing supply, processing and repair
- Product development
- Machine shop for drilling items



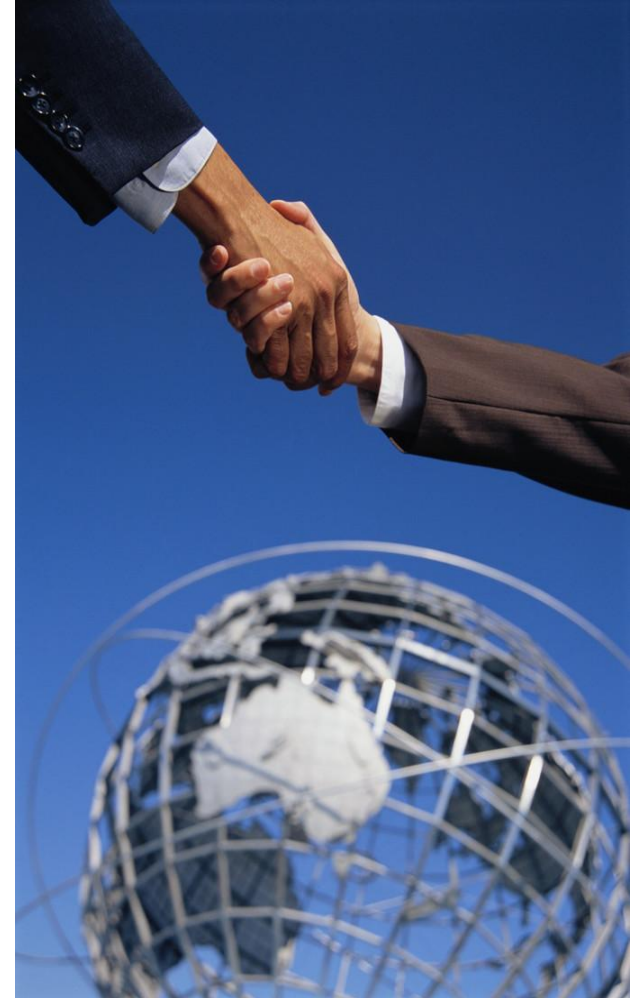
ROMA DIESEL SERVICES

- Design, development and manufacture of;
- Generators
 - Separators
 - Meter skids

ARROW ENERGY

SUPPLIER PARTNERSHIPS - WHAT WE LOOK FOR

- Safety and environmental track record
- Local content throughout supply chain
- Quality, reliability and flexibility
 - Competitive pricing
 - Robust cost management
 - Customer focus
 - Innovation



WAY FORWARD

Arrow has committed to:

- **Recruiting locally**, where skills and experience are available
- **Actively seeking local** and Australian **industry participation**
 - Delivering **benefits** to the community

The way forward:

- Understanding key local business issues in the region
- How to ensure local businesses are given the opportunity to participate through our tender process and major contract
- Continue to work with local businesses to ensure opportunities are realised

Questions and Answers

Freecall: 1800 038 856

Email: info@arrowenergy.com.au

BACK UP

ARROW ENERGY

ARROW BOWEN PIPELINE

Arrow Bowen Pipeline (ABP) update

- Pipeline Survey Licence
- Environmental Impact Statement (EIS) terms of reference
- Two ecological field surveys
- Contacted all potentially affected landholders

Next steps (6 – 12 months)

- Continue discussions with landholders
 - ❖ negotiate access to conduct detailed ecological assessments and cultural heritage surveys
 - ❖ landholders will be shown detailed alignment plans for discussions regarding easements
- Plan to submit the EIS in December 2011
 - ❖ sent to landholders and also available in community libraries
 - ❖ information sessions will be held to discuss the EIS in 2012

