

# Corporate Update



Delivering Western Australia's Energy Future



September 2014

[www.buruenergy.com](http://www.buruenergy.com)

# Important Notice and Disclaimer

## Disclaimer

This document has been prepared by Buru Energy Limited ABN 71 130 651 437 ("**Buru Energy**"). This presentation contains certain statements which may constitute "forward-looking statements". It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including, but not limited to:

price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve and resource estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delays or advancements, approvals and cost estimates.

All of Buru Energy's operations and activities are subject to joint venture, regulatory and other approvals and their timing and order may also be affected by weather, availability of equipment and materials and land access arrangements, including native title arrangements.

Although Buru Energy believes that the expectations raised in this presentation are reasonable there can be no certainty that the events or operations described in this presentation will occur in the timeframe or order presented or at all.

No representation or warranty, expressed or implied, is made by Buru Energy or any other person that the material contained in this presentation will be achieved or prove to be correct. Except for statutory liability which cannot be excluded, each of Buru Energy, its officers, employees and advisers expressly disclaims any responsibility for the accuracy or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error or omission there from. Neither Buru Energy nor any other person accepts any responsibility to update any person regarding any inaccuracy, omission or change in information in this presentation or any other information made available to a person nor any obligation to furnish the person with any further information.

All dates in this presentation are for calendar years. All references to \$ are in Australian currency, unless stated otherwise.

## Competent Person's Statement

The information pertaining to reserves and resources contained in this presentation is based on information compiled by Mr Eric Streitberg who is Executive Chairman of Buru Energy. Mr Streitberg consents to the inclusion of the information in the form and context in which it appears.

Mr Streitberg has over 40 years' experience in petroleum geology and geophysics, oil and gas exploration, and oil and gas company management. He is a Fellow of the Australian Institute of Mining and Metallurgy, a member of the Australian Institute of Company Directors, a member of the Society of Exploration Geophysicists and the Petroleum Exploration Society of Australia, and is a Certified Petroleum Geologist of the American Association of Petroleum Geologists. Information in this presentation has been disclosed to the ASX pursuant to the ASX Listing Rules.

# Corporate and share price performance

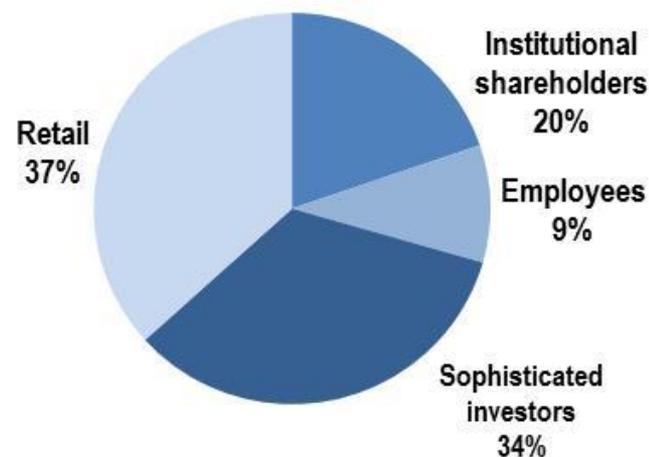
## Corporate Overview

Formed	2008
Ticker	ASX:BRU
Index	S&P/ASX300
Shares on issue	298 million
Share price	0.85 cps
Market Cap	\$253 million
Cash on hand	\$37.6 million (at 30 June 14)
Net Acreage	~53,188 sq km ~13.2 million acres
Key Partners	Mitsubishi, Apache



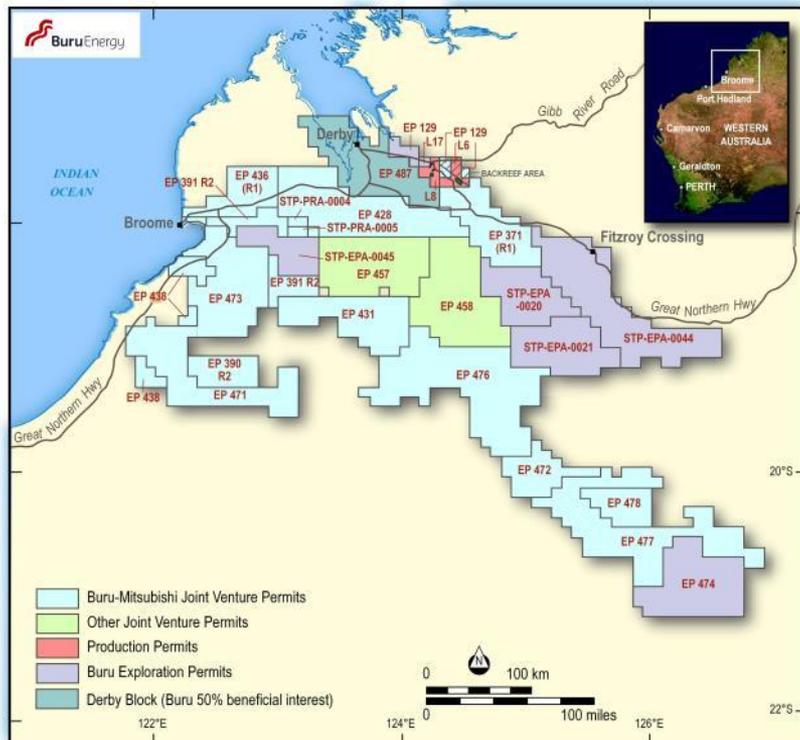
6 month share price

## Shareholder Breakdown



# Buru investment drivers

- ✓ Extensive basin wide acreage spread in the most underexplored onshore Australian basin
- ✓ Significant oil and gas potential in conventional reservoirs with current oil production from Ungani field
- ✓ Multi TCF tight gas resource with high liquids content
- ✓ Major international partners (Mitsubishi and Apache)
- ✓ High equities and operatorship
- ✓ State Agreement provides long term tenure over core acreage



# Restructured board

## RESTRUCTURED BOARD TO REFLECT SIGNIFICANT CHANGE IN COMPANY OPERATIONAL FOCUS

- Board now has three independent non-executives and Executive Chairman
- Eric Streitberg (founding and largest shareholder) assumed Executive Chairman role
- Intention for appointment of non-executive Chairman in due course
- Active recruitment process for further independent non-executive director

## STRONG SKILL SET

- **Technical** - proven oil and gas finders and developers with strong technical experience
- **Commercial** - successful senior executives responsible for world scale projects and budgets with strong focus on the bottom line
- **Corporate** - successful company founders and growth agents with experience in major corporate environments
- **Stakeholder relations** - strong Government connections and strong community engagement backgrounds



**Eric Streitberg**  
Executive Chairman

+40 years experience in petroleum geology, geophysics and management of petroleum exploration and production companies



**Peter Jones**  
Non-Executive Director

+30 years involvement in the Western Australian resources sector across business and government



**Eve Howell**  
Non-Executive Director

+40 years management experience in the oil and gas industry including discovery and development of various oil and gas fields



**Robert Willes**  
Non-Executive Director

+25 years international experience in the oil and gas and energy sectors and serves as MD of Challenger Energy Ltd

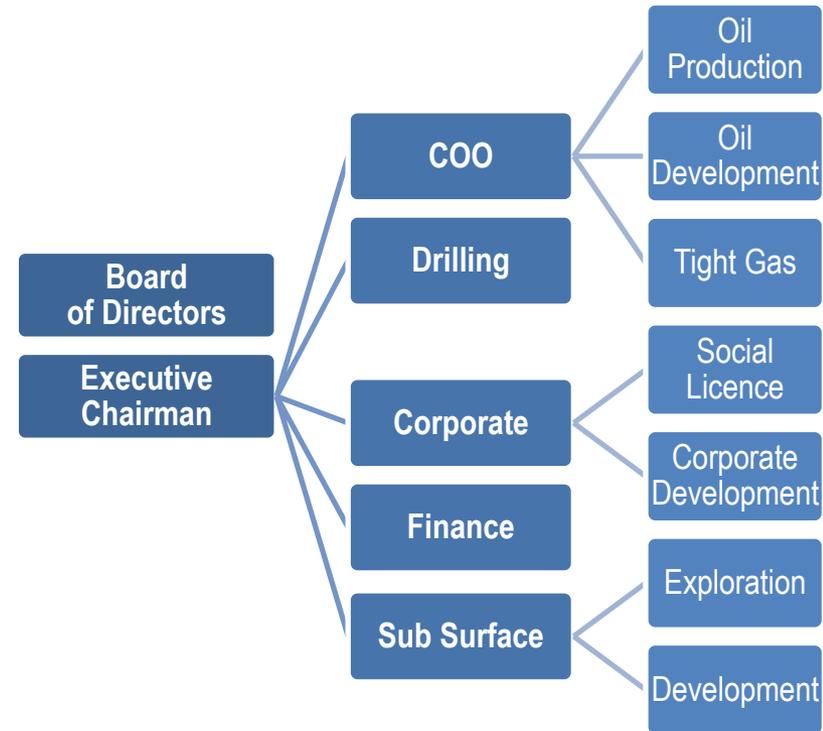
# Management team with capacity to deliver

## RESTRUCTURED MANAGEMENT TEAM WITH FOCUS ON DELIVERY

- Streamlined management structure to reduce duplication and number of consultants
- Flattened management structure and increased accountability
- Staff had increased by +50%, current streamlining reduced by 30%, to pre 2013 levels
- Strong internal cost discipline
- Approval processes very rigorous - and appropriate staff to deliver

## OPERATIONS TEAM CAPABILITY FOR BOTH OIL AND GAS

- **Sub-surface** - small team of highly experienced explorationists tasked to deliver prospects, permit management, and ensure optimum development
- **Oil production** - simple fields to produce with small skilled team with operational and environmental expertise
- **Oil development** - highly experienced small engineering team to deliver remote oil field development at lowest cost
- **Tight gas** - focus is now on program delivery, all approvals in place and delivery of the program is relatively routine, small skilled team in place
- **Drilling** - senior person in-house with one consultant
- **Financial/Commercial** - senior in-house with across discipline support
- **Corporate/Community** - controlled by General Counsel with strong support on the ground and in-house. Major part of the business
- **Shareholders** - Executive Chairman responsible to the owners of the Company, and for Government interaction



# Business structure

## CONVENTIONAL GAS AND OIL



- Ungani Oil Field play opening discovery
- Regional follow-up potential
- Low cost development with short term cash flow generation
- Oil provides benefits to all stakeholders in short time frames
- Good potential for conventional gas resources (inc Yulleroo)
- Conventional gas projects supply local markets with low impact development

## TIGHT GAS

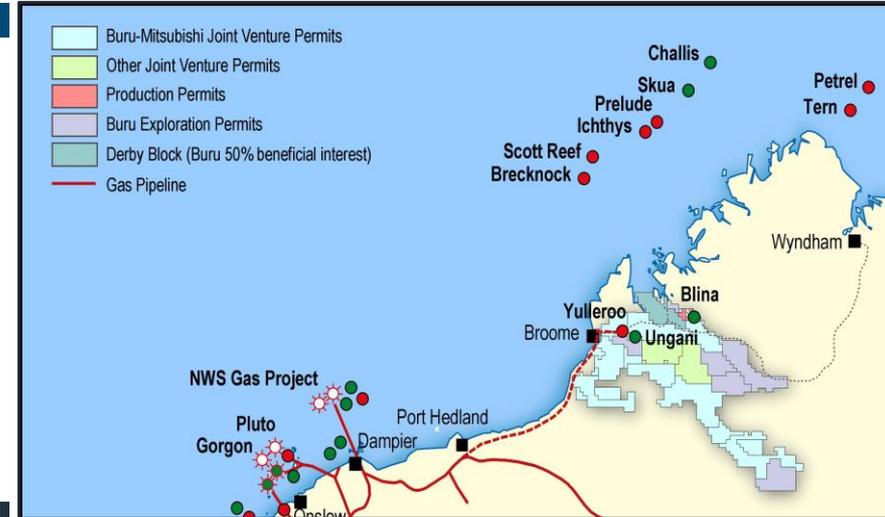


- World class potential defined in Laurel Formation
- Independent assessment of +40 TCF prospective resources net to Buru
- Tight gas – not shale
- Previous frac test program (Yulleroo 2) demonstrated excellent potential
- Test stimulation (frac) program planned for early 2015
- Long term value for all stakeholders

# Outstanding whole of basin acreage position

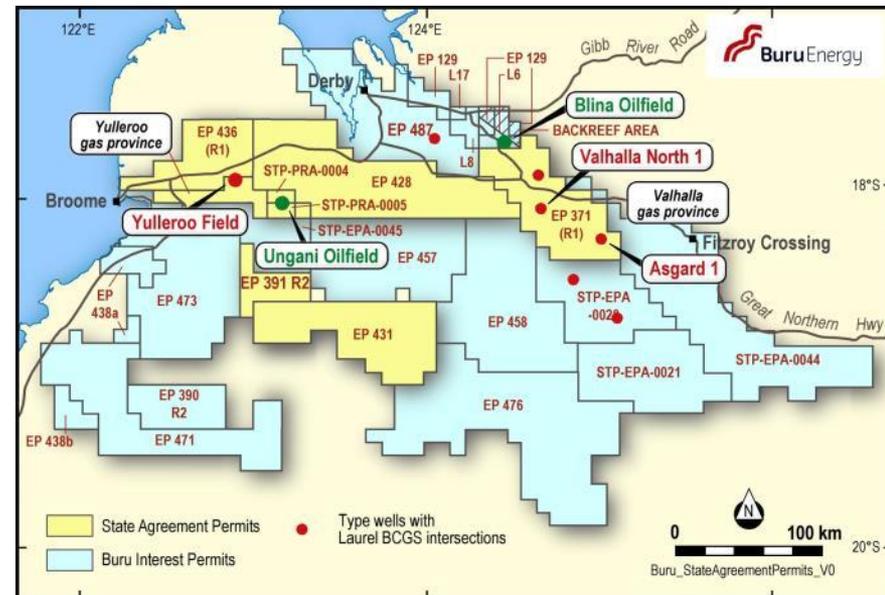
## MAJOR LONG TERM POSITION WITH TENURE CERTAINTY

- **Regional acreage position**
  - Continuous basin wide coverage gross 93,007 sq kms (22.9 million acres) - 640km by 250km (~450 miles by ~150 miles)
  - Generally 50% equity and operatorship
- **Unique portfolio**
  - Oil development, gas appraisal, quality exploration
  - Multiple play types with high potential



## ACTIVE ACREAGE MANAGEMENT - STATE AGREEMENT

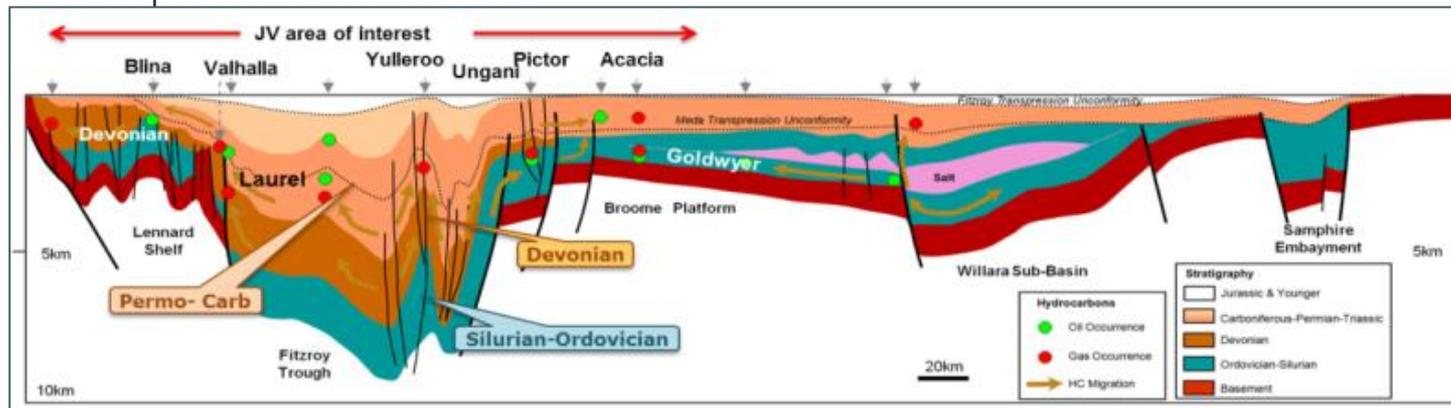
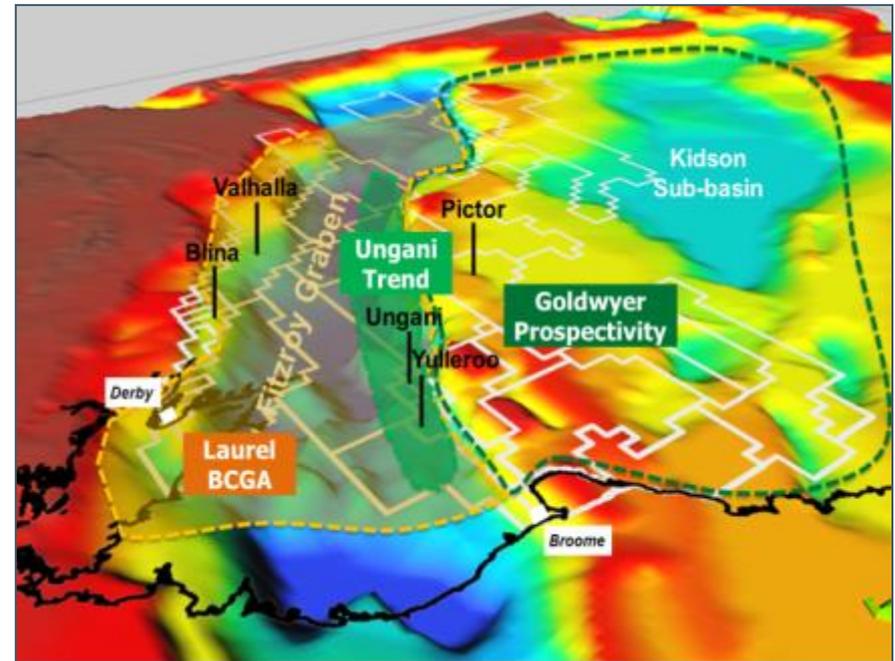
- **Unique agreement**
  - Long term tenure (25 years)
  - Recognises investment to date by JV
- **Work program**
  - Offsetting across permits
  - Systematic appraisal - optimal development
- **Project facilitation**
  - Commitment to major domestic gas project
  - Strong alignment of State Govt with JV
- **Continued compliance**
  - Commitment to Native Title, environmental, heritage, and safety compliance



# Buru controls the highest potential acreage

## THREE MAJOR PETROLEUM SYSTEMS

- **Ungani oil trend**
  - High quality conventional reservoirs
  - Prolific oil source rocks
  - Well defined prospects
- **Laurel Formation**
  - Potential giant gas accumulation
  - Basin centred tight wet gas accumulation
  - Conventional reservoirs present with potential high deliverability
- **Goldwyer/Acacia**
  - Large scale conventional oil potential in the Acacia Sandstone and Nita Formation
  - Apache farmin provides low cost evaluation



# Ungani field overview

## UNGANI DISCOVERY – A GAME CHANGER FOR THE CANNING BASIN

- **Resource**
  - **Substantial oil column** (+50m) in very high quality conventional dolomite reservoir confirmed by two wells. Third well has lower productivity and will be further tested
  - **Light Sweet crude** - 37 deg API, high yield, sells at premium to Brent
  - **Resource estimate** - currently being reviewed with results of the EPT and workover of Ungani 1<sup>ST</sup>1
- **Extended production testing**
  - **Excellent reservoir performance** - confirmed by EPT
  - **Strong production to date** - Total 320,785 bbls to end August
  - **Extension** - DMP approval to 9 December for next stage
- **Next steps - development**
  - **Commercialisation** - EPT has confirmed resource base to support incremental development plan
  - **Production system** - simple and relatively cheap, no gas and light high quality oil
  - **Export system** - trucking to ship export port working well
  - **Principal development costs** - additional wells and export system



*Ungani 2 well head*



*Ungani field facility*

# Ungani EPT Overview

Ungani Field

Transport to  
Wyndham Tank  
Farm

Storage & export  
from Wyndham

Shipping to  
refinery



## EPT production

**U2** well producing very strongly with the rate constrained as planned to up to 1,000 bopd aligned with current trucking capacity

**U1ST1** Workover first stage successful. Rates up to 1,200 bopd at 30% watercut down from 60% water pre workover

**U3** Workover planned for production test/injectivity potential

**UN** Production test planned

**Production Facilities** upgraded to improve operability and uptime

## Oil Trucking

900km to existing tank farm at Wyndham  
Local contractor with excellent reliability  
Trucking system sized to port storage and ship capacity

## Port Facility

Wyndham Port using existing Cambridge Gulf Limited facility  
Required modifications to the tank farm completed on time and on budget  
Storage currently limited to 30,000 barrels with 50,000 bbls ship size  
Potential to increase storage to streamline ship schedules

## Crude shipping

Wyndham to regional refineries.  
Export carrier size is constrained to SR carriers (50,000 bbls) by storage tank size and draft at jetty  
Ship contracted on a time charter  
Shipping and sales by Petro Diamond Company Limited (Mitsubishi subsidiary in Singapore)  
Sales to date into SE Asian refineries

# Ungani: Way forward

## POST EPT DEVELOPMENT

- Optimise shipping export route
- Minimise wet weather downtime - field pipeline/road/loadout
- Staged development process for optimal development
- Additional wells required together with produced water handling system (longer term re-injection)
- Currently reviewing innovative low cost process for facility upgrades

## DEVELOPMENT FUNDING

- Principal costs additional wells, water disposal and port facilities upgrade
- Reserves certification and production licence required for project funding
- Mitsubishi facility currently being renegotiated post Ungani 3 results and analysis (up to \$27.5 million). Non-dilutive and off balance sheet
- NAB facility structure currently being reviewed prior to reserves certification process
- Negotiations for production agreements with Native Title Parties progressing



*Ungani field truck loadout*

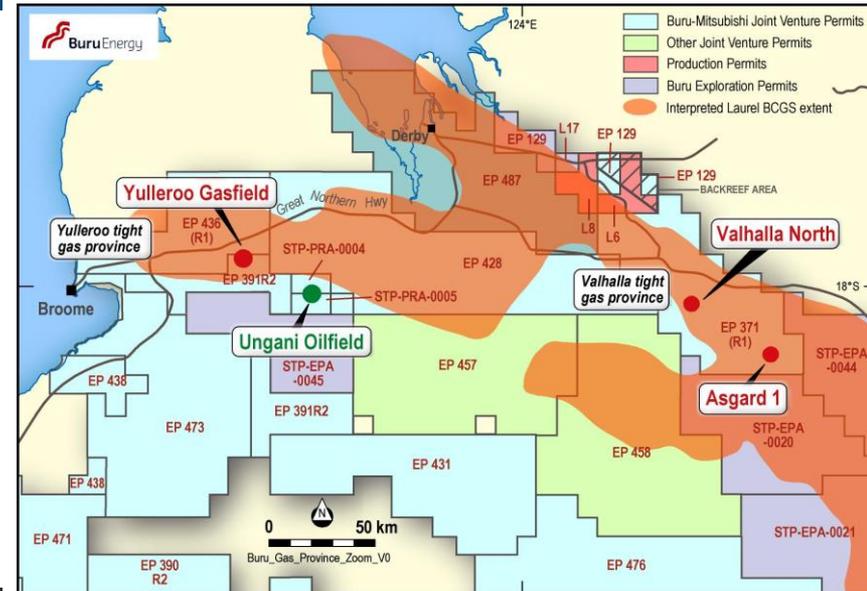


*Ship loading at Wyndham*

# Laurel Gas

## CONTROLLED BY BURU/MITSUBISHI JV

- **Upside**
  - Regional scale gas accumulation
  - Basic centred tight wet gas (BCGS)
  - High deliverability conventional reservoirs present
- **Resource**
  - +100 TCF in the BCGS and +1Bn bbls oil (gross) - with 47 TCF gas net to Buru (independent estimates of gross prospective resources)
- **Hybrid Play**
  - Combined package of sands, silts and limestones with >1,500 meters of gas saturations



## BCGS CHARACTERISTICS

- **Well defined**
  - Highly elevated mud log gas shows over a 1,500m+ interval in 10 wells
  - Recognised and appraised in the last three years by Buru/MC JV
- **High quality gas**
  - Gas is sweet with low CO<sub>2</sub>, no H<sub>2</sub>S and interpreted high liquids content (~25bbls/mmcf condensate and ~25bbls/mmcf of LPG)
- **Conventional potential**
  - Intensive systematic program underway to identify the conventional sweet spots (plums in the pudding)

Product	Prospective Resources (net to Buru)		
	Low Case (MMbbl/TCF)	Best Estimate Case (MMbbl/TCF)	High Case (MMbbl/TCF)
Condensate	226	1,177	4,717
Natural Gas	12	47	150
Values have been rounded to the nearest TCF and MMbbl			

# Trial reservoir stimulation proves tight gas potential

## THE YULLEROO 2 STIMULATION AND TEST VALIDATES THE TIGHT GAS POTENTIAL OF THE BASIN

- Yulleroo wells have defined a 700 to 800 meters tight gas column with thin conventional sandstone reservoirs over a large area
- Sufficient data exists to be able to calculate prospective resources for the accumulation. RISC has estimated prospective resources in both conventional and unconventional reservoirs of over 6TCF of gas net to Buru as follows:

	Low	Best	High
Net recoverable gas (TCF)	1.76	6.56	20.17
Net recoverable condensate (mmbbls)	33.30	164.30	622.90

- The 2010 stimulation (frac) and flow test in the vertical Yulleroo 2 well was designed to gather data on rock parameters, gas quality and potential flow rates
- Pinpoint stimulation over three zones was undertaken by BJ Services
- Injection rates were limited by casing design in the exploration well
- Results were very positive demonstrating:
  - formation is “fraccable” with good injection characteristics
  - strong flows of gas to surface (+1.6 mmcf)
  - very good quality of the gas (no H<sub>2</sub>S, very low CO<sub>2</sub>)
  - high condensate and LPG content with condensate loading on shutin (estimated from basin wide recoveries of ~25bbls/mmcf condensate and ~25bbls/mmcf of LPG)
- Stimulation proceeded without incident and detailed monitoring has demonstrated no detectable effect on the ground surface or in the aquifer
- Yulleroo 2 results have ticked most of the boxes for a successful development
- TGS program is now aimed at ticking the commercialisation boxes – recovery per zone and decline rates



*BJ Services stimulation units at Y2*



*First gas from Yulleroo 2*



*Yulleroo 2 cleanup flow*

# Laurel Formation tight gas pilot exploration program

- **Program has undergone intense regulatory and community scrutiny**
  - Buru Energy is committed to transparency and disclosure
  - Adopted very open, proactive and factual approach
- **Regulatory approvals**
  - WA Environment Minister upheld EPA decision that: Buru's "small scale, limited duration 'proof of concept' exploration proposal is unlikely to have a significant effect on the environment"
  - DMP approvals subsequently received for Environment Plan, Operational Plan and Safety Plan
- **Community engagement**
  - **Traditional Owners**
    - Intensive program to ensure TO's are fully informed of our proposed activities
    - Independent experts provided advice to TO panels/ boards/ general TO community
    - Agreement for program received from Noonkanbah community
    - Yawuru community required conditions to be met – these are currently being formulated for review
    - Nyikina Mangala community review process in progress (TGS program is not on NM areas)
  - **Other stakeholders**
    - Co-ordinated community information program across all levels (media/community forums/open days/interviews/ industry briefings)
    - Protest camp established at the entrance to the Yulleroo access road. This action has had no impact on operations to date.



On-country heritage survey meeting



Information presentation

# Laurel Formation tight gas pilot exploration program overview

## PREPARATION FOR STIMULATION (FRACGING) ACTIVITY

- Extensive baseline modelling
- Best practice reviews
- Community Engagement
- Stimulate up to four wells and flow back
- Possible conventional reservoirs testing
- Long lead and operational planning underway
- Site works completed at 2 wells and planned for other wells

## PHASING

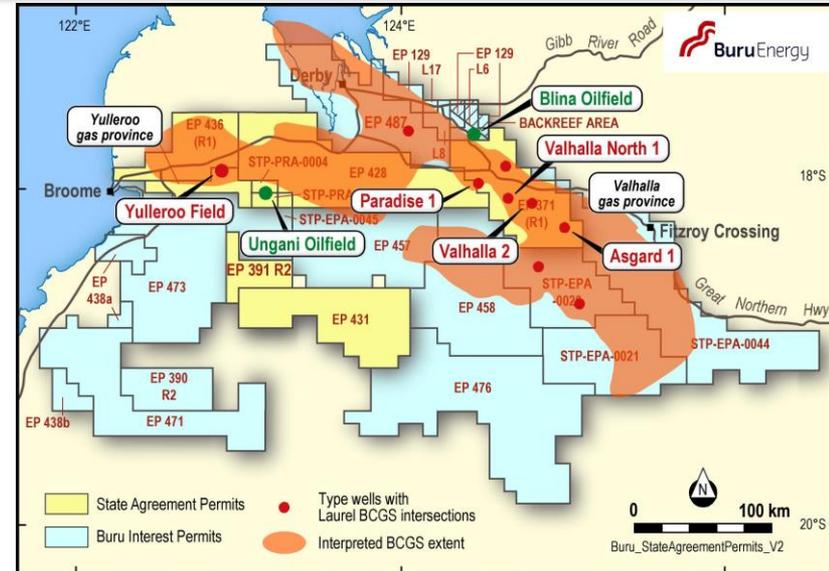
- Program in 3 phases to optimise operational and commercial parameters
- **Phase 1** - current activity, civil works, well conditioning, CBL's, DFIT's
- **Phase 2** - until dry season 2015, review of operational and commercial parameters to ensure maximum effectiveness and data output
- **Phase 3** - dry season 2015. Stimulation and flowback

## OUTCOMES

- Y2 stimulation in 2010 confirmed most of the technical parameters for a successful development of the tight gas
- TGS program aimed at zonal deliverability and decline rates

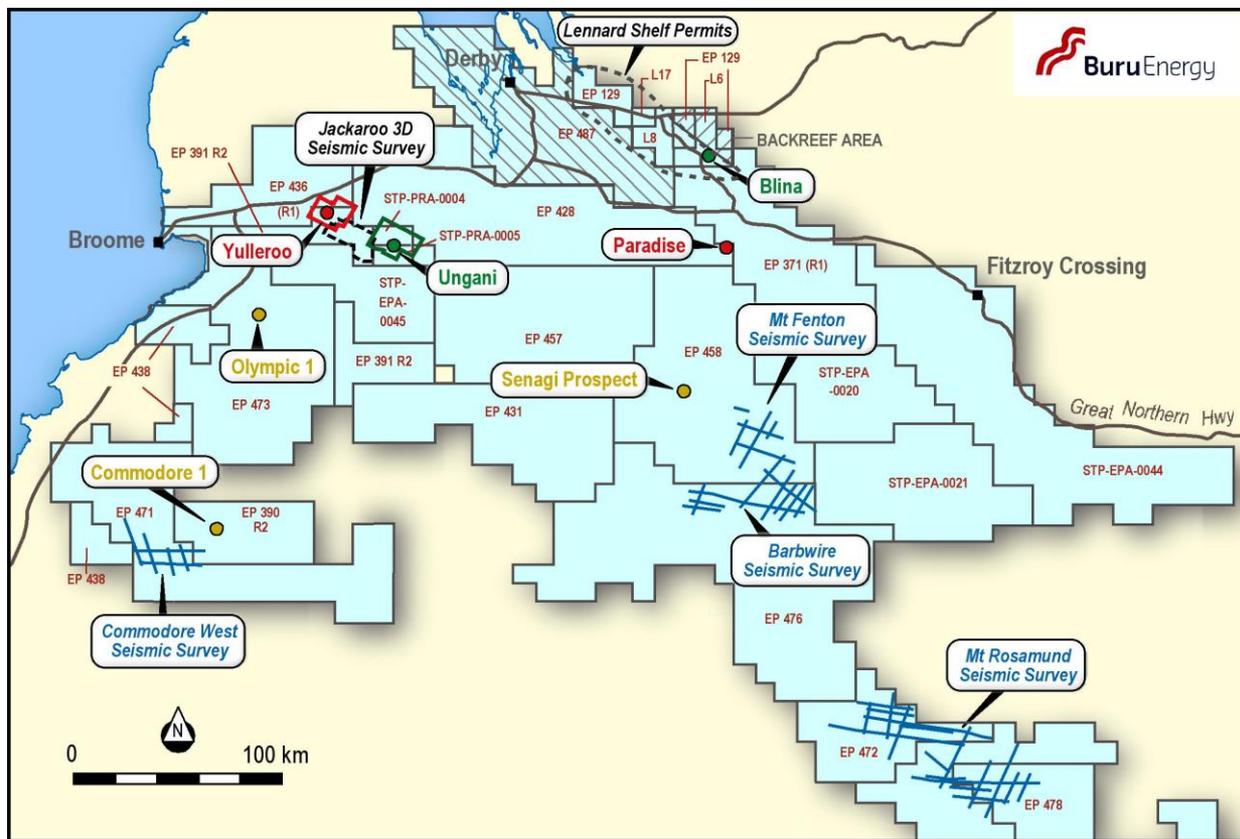
## FUNDING

- Estimated program cost coming down through optimisation
- \$20 million released from Alcoa escrow to cover majority of Buru's costs



Yulleroo 3 wellsite

# Exploration and appraisal program



## APPRAISAL AND TEST

- Ungani 1 - workover
- Ungani North - test
- Ungani 3 - workover and test
- Paradise 1 - test

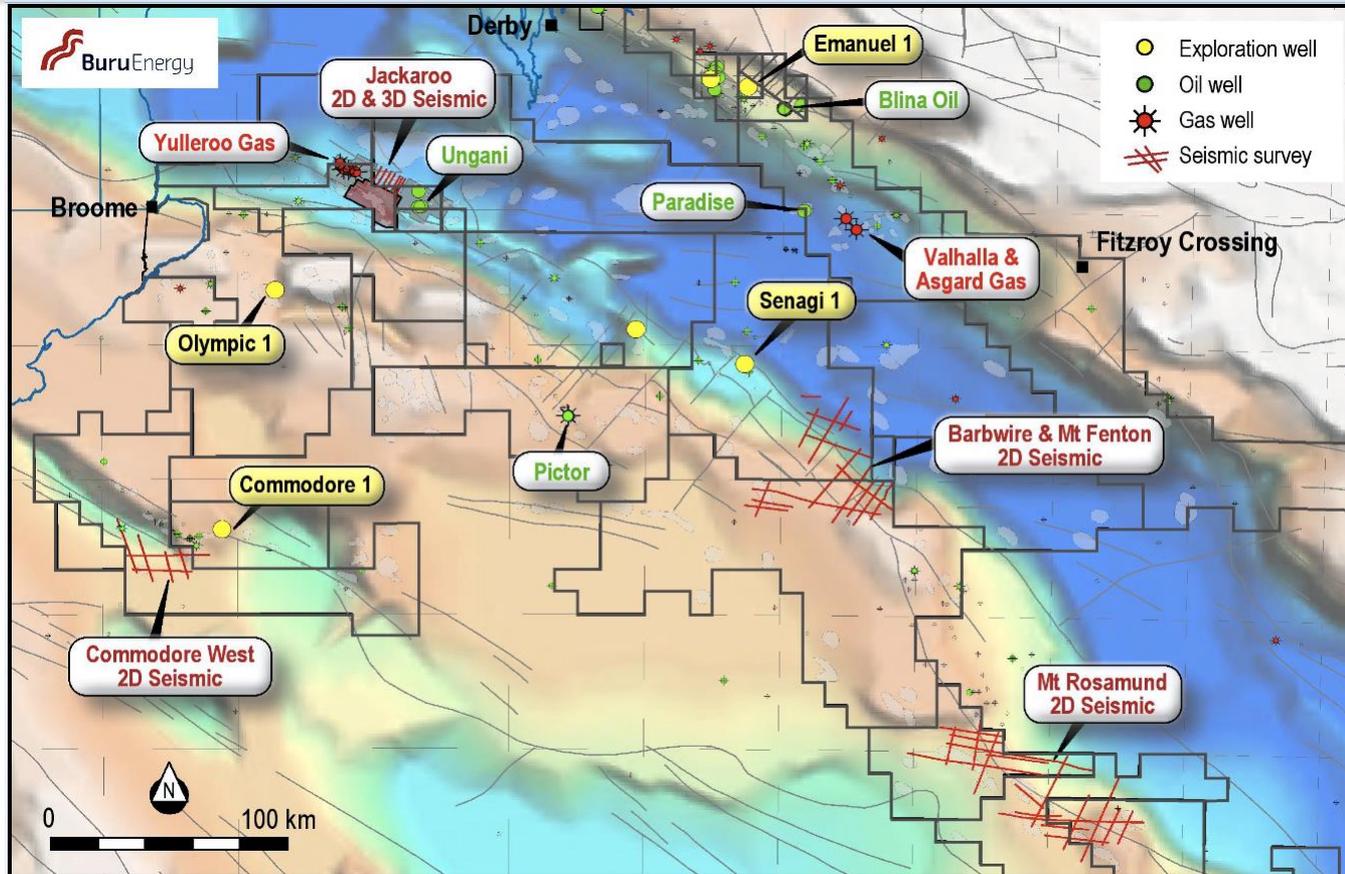
## EXPLORATION DRILLING

- Commodore 1
- Olympic 1
- Lennard Shelf - 2 wells
- Ungani trend - Senagi 1

## SEISMIC ACQUISITION

- 2D surveys (988 kms)
- 3D survey (240 sq kms)

# High value conventional oil exploration



## UNGANI OIL DISCOVERY IS A 'PLAY OPENER'

- Conventional vuggy dolomite reservoir
- Ungani Nth proved extensive petroleum system
- Structures are readily imaged by geophysics
- Ungani Oil Trend covers over 120 kms by 40 kms (+1 million acres)
- Buru controls entire trend
- Senagi well planned as operational conditions permit

## OTHER CONVENTIONAL OIL PLAYS

- **Paradise area** - test of Paradise oil discovery planned, many additional prospects in that area
- **Lennard Shelf** - historic oil area, potential for Ungani Dolomite style plays, two wells planned
- **Coastal and Acacia Provinces** - Two wells to be drilled shortly

# Drilling program shift to more cost efficiency

## LOWER COST FIXED PRICE EXPLORATION DRILLING

- Need for step change recognised after review of previous 5 years of drilling
- JV have agreed to contract DDH1 Rig #31, a UDR5000 highly mobile mineral rig which has been converted for oil and gas operations
- The rig is currently drilling deep shale gas wells for an operator in the Northern territory
- Expected to be mobilised to the first drilling location for Buru Energy in October
- The rig is capable of drilling cored holes to at least 3,000 metres drill depth and has a small footprint and crew
- Expectation of substantially reducing exploration well costs
- Standard oilfield rig will still be required for development drilling

## CONTRACT STRUCTURE

- Fixed price contract which is expected to result in a decrease in drilling costs
- The fixed price includes key aspects of the drilling program from mobilisation to demobilisation and movement between wells
- Arrangements are in place to address a shutdown of operations due to weather



DDH1 Rig 31



DDH1 rig on location in Northern Territory

# Funding status

## CURRENT SITUATION

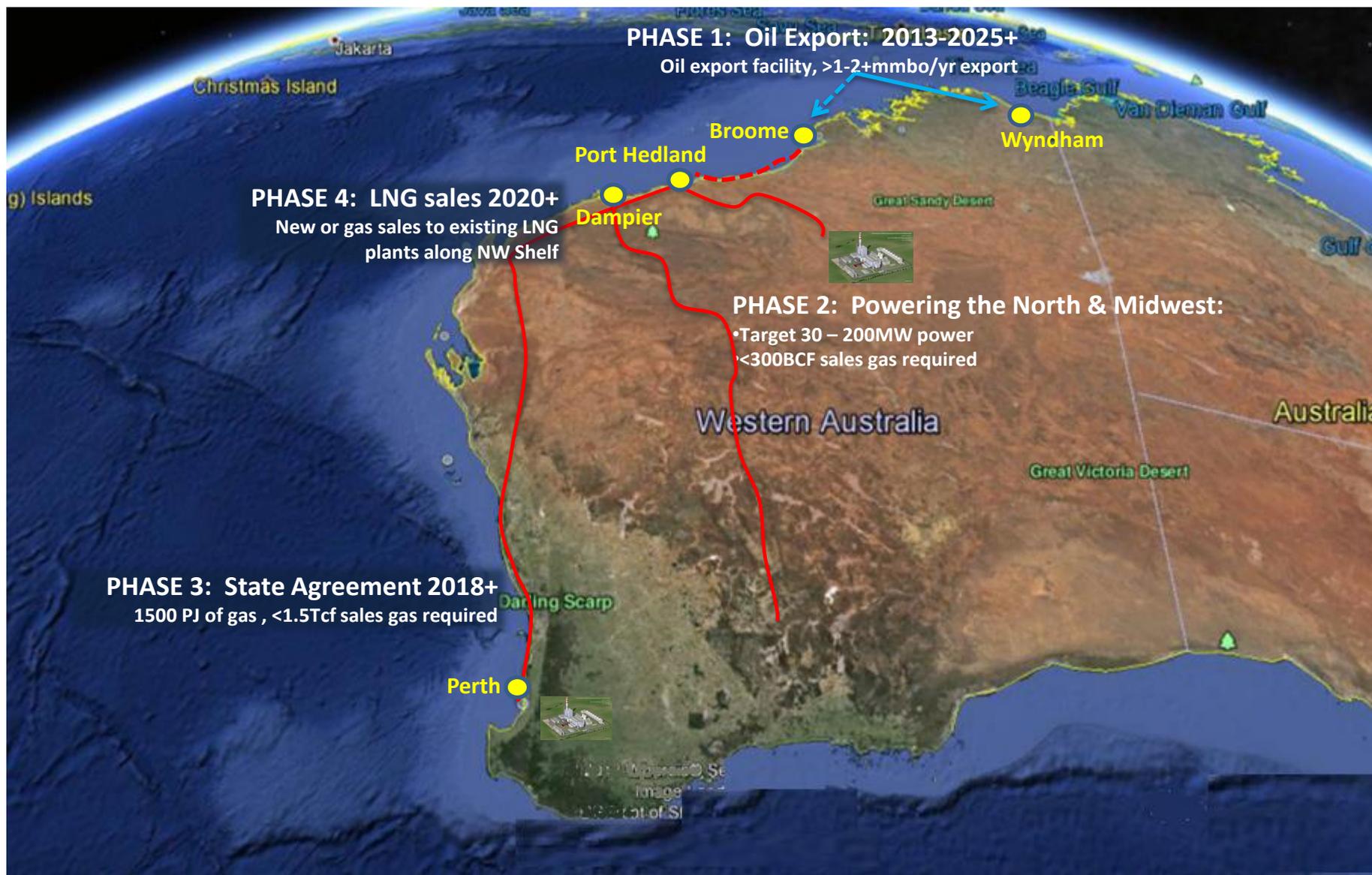
- **Ungani development**
  - Relatively low cost - main cost is wells
  - Export facility - off balance sheet funding
  - Strongly cash flow positive when in production rather than EPT mode
  - Mitsubishi Funding agreement resetting under negotiation (\$27.5 million)
  - NAB facility potentially being restructured for more corporate flexibility
- **Oil exploration program**
  - Coastal wells funded via Apache farmin
  - Lennard Shelf wells funded by farmin party
  - Senagi funded from internal resources
  - Majority of 2D seismic funded by Apache
  - 3D seismic funded internally
- **Laurel Tight Gas pilot program**
  - Funded from Alcoa escrow agreement
- **Other funding sources**
  - Acreage rationalisation - further farmouts/past cost reimbursement

## FORWARD FUNDING

- **Oil exploration**
  - Wider exploration via excess cash from Ungani or farm-out
- **Gas appraisal**
  - Laurel farm-in partner introduced after flow testing
- **Gas development**
  - Funded through project dilution and debt



# Buru Energy's vision



# Energising Western Australia



**Buru**Energy