Senex Energy Limited

# Positioned for growth

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**Singapore and Hong Kong**

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## Reserves

Unless otherwise indicated, the statements contained in this presentation about Senex's reserves estimates have been prepared by Dr Steven Scott BSc (Hons), PhD, who is General Manager – Exploration, a full time employee of Senex, in accordance with the definitions and guidelines in the 2007 Petroleum Resources Management System approved by the Society of Petroleum Engineers (**SPE PRMS**). Dr Scott consents to the inclusion of the reserves estimates in the form and context in which they appear. Senex's reserves are consistent with the SPE PRMS.

# Overview: Positioned for growth

## CASH FLOW THROUGH OIL PRODUCTION
**High margin, low risk oil business**


## FAVOURABLE GAS MARKET DYNAMICS
**Strong demand for eastern Australian gas**

## GROWTH IN UNCONVENTIONAL GAS
**Commanding unconventional gas position**

## DIVERSFIED RESOURCE PORTFOLIO
**Valuable coal seam gas business**



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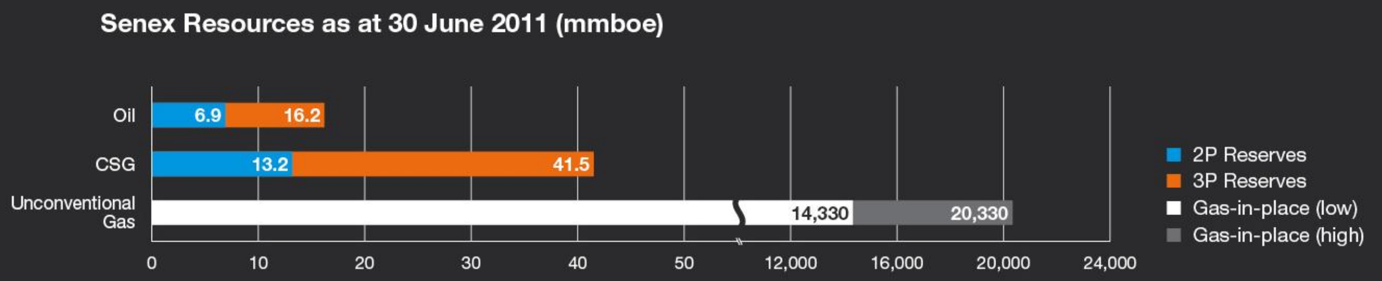
Introducing Senex Energy Limited,
the new name to watch in oil and gas

# Senex Energy Limited (ASX:SXY)

**Senex is a strong Australian energy company, making smart choices to rapidly grow our diversified oil and gas portfolio**

Senex has materially outperformed the ASX/S&P 200 over the last 12 months


Oil, coal seam gas and unconventional gas resources in strategic locations



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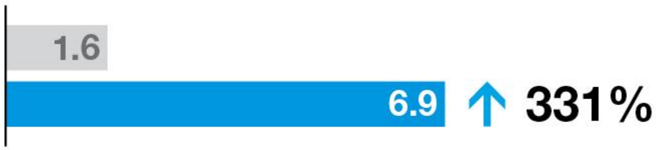
# 2010/11 Highlights

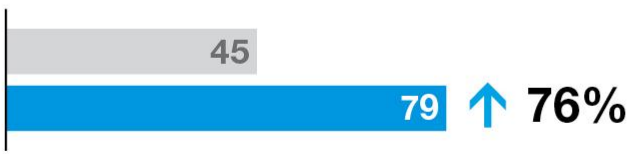
## Net oil reserves




**2P** (from 1.6 mmbbls to 6.9 mmbbls at 30 June 2011)


**3P** (from 4.5 mmbbls to 16.2 mmbbls at 30 June 2011)

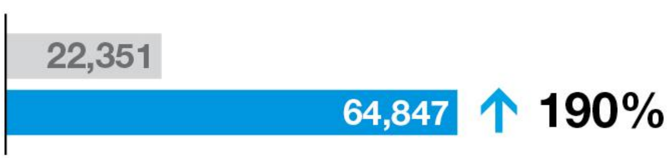
## Net gas reserves




**2P** (from 45 PJ to 79 PJ at 30 June 2011)


**3P** (from 89 PJ to 249 PJ at 30 June 2011)

## Net land position




(from 22,351 $km^2$ to 64,847 $km^2$ at 30 June 2011)

## Share price


(from $0.26 at 30 June 2010 to $0.36 at 30 June 2011)



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# A clear path to value and growth

1. **Grow the oil business to generate cash flow**
   - Cooper Basin flooding issues being resolved
   - Targeting >700,000 barrels of oil (net) in 2011/12
   - Drilling 11 western flank wells in 2011/12
2. **Unlock a world class unconventional gas resource**
   - Demonstrate technical feasibility of unconventional gas production
   - Establish large scale, cost competitive resource base
3. **Appraisal and development of Surat Basin CSG**
   - Targeting material 2P reserve increase and deliverability testing in QGC joint venture permits
   - Targeting material reserve improvements in Don Juan CSG Project (Senex operated)



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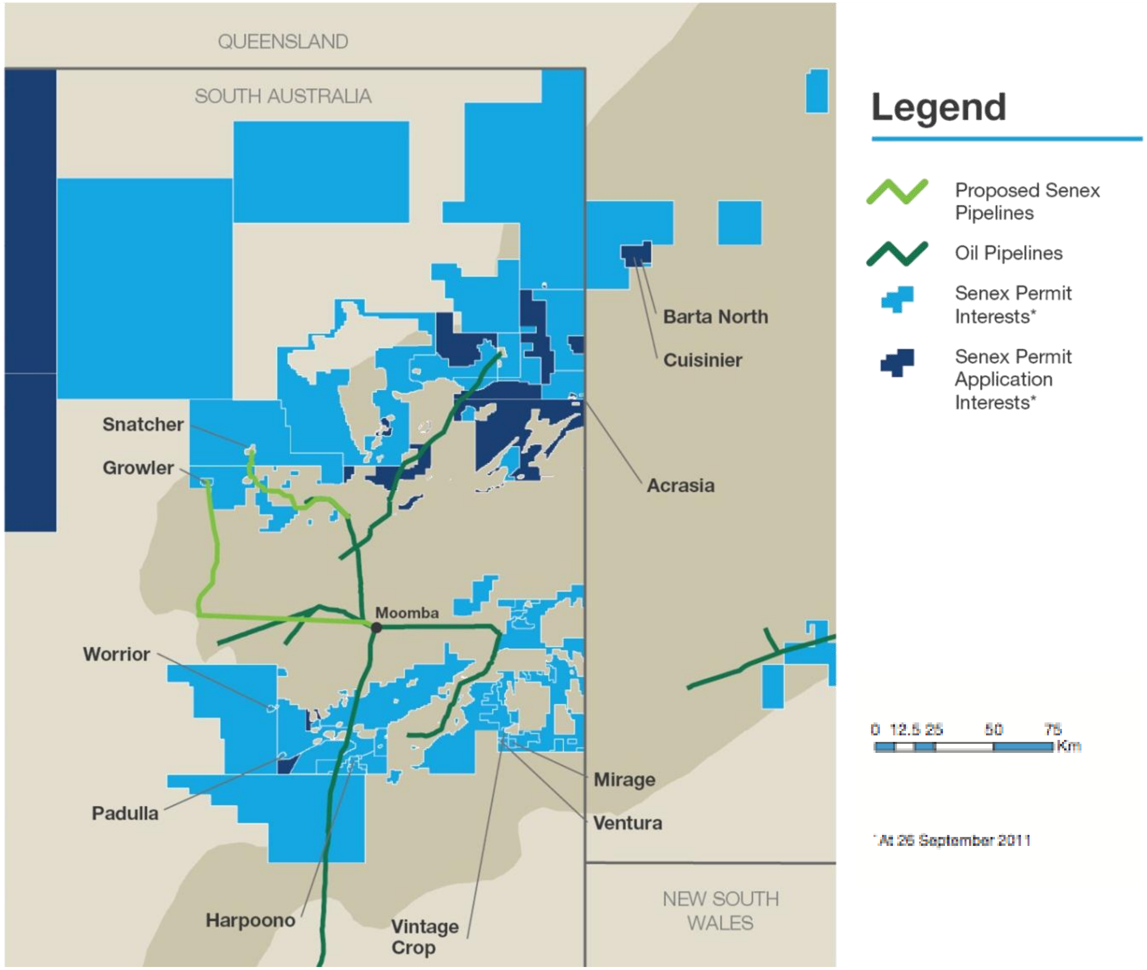
# High margin oil business in the South Australian Cooper Basin

# Positioned for rapid growth in the Cooper Basin

- Oil revenue priced off Brent – stronger than WTI
- High oil net back of ~A$70* per barrel
- Major acreage holding with strong equity positions
- Senex operates all S.A. Cooper Basin production
- Fast drill and tie-in periods
- High flow rates from wells
- Lower risk exploration on 3D seismic
- Proposed pipeline infrastructure to increase production rates and secure product delivery




* At Brent oil price of A$100/barrel, with delivered opex.



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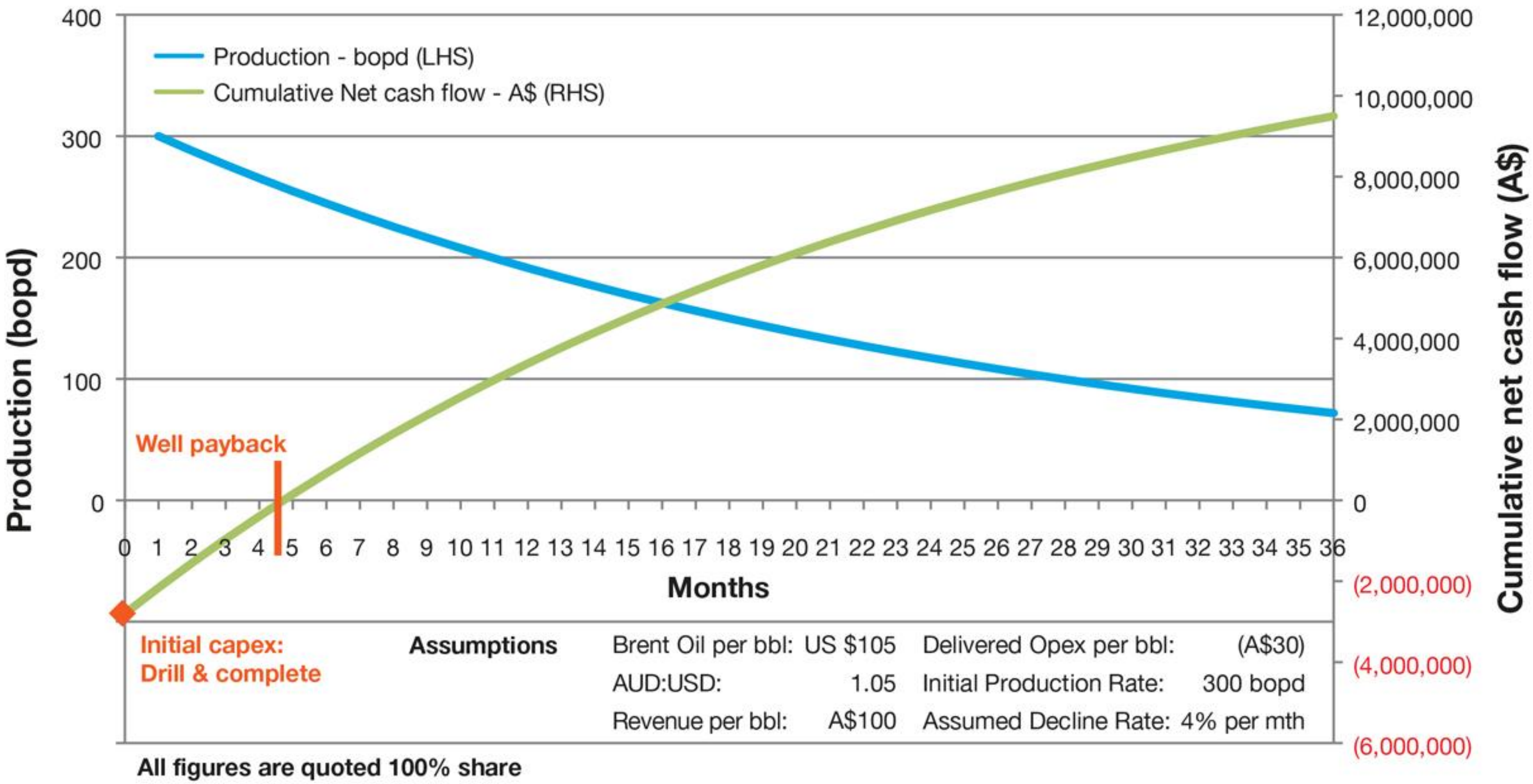
# Western flank oil: a high margin business

- Development well payback c.5 months at current oil prices, delivering ~121% return with 12 months continuous production
- Typical Birkhead Channel oil well profile and economics:

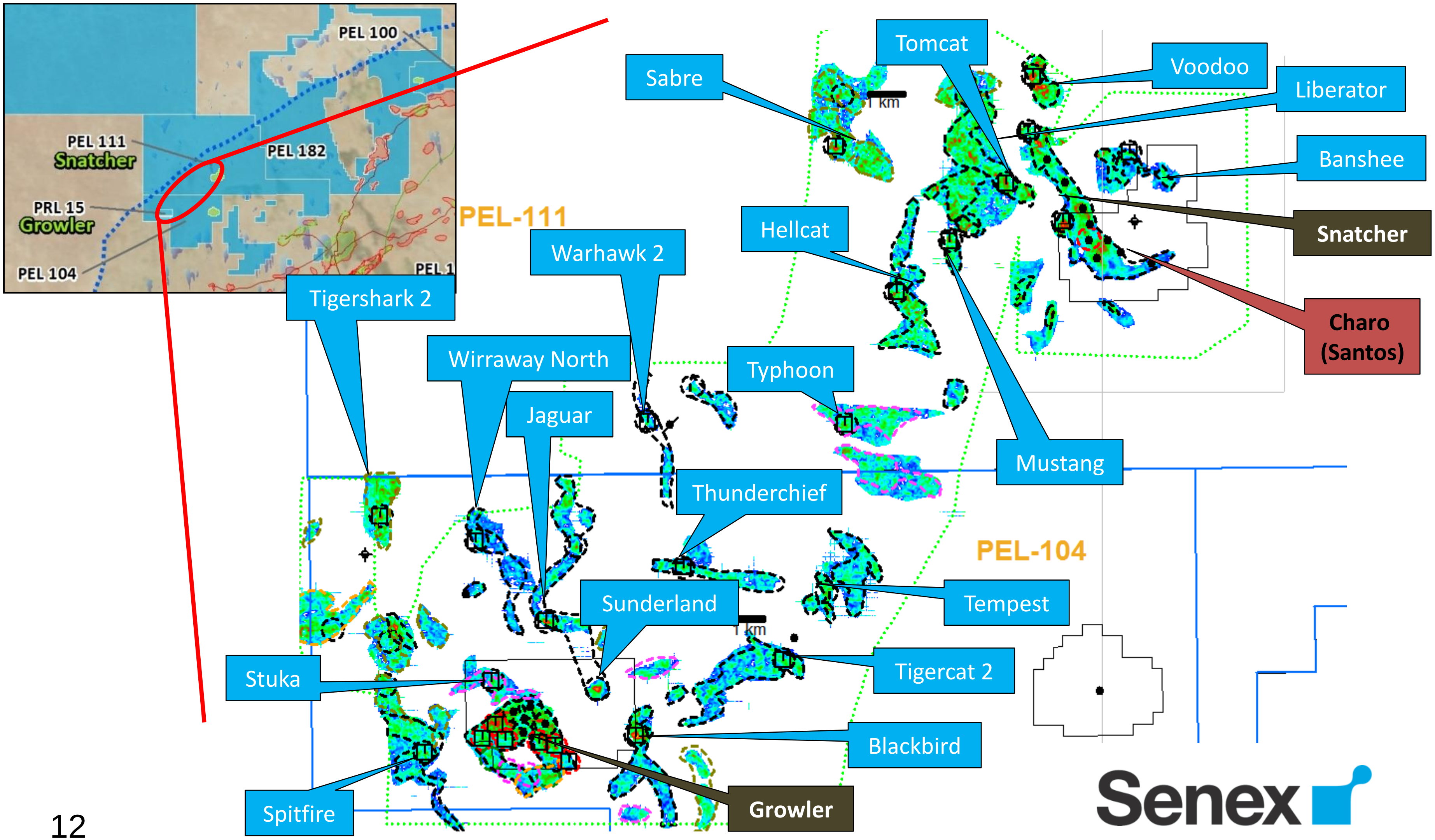


# Fully funded 2011/12 work program

- More than $90 million in cash following oversubscribed 1 for 5 entitlement issue in September 2011
- Targeting production of over 700,000 barrels of oil for 2011/12
- Demonstrated oil reserves growth with 2P reserves of 6.9 million barrels net and 3P reserves of 16.9 million barrels net
- Aggressive 2011/12 western flank exploration, appraisal and development program to accelerate reserves and production:
  - Six lower risk Birkhead channel exploration wells on 3D seismic
  - Five appraisal/development wells

# Reduced risk western flank exploration on 3D seismic

- 25 prospects on 3D seismic yet to be drilled in PEL 104 and PEL 111

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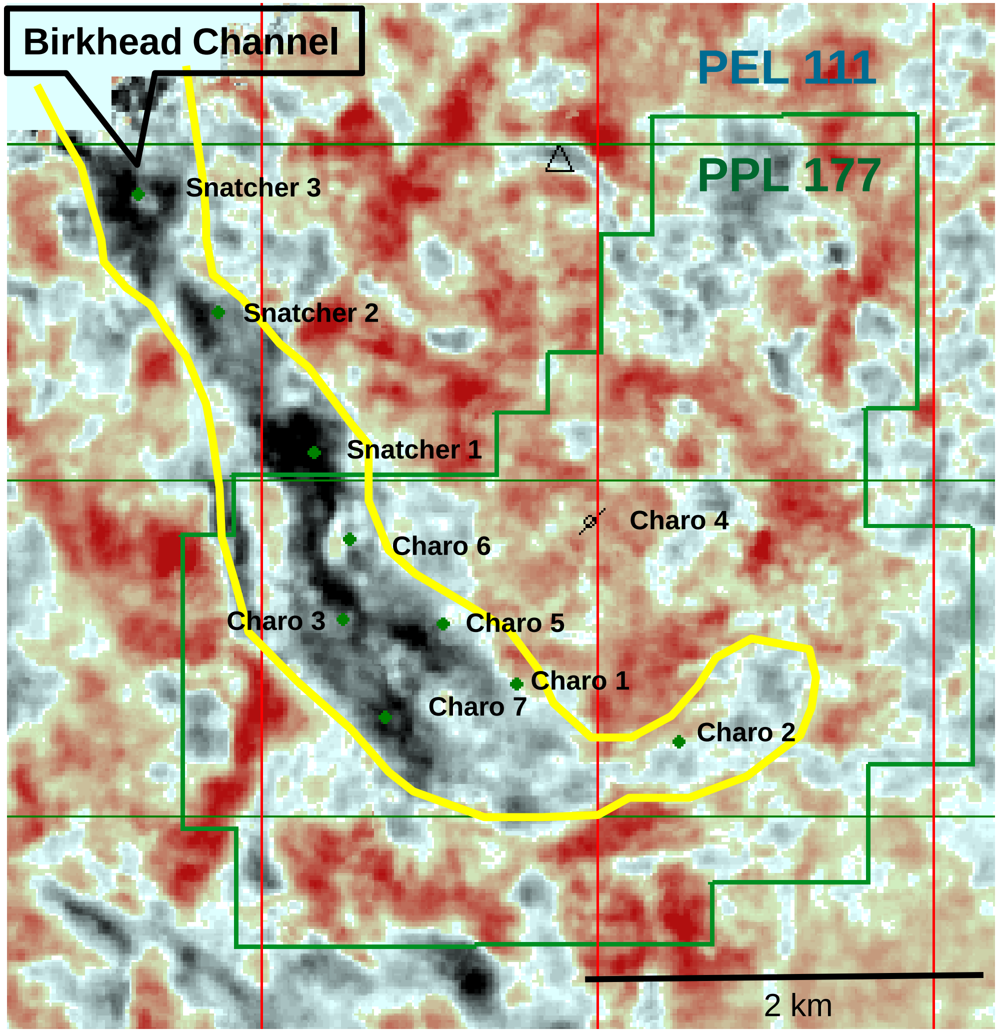
# Birkhead channel 3D seismic interpretation reduces risk




Source: PIRSA (open file data) as interpreted by Senex

- Birkhead channels can be mapped using 3D seismic data
- The Snatcher/Charo channel is seen here as black within a red background
  - Charo 1 – marginal (uneconomic), likely due to poor sand development
  - Charo 4 – failure, no sand development
  - Charo 2 – mostly water, good channel sand intersected with a high water contact
  - Charo 3, 5, 6, 7 and Snatcher 1, 2, 3 – intersects Birkhead channel with oil production

# Important infrastructure to derisk oil production

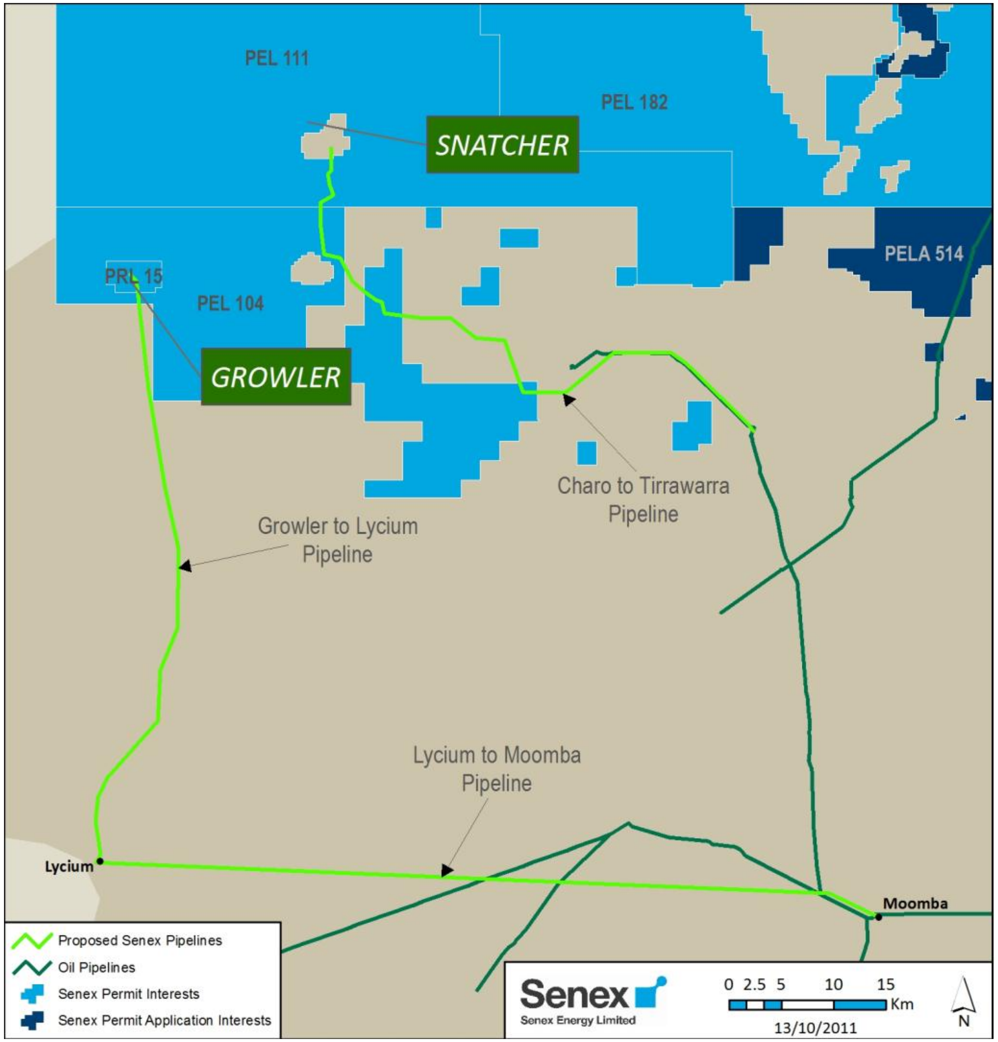
- **Increased production rates**
- **Secure product delivery**
- **Reduced Opex**

**Growler-Moomba flowlines**

- Growler to Lycium 6” flowline, 8,000 bopd (Senex 60%)
- Lycium to Moomba 8” flowline 15,000 bopd (Senex 40%)
- Due to be operational by end FY12
- Net cost to Senex ~$20m

**Charo-Tirrwarra flowline**

- Agreement with SACB JV to increase capacity to take PEL 111 oil production
- Net cost to Senex ~$2.5m, structured as tariff prepayment

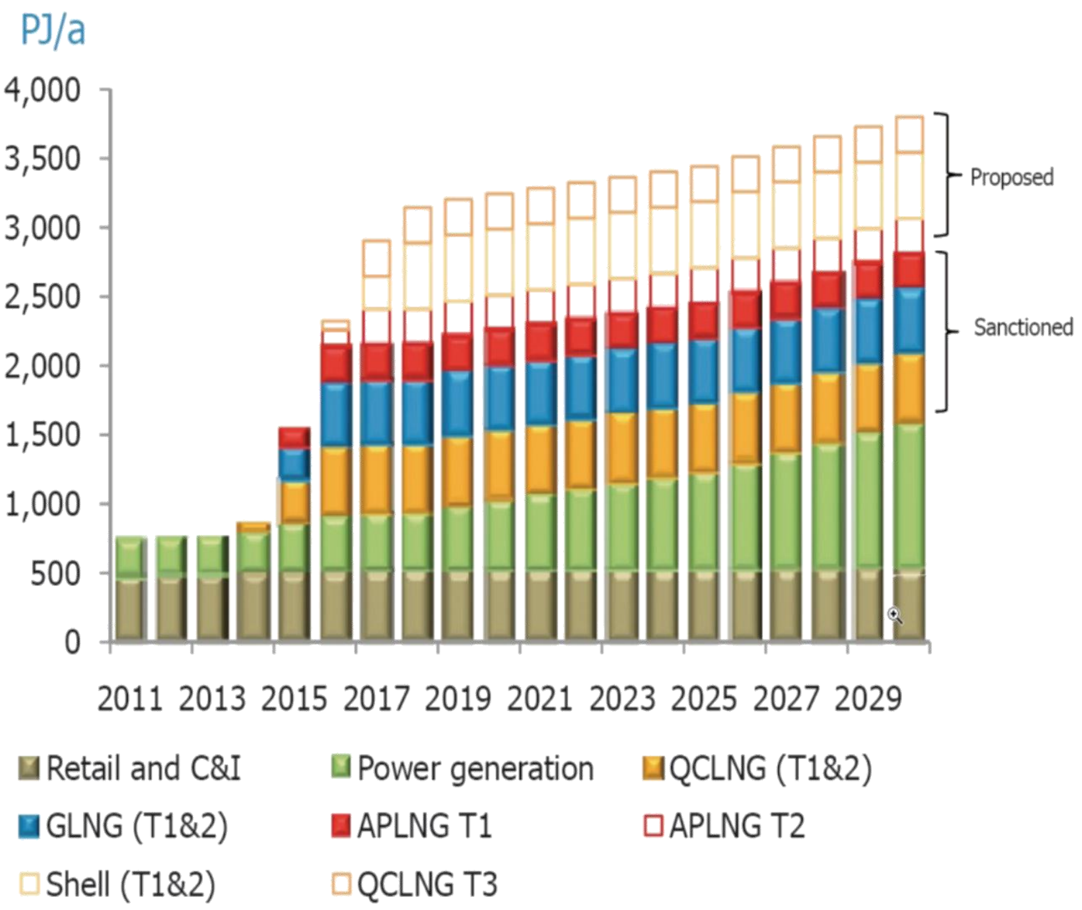


# Strong demand for eastern Australian gas

# Increasing gas demand, increasing cost of supply

## CHANGING DYNAMICS

- Eastern Australian domestic gas demand: ~700 PJ pa
- Total eastern Australian gas demand forecast to triple by 2020
- Growth driven by power generation and LNG
- Senex perfectly positioned to supply eastern Australian gas markets




Source: Santos, Eastern Australia Business Unit Presentation, 26 September 2011

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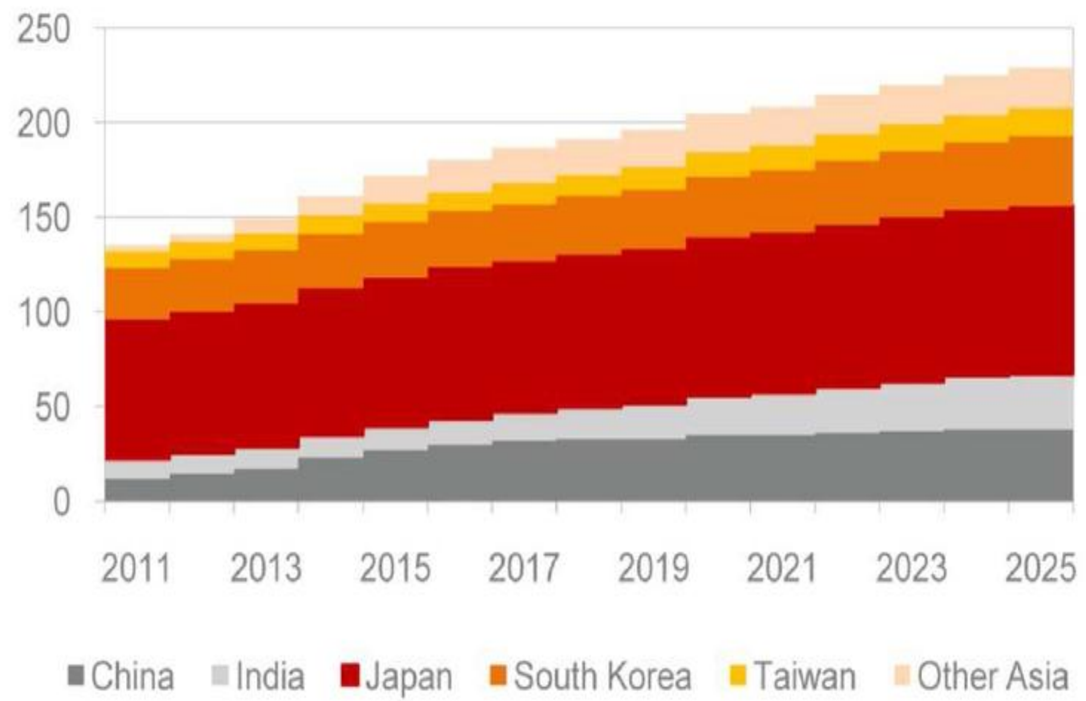
# Asian LNG demand underpins Qld LNG industry

**STRONG LNG DEMAND**

- Asian LNG demand forecast to exceed 200Mt by 2025
- Three Gladstone-based LNG projects approved to proceed
- Senex coal seam gas acreage in prime LNG feedstock region

**Reference LNG demand – Total Asia (Mt)**



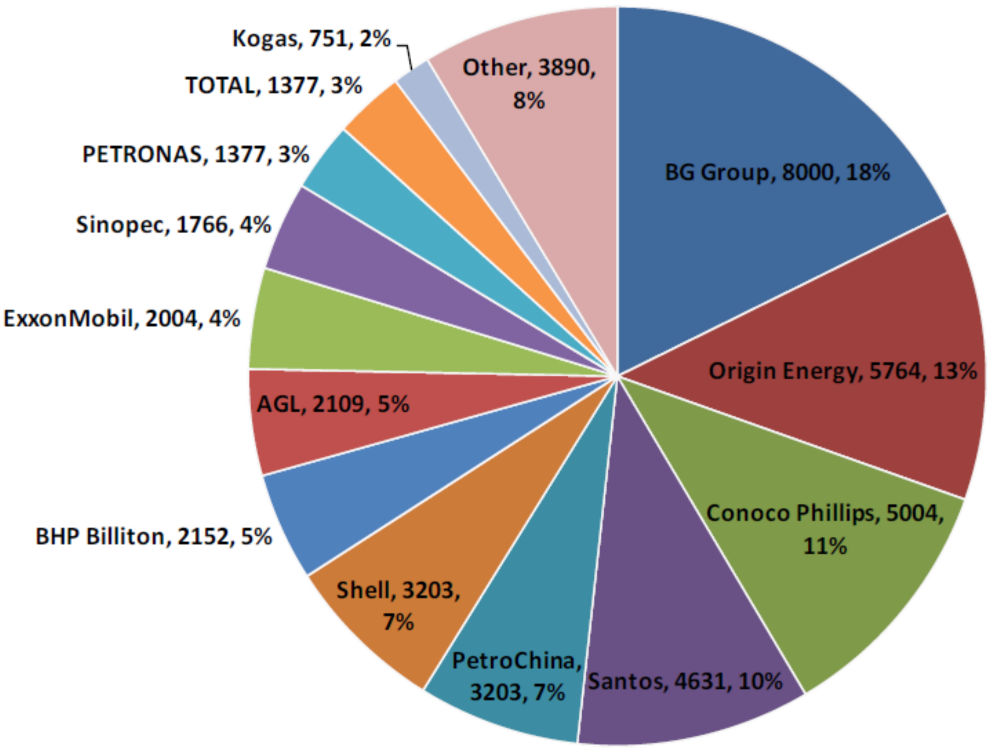

Source: Core Energy Group

# East coast gas market tightening significantly

**CHANGING MARKET DYNAMICS**

- LNG markets provide access to oil-linked gas pricing
- Gas prices trending toward $6-$9 per gigajoule
- Independent gas producers with commercial reserves positioned to supply higher priced domestic markets and LNG

**Australian east coast 2P gas reserves (PJ)**




Source: Energy Quest, August 2011

**83% of east coast 2P gas reserves are held by Queensland LNG Projects participants**

# Commanding unconventional gas position in the South Australian Cooper Basin

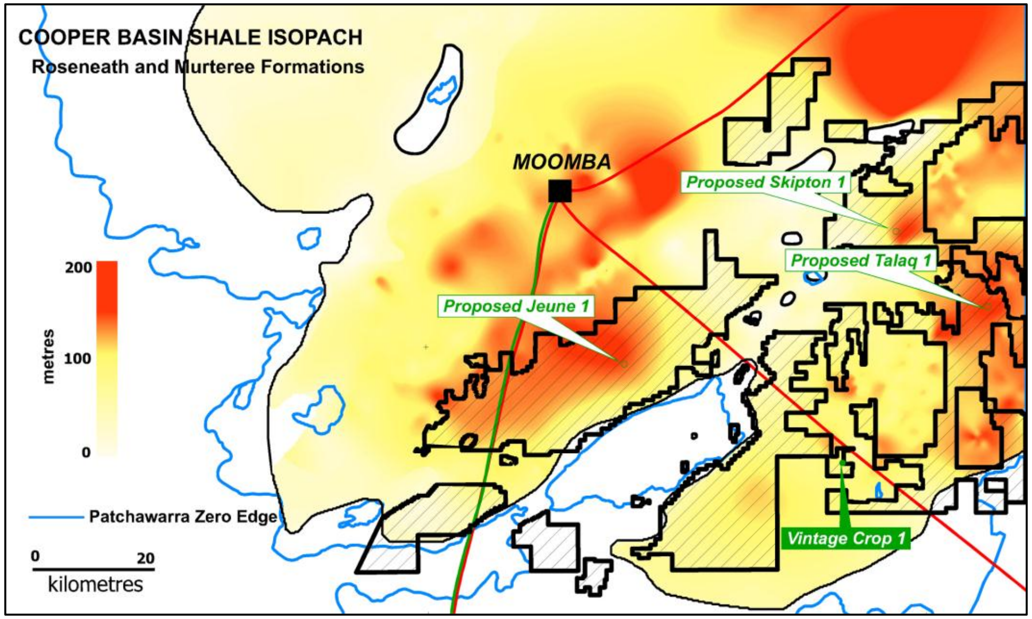
# Cooper Basin unconventional gas portfolio

- Senex has a major position in unconventional gas in the South Australian Cooper Basin:
  - **Shales**: Thick, mature Roseneath and Murteree shales
  - **Coals**: Thick, mature Toolachee coals and Patchawarra coals
  - **Tight sand / coal sequences**: Thick Toolachee and Patchawarra sand / coal sequences
- MHA Petroleum consultants estimate 86 – 122 Tcf of Gas-In-Place (Senex share) within shales and coals in Senex permits[1]
- Strategic three well farm in commitment to PELA 514 (1,972 km$^2$):
  - PELA 514 North: Conventional oil Birkhead Channel Sands (Growler oil field analogue)
  - PELA 514 South: Unconventional shale gas, tight gas sands and deep coal seam gas potential

[1] 86 – 122 Tcf does not include PELA 514 Gas-In-Place estimates, or additional Gas-In-Place within Tight Gas Sand reservoirs

# Vintage Crop-1 significantly exceeded expectations

- Successful shale gas evaluation in Vintage Crop-1 in PEL 516 (Senex 100%) with continuous gas shows
- Core samples taken over 36 metres from 88 metre section
- Preliminary results confirm:
  - Presence of liquids rich gas
  - Favourable mineralogy
  - Properties similar to successful North American shale plays
- Potential gas-in-place in PEL 516 of over 100Tcf
- Further evaluation of shale gas potential by drilling three dedicated shale gas wells in FY12, including fracture stimulation and flow testing



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# 2011/12 Unconventional gas exploration program

- Fracture stimulation injectivity test at existing Allunga Trough-1 well to gather shale mechanical properties data for larger frac program
- Three dedicated unconventional gas exploration wells to be drilled in PEL 516 (Senex 100%) in 2011/12 for budgeted cost of ~$15 million
  - Wells to be fully cored, fracture stimulated and flow tested
- Material contingent resource booking targeted for financial year end


Vintage Crop-1 core samples from the Roseneath Shale



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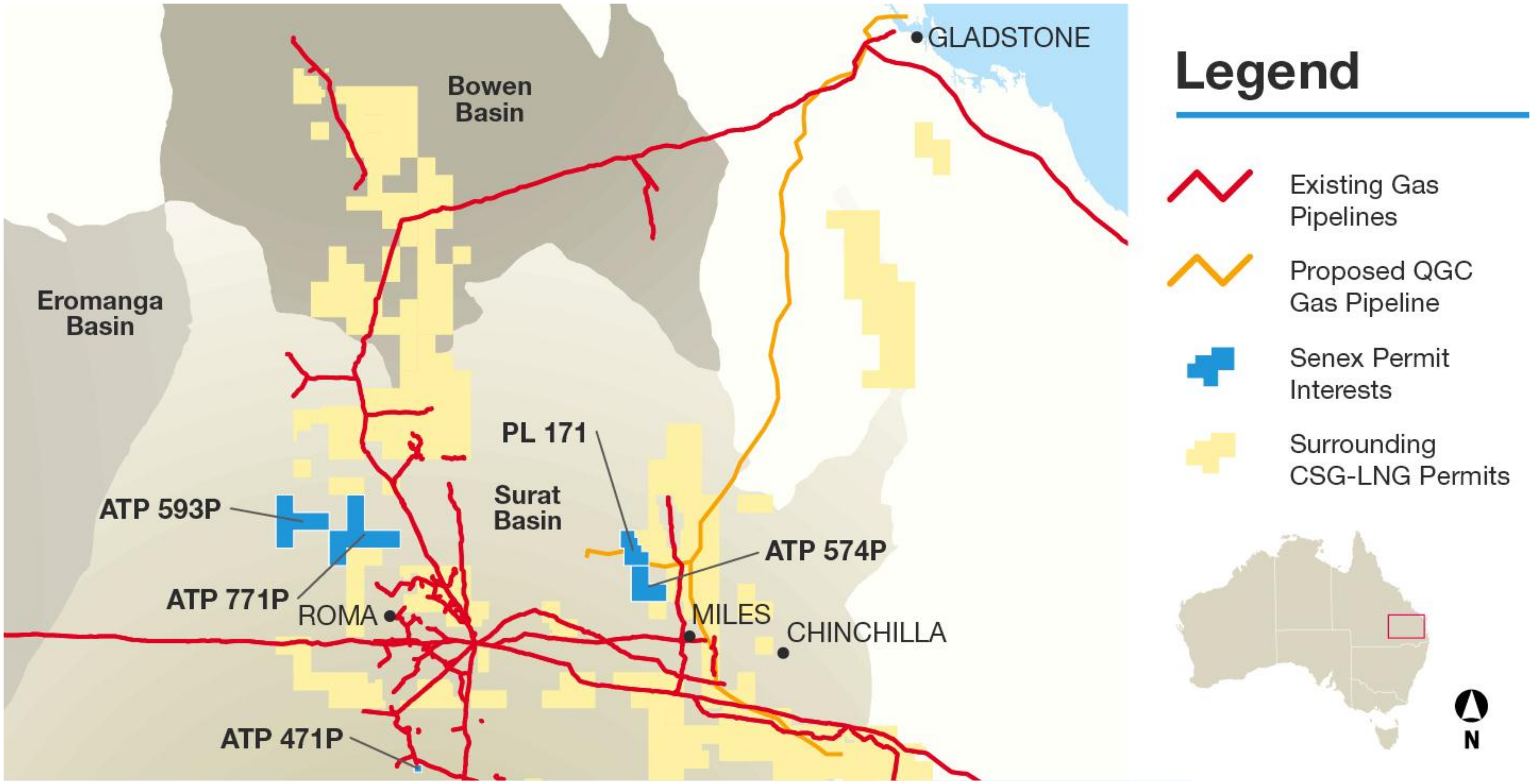
# Valuable coal seam gas business in Queensland’s Surat Basin

# Strategically located coal seam gas assets



# Aggressive FY12 exploration and appraisal program

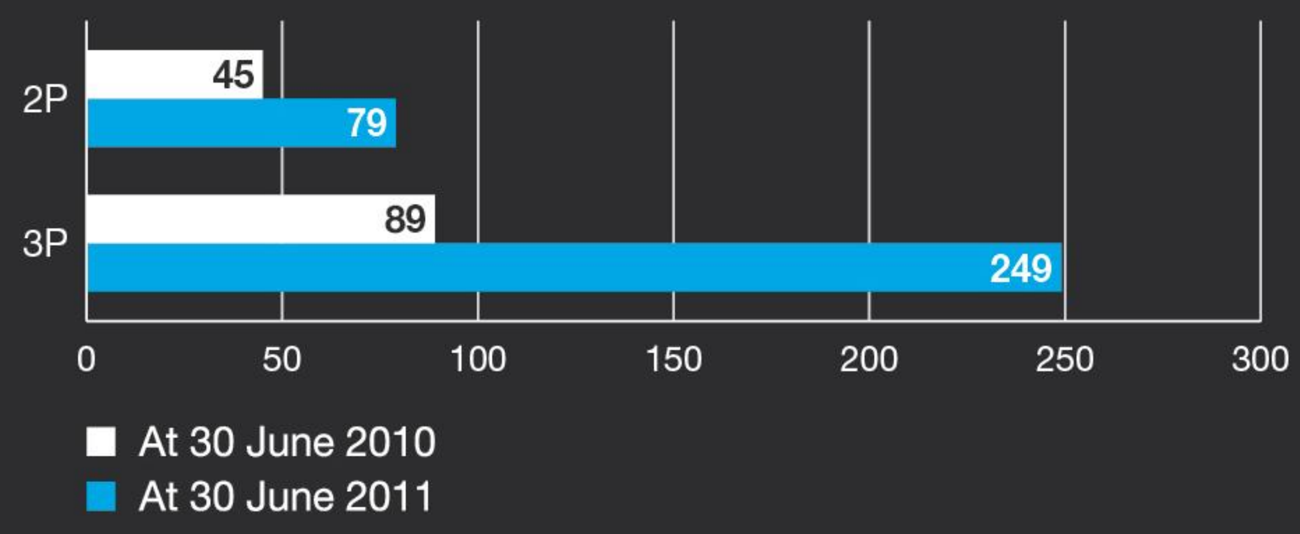
- Aggressive exploration and appraisal programs in place to test production and materially increase 2P and 3P coal seam gas reserves during 2011 and 2012
- ATP 574P (Senex 30%) and PL 171 (Senex 20%) with QGC*:
  - Operated by QGC with active technical input from Senex
  - Appraisal program agreed focusing on significant 2P reserve additions and gas flow testing in 2012
- ATP 593P and ATP 771P (Senex 45%) with Bow Energy:
  - Operated by Senex
  - Plans agreed to pursue growth in certified reserves, with two core wells to be drilled in Q3 2011

*: A BG Group business

# Significant reserves growth delivered in 2011

- Demonstrated reserves growth in coal seam gas permits
- Material 2P reserves additions expected from 2011/12 work program, including flow testing of appraisal wells
- Location of permits not adversely affected by landholder issues

Senex net gas reserves (petajoules)



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