



To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	9 June 2016
From	Helen Hardy	Pages	114
Subject	Investor Day and Site Tour Presentation		

Please find attached a release on the above subject.

Regards

Helen Hardy
Company Secretary

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ORIGIN ENERGY

Investor Day and Site Tour

Grant King, Managing Director

Frank Calabria, CEO Energy Markets

David Baldwin, CEO Integrated Gas

9-10 June 2016

Forward looking statements

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Corporate Overview

- CEO address

Energy Markets

- Business Overview
- Integrated Wholesale Portfolio Strategy
- Customer Strategy
- New Energy Solutions

Integrated Gas

- Business Overview
- Markets
- Value and Resilience
- Strategy in Action

CEO Address

Grant King, Managing Director

Origin's strategy of *connecting resources to markets* is pursued through a clear focus on its 2 businesses and 3 priorities designed to drive continued improvement in Origin's performance



2 BUSINESSES



A leader in energy markets



A regionally significant position in natural gas and LNG production

3 PRIORITIES



Growing contribution from Energy Markets



Growing production and reducing cost in Integrated Gas

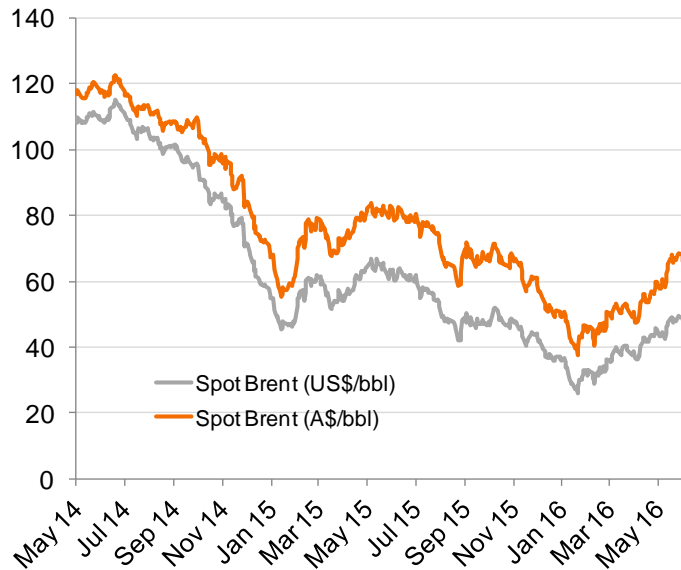


Maintaining adequate funding and an appropriate capital structure

Two external influences have impacted Origin's priorities and prospects – Oil Price and COP21



Fall in Oil Price

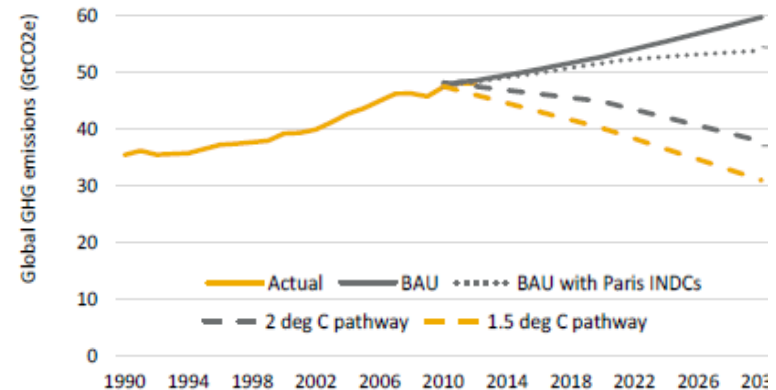


Origin's response

- Debt reduction
- Cash preservation
- Risk reduction

Increasing global commitment to reduction in carbon emissions

Actual and Projected Global Greenhouse Gas Emissions¹



Origin's position

- Long resource position exposed to global demand for natural gas
- Short generation and LREC position, flexible fuel and generation portfolio, and increasing investment in renewables

In the near term Origin is focused on reducing risk

In response to lower oil prices Origin is delivering on commitments to reduce debt



Achieved to date	Ongoing initiatives	Targets
<ul style="list-style-type: none"> ✓ Sale of Contact, reducing debt by \$3 billion ✓ \$2.5 billion Entitlement Offer ✓ A\$396¹ million of \$800+ million asset sales program achieved ✓ Reduced dividend ✓ Reduced capex and opex ✓ Exit from non-core activities (international exploration, geothermal, large scale IT) ✓ Purchased oil put options for FY2017 to reduce risks at oil prices below US\$40/bbl (or A\$55/bbl) 	<ul style="list-style-type: none"> ✓ Remaining asset sales ✓ Reduce capex ✓ Reduce opex ✓ Reduce APLNG break-even by US\$2-3/boe ✓ Potential to suspend dividend 	<ul style="list-style-type: none"> • Net Debt below \$9 billion in FY2017 <ul style="list-style-type: none"> • Net Debt includes the effect of FX hedging transactions on foreign currency debt • S&P's stable outlooks reflects S&P's expectation that Debt/EBITDA will reduce to about 4x by FY2017 and mid-3x thereafter

Origin has maintained an investment grade credit rating with both S&P and Moody's

The asset sale program is on track to deliver a A\$800+ million reduction in debt without materially impacting underlying business operations



- **\$355 million** proceeds for Mortlake infrastructure at an incremental cost of approximately \$26 million per annum

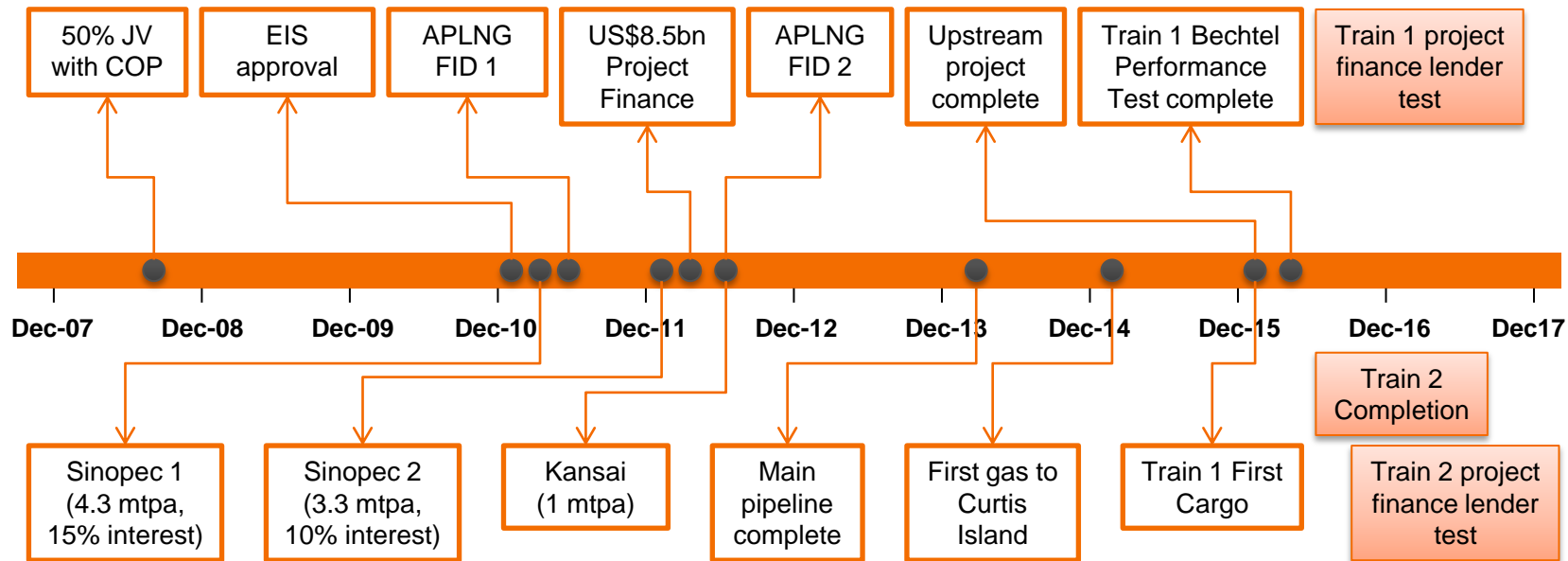
A\$m	Proceeds	Incremental costs (FY17)	FY2017 EBITDA multiple
Mortlake Pipeline	245	17	14.4x
Mortlake Terminal Station	110	9	12.9x
Total	355	26	

- **US\$30 million** proceeds for interest in OTP, an Indonesian geothermal development project
- **Other infrastructure and wind assets** – progressing sale of Cullerin Wind Farm, Stockyard Hill Wind Farm development site and Darling Downs Pipeline
- **Upstream assets**
 - Perth Basin: Formal sale process ongoing
 - Cooper Basin: Review in FY2017

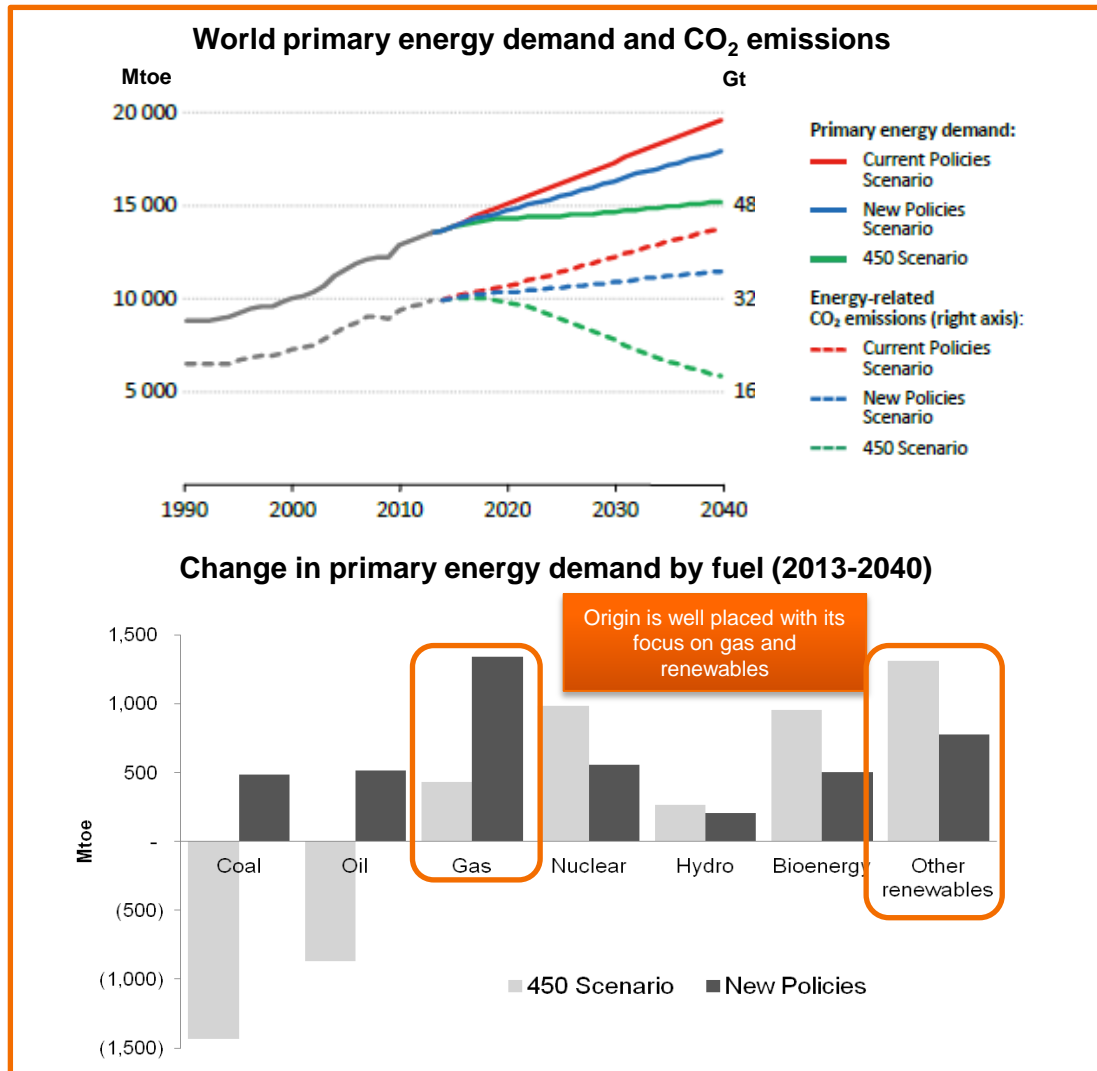


Mortlake terminal station

The APLNG project is increasingly de-risked and close to completion after an eight-year journey



The Paris Agreement has been ratified, committing Australia to a carbon emissions reduction of 26-28% by 2030. Origin is well positioned to respond through its gas and renewable portfolio



Source: Based on IEA data from *World Energy Outlook 2015* © OECD/IEA 2015, www.iea.org/statistics

Energy in a carbon constrained world

- The **Paris Agreement** placed the world on a path of decarbonisation that will require a significant shift in energy mix towards **gas and renewables**
- Origin is strategically positioned
 - Long gas** in a market of growing global demand for lower emissions, flexible firming fuels
 - Short generation / LREC**, uniquely placed to accelerate development of renewables in Australia
 - Flexible fuel and generation portfolio** able to be deployed to support renewable penetration
- Origin supports Australia's commitment to reduce carbon emissions by at least **26% by 2030** from 2005 levels and was the first energy company to sign on to all seven of the We Mean Business commitments on climate change action

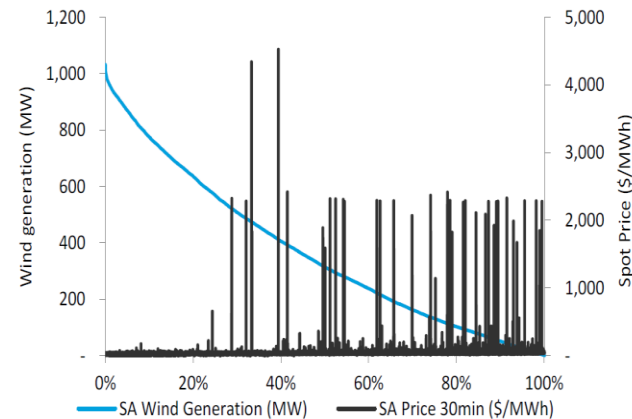
In SA wind and solar are reducing dispatch and margins for existing coal plants, increasing reliance on gas generation for reliability

Figure 3 Solar and wind generation capacity per capita



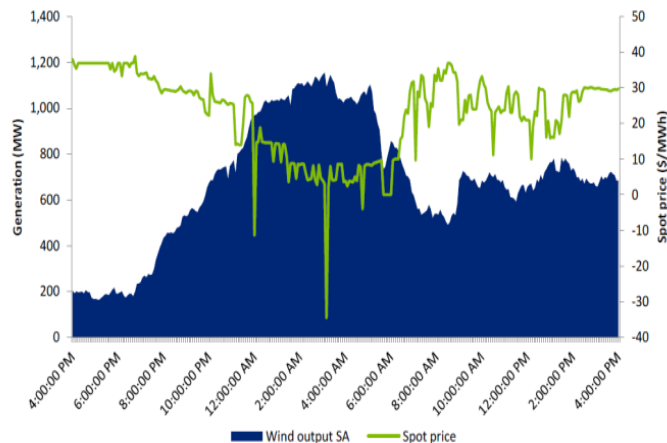
Source: ESAA, 2014

Figure 12 Wind increasing price spikes



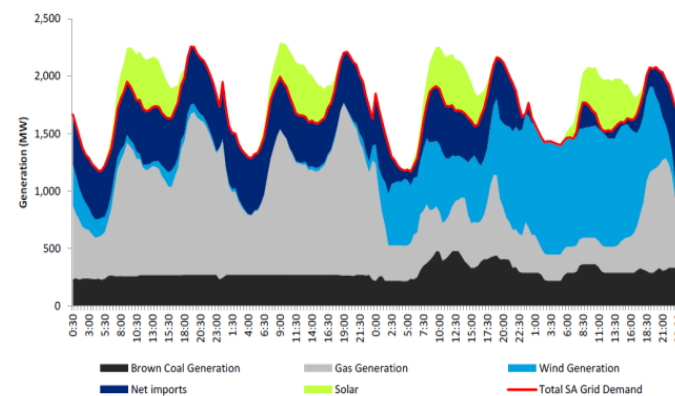
Source: Deloitte Access Economics Analysis of AEMO market data (FY15)

Figure 7 Wind lowering market price



Source: Deloitte Access Economics, November 2015

Figure 6 Fuel mix example



Source: Deloitte Access Economics analysis of AEMO market data
Note: Wind and price outcomes from 27 to 30 July 2015

Increased LNG supply. Will LNG demand surprise to the upside?

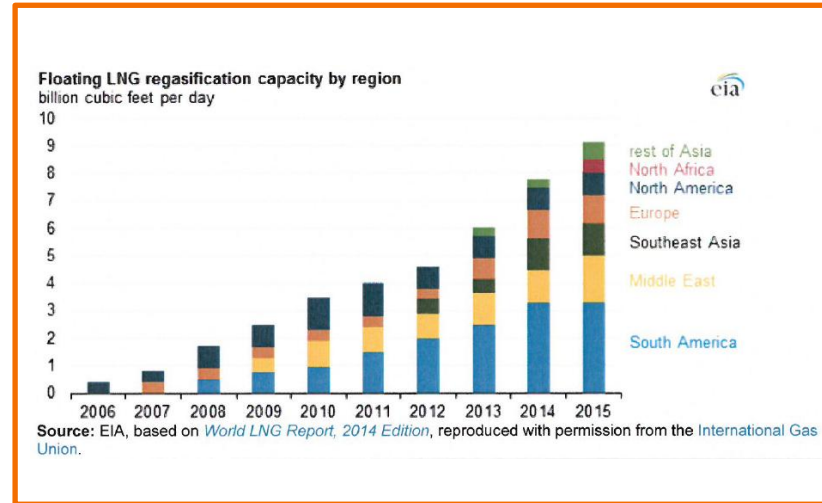
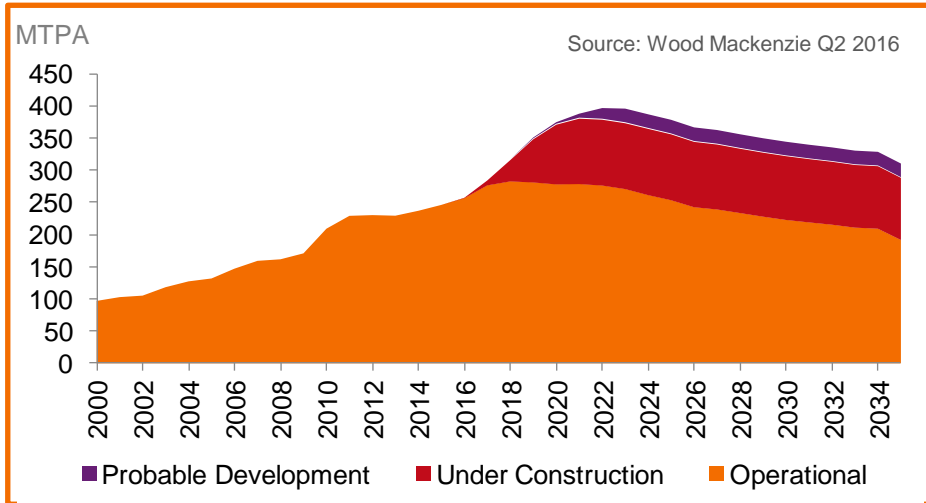
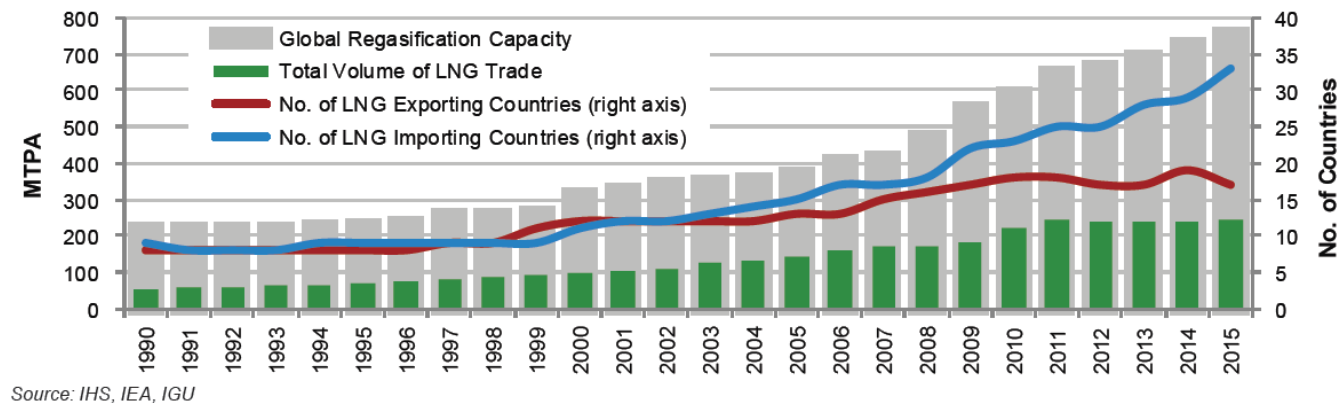


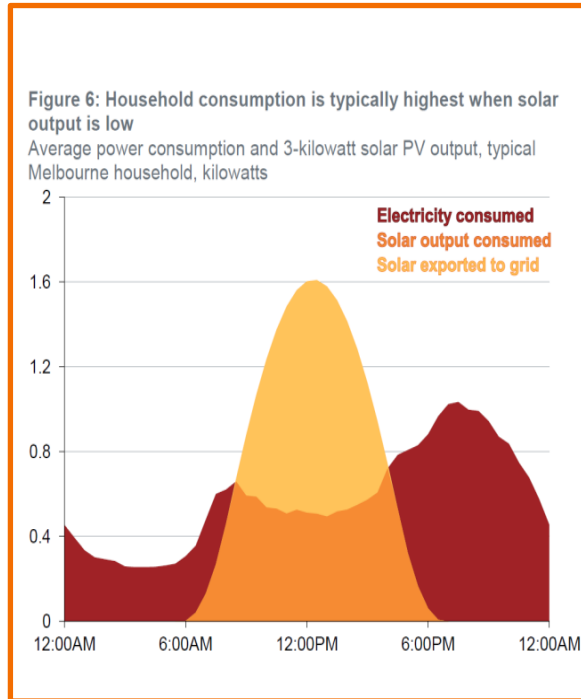
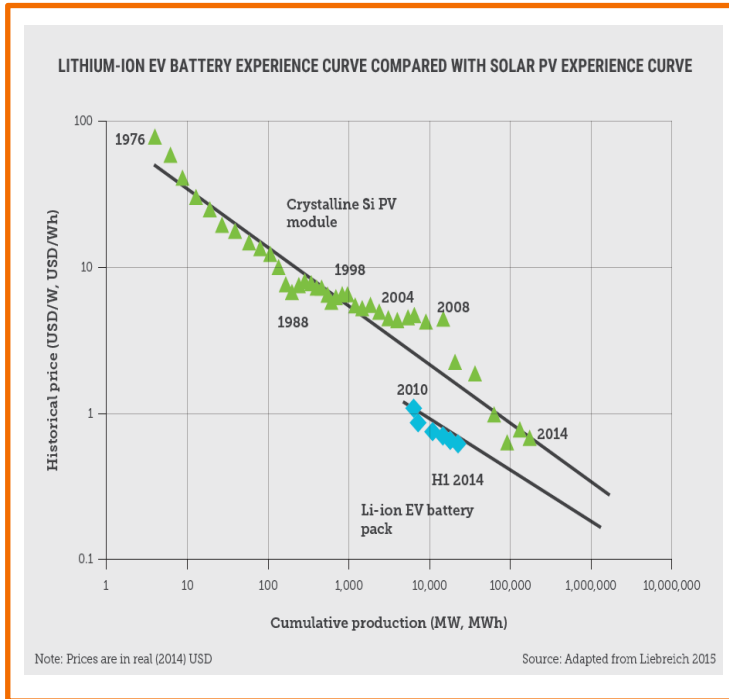
Figure 3.1 LNG Trade Volumes, 1990–2015

Source: IGU 2016 World LNG Report, April 2016

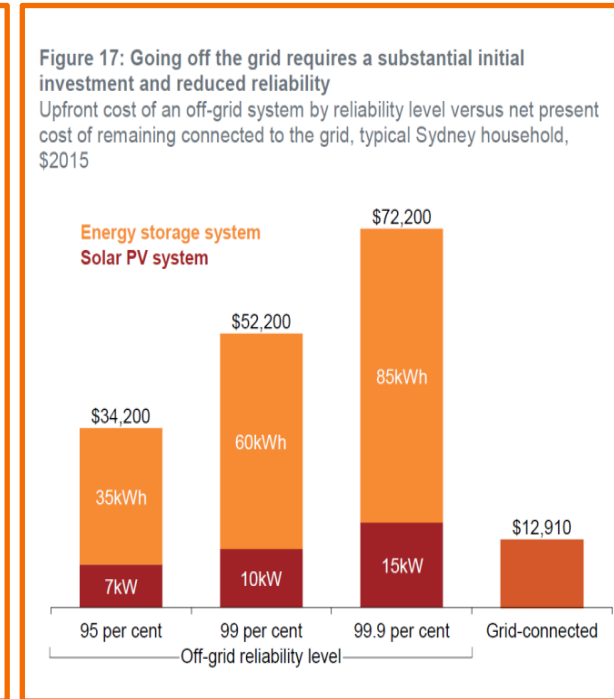


Floating regasification units are “democratising” gas supply, enabling more countries to use gas to firm intermittent renewables

Will batteries displace gas as a balancing fuel? While battery costs will continue to decline, they are not competitive with grid delivered energy



Source: Grattan Institute, May 2015



Source: Grattan Institute, May 2015



“storing energy turns out to be surprisingly hard and expensive...and it would triple your electricity bill.”

Bill Gates, February 2016

Near term milestones



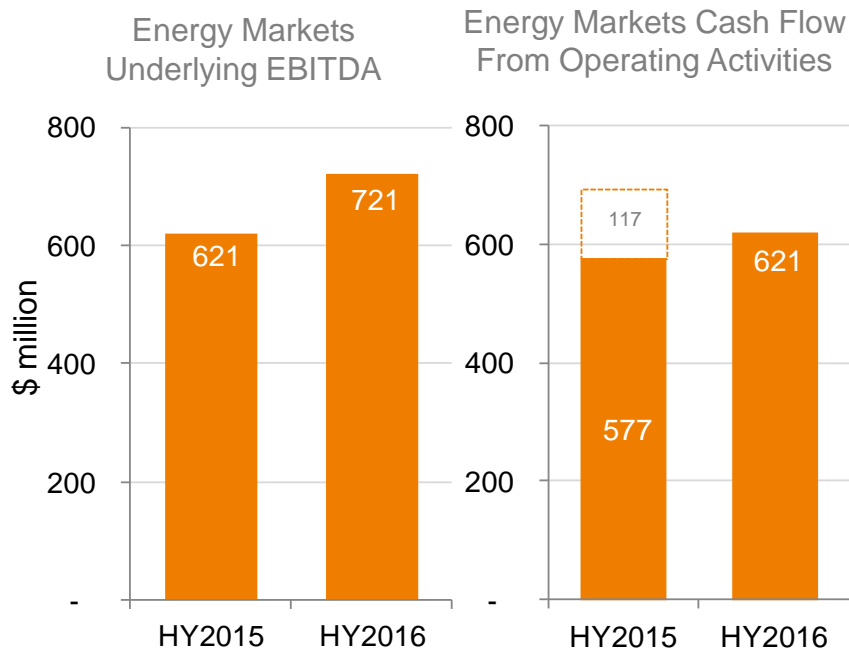
	Timing
Train 1 revenue recognition	1 March 2016
Bechtel Performance Test	Completed 30 April 2016
Asset sales progress	Through FY2016 and FY2017
Train 1 project finance lender tests met and sponsor guarantees partially fall away	H1 FY2017
Train 2 completion	H1 FY2017
Train 2 revenue recognition	Q3 FY2017
Train 2 project finance lender tests met and remaining sponsor guarantees fall away	CY2017
Net debt below \$9 billion	End FY2017

- FY16 underlying earnings will include four months of Train 1 revenue and a disproportionate share of costs, including:
 - APLNG opex, interest and depreciation related to Train 1 assets (Upstream and Downstream)
 - APLNG opex, interest and depreciation related to Pipeline and Shared Facilities
 - Origin interest expense associated with APLNG funding for Train 1 assets, Pipeline and Shared Facilities
- The disproportionate share of costs versus revenue will continue in FY17 until Train 2 revenue recognition commences

Origin's two businesses are executing on strategic priorities



Continued strong performance in Energy Markets



- ✓ Increased Natural Gas contribution
- ✓ Stabilised Electricity contribution
- ✓ Reduced cost to serve
- ✓ Improved customer experience and service

APLNG project increasingly de-risked, strong operational performance

Upstream 100% complete, Downstream 97% complete



- ✓ Upstream operated production exceeding 1,000TJ/d
- ✓ Train 1 exceeding nameplate capacity
- ✓ \$1bn of annual cost reductions implemented 6 months early
- ✓ Train 1 Bechtel Performance Test completed 30 April 2016



ORIGIN ENERGY

IMPROVING RETURNS IN ENERGY MARKETS

Frank Calabria CEO Energy Markets

Investor Day 9 June 2016



origin

The energy market continues to evolve as we expect



Electricity market shifting to renewables

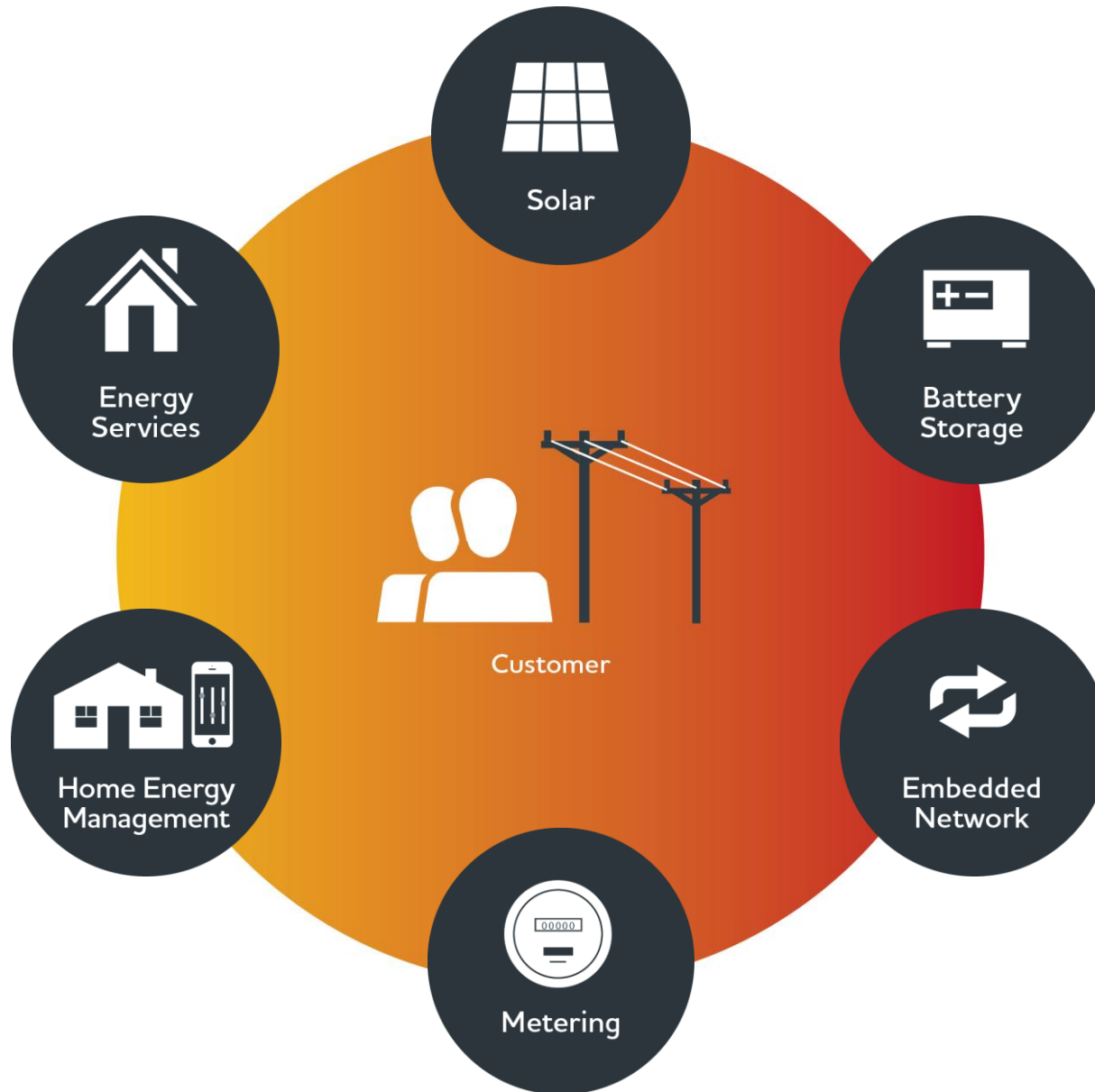


Gas market becoming more volatile



Consumers becoming more empowered

We are confident in our vision to become the most trusted energy solutions provider



Our strategies to move closer to the customer and improve returns



Integrated wholesale portfolio strategy



- Increasing investment in renewables
- Competitively priced fuel position
- Access to transport
- Generation flexibility

Customer strategy



- Leading customer experience & service
- Low cost business model
- Increase customer lifetime value
- Innovative & differentiated products & services

New energy solutions strategy



- Solar (business & residential)
- Centralised Energy Services
- Digital metering
- Home Energy Services
- Home energy management

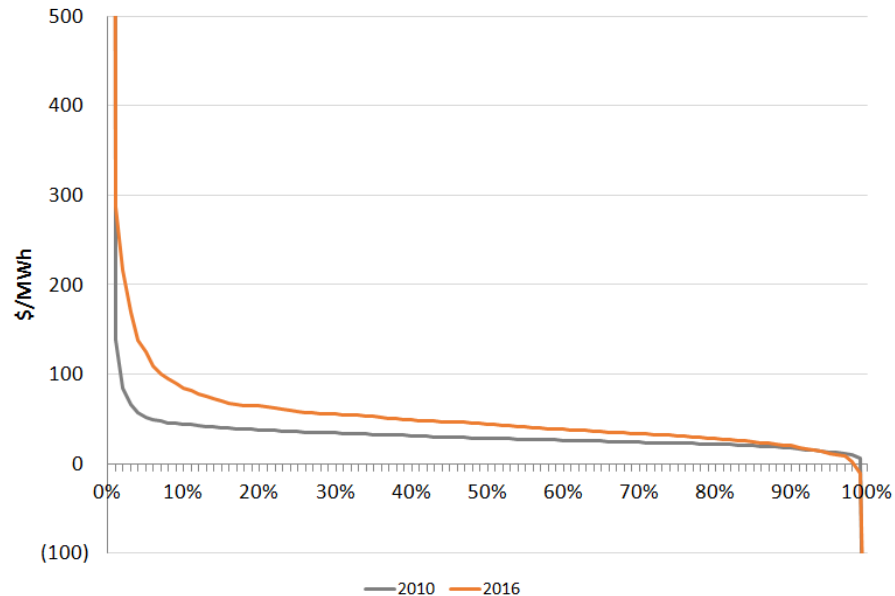
Integrated business model benefiting from changing market dynamics



Increased renewables will result in higher wholesale electricity prices as coal exits...

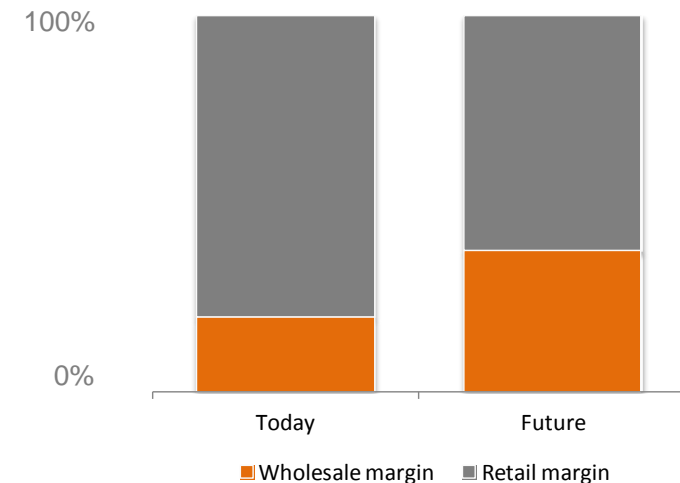
...improving the competitiveness of our integrated business over time

SA Price Duration Curve 2010 and 2016



Source: AEMO

Indicative split between wholesale & retail electricity margin (%)



- ✓ Energy price and volatility increasing with renewables
- ✓ Peaking portfolio managing wholesale market volatility
- ✓ Fuel flexibility

Delivering on our commitments in FY2016



✓ Expanding Natural Gas margins

- Significant growth in gas margins

✓ Maintaining Electricity margins

- Maintaining electricity gross profit following structural decline
- Increasingly competitive cost of electricity as we invest in utility scale renewables; executed Moree and Clare PPA's

✓ Building customer loyalty and trust

- Market leading digital performance; simplification of customer experience
- Delivered differentiated product proposition (*Predictable Plan*)

✓ Growing new energy solutions

- Increased our share of the business solar market; launched battery storage solution
- Growing our Centralised Energy Services business
- Further developed our metering capability

✓ Reducing operating costs and capital expenditure; improving returns

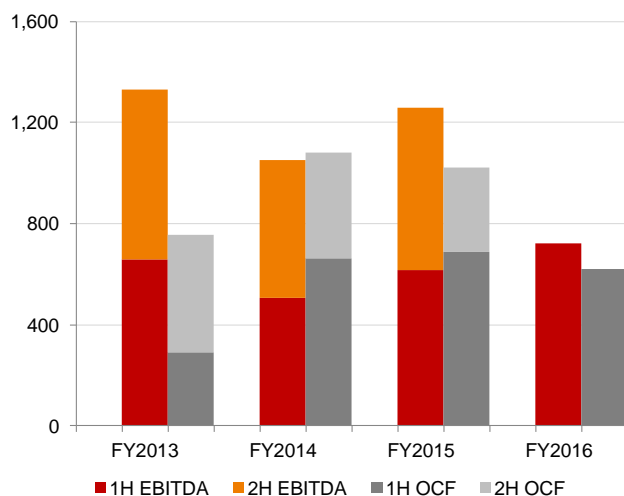
- Uplift in earnings, improved working capital & progress on asset sales improving returns
- On target for \$100m reduction in Natural Gas & Electricity cash cost to serve and Generation opex from FY2014 levels
- Capital expenditure reduced to ~\$240 million in FY2016 (\$55 million lower than FY2015)

Increased operating cash flow and reduced capital expenditure are improving returns



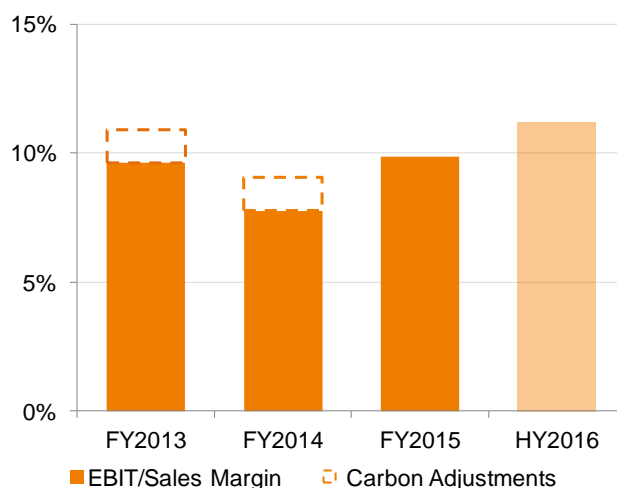
Predictable and improving earnings and cash flow

EBITDA & operating cash flow (\$m)



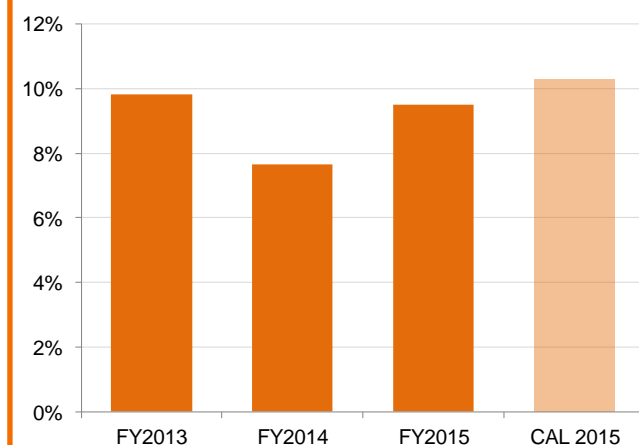
EBIT to Sales margins improving

Energy Markets margins (%)



Clear focus on return on capital

Energy Markets ROCE (%)



Return on capital employed = EBIT/Capital Employed

Strong growth opportunities over the next two years



✓ **Stabilising Natural Gas margins**

- Maintaining already strong gas margins
- Upside exposure to higher oil prices longer term
- Gas market volatility may provide further opportunities

✓ **Improving Electricity margins**

- Increasing wholesale returns; investment in renewables at low cost
- Improving customer lifetime value

✓ **Growing new energy solutions**

- Grow our position in the business solar market
- Grow our Centralised Energy Services business through embedded networks
- Increasing roll out of digital meters & associated propositions
- Launch Home Energy Services business

✓ **Reducing operating costs and capital expenditure; improving cash flow & returns**

- Targeting further reductions in Natural Gas & Electricity cash cost to serve and Generation opex
- Ongoing capital expenditure expected to be similar to FY2016 levels
- Improving working capital through debtor management strategies (monthly billing; reduced time to pay)
- Asset divestment program to further improve returns

① Integrated wholesale portfolio strategy

② Customer strategy

③ New energy solutions strategy



origin

INTEGRATED WHOLESALE PORTFOLIO STRATEGY

Tony Lucas

General Manager Energy Risk Management

Greg Jarvis

General Manager Wholesale & Trading and Business Sales

1

Outlook

- Gas market volatility
- Supply shifting to renewables
- Renewable certificate and wholesale energy prices increasing
- Battery economics improving

2

Integrated Portfolio Strategy

- Competitively priced fuel position
- Access to transport
- Generation flexibility
- Portfolio pivoting to renewables

3

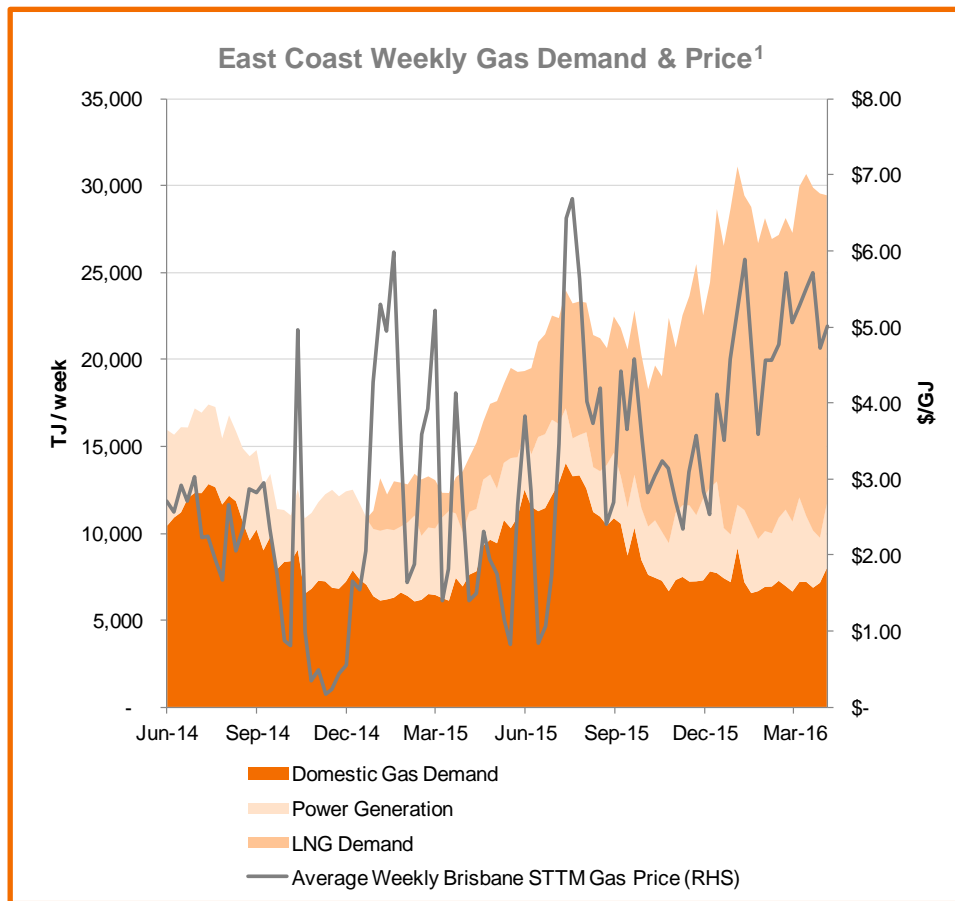
Execution

- Increased gas margins
- Managing cost of electricity in a rising market
- Renewable strategy creating value; Clare & Moree PPA's executed

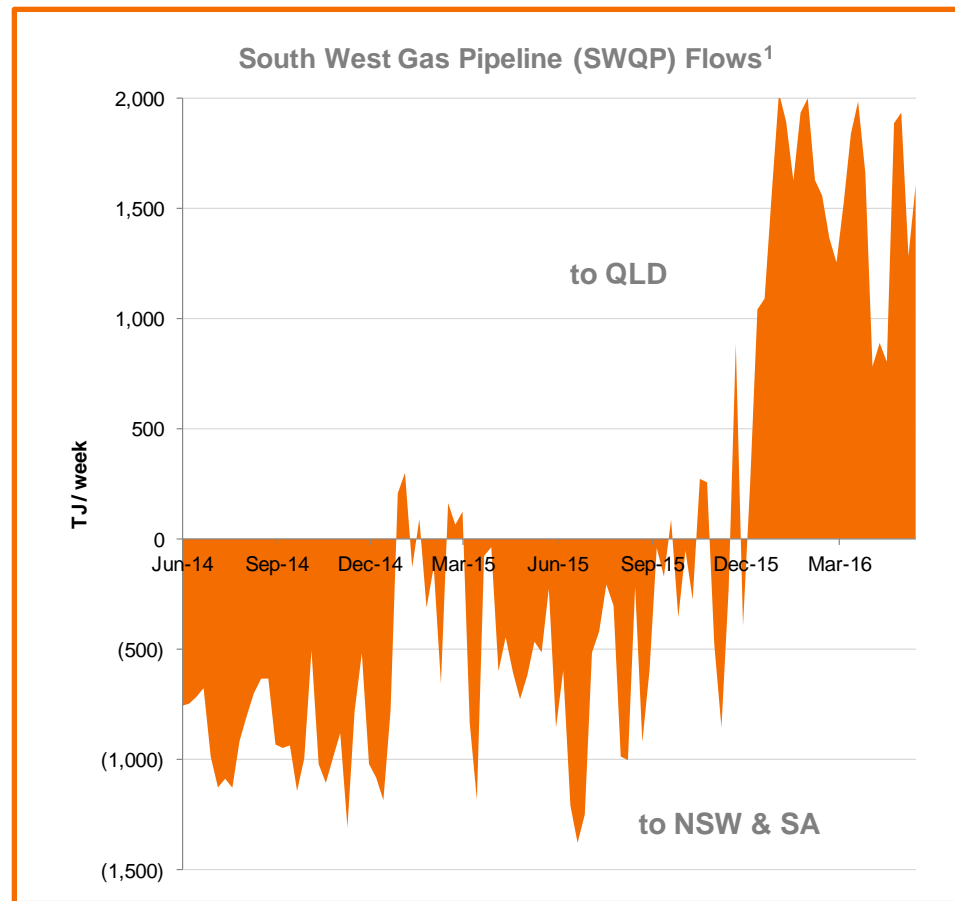
LNG demand and linkage to oil prices expected to increase volatility in the gas market



Gas demand & price volatility increasing



Gas flows changing



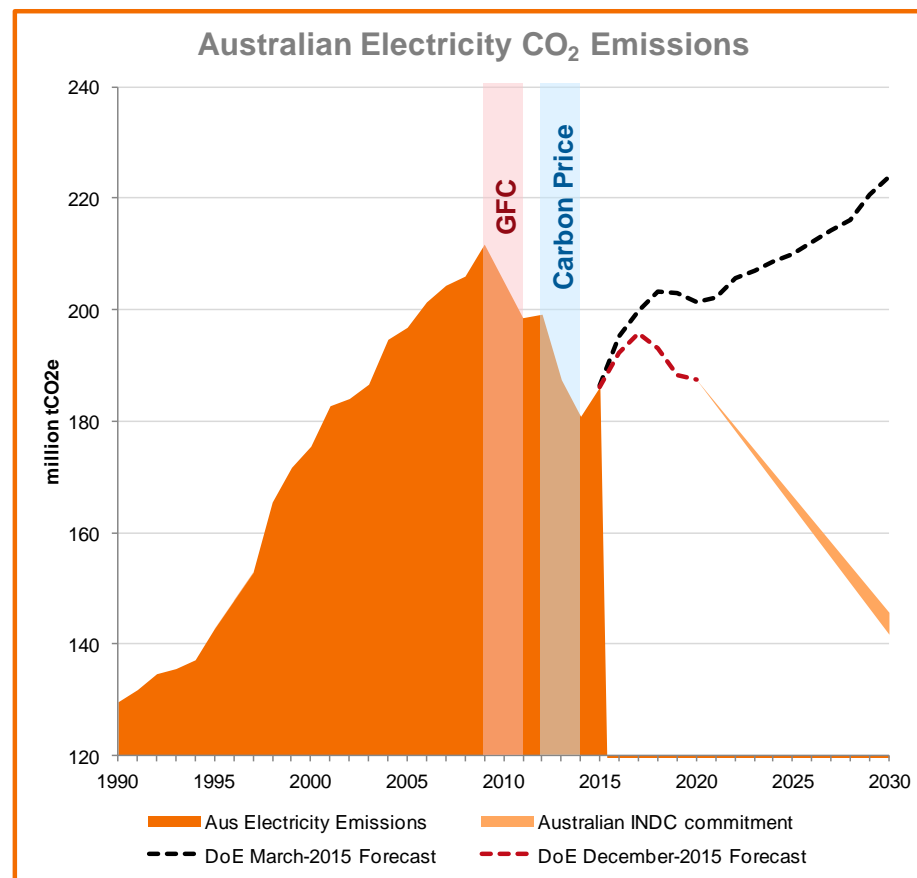
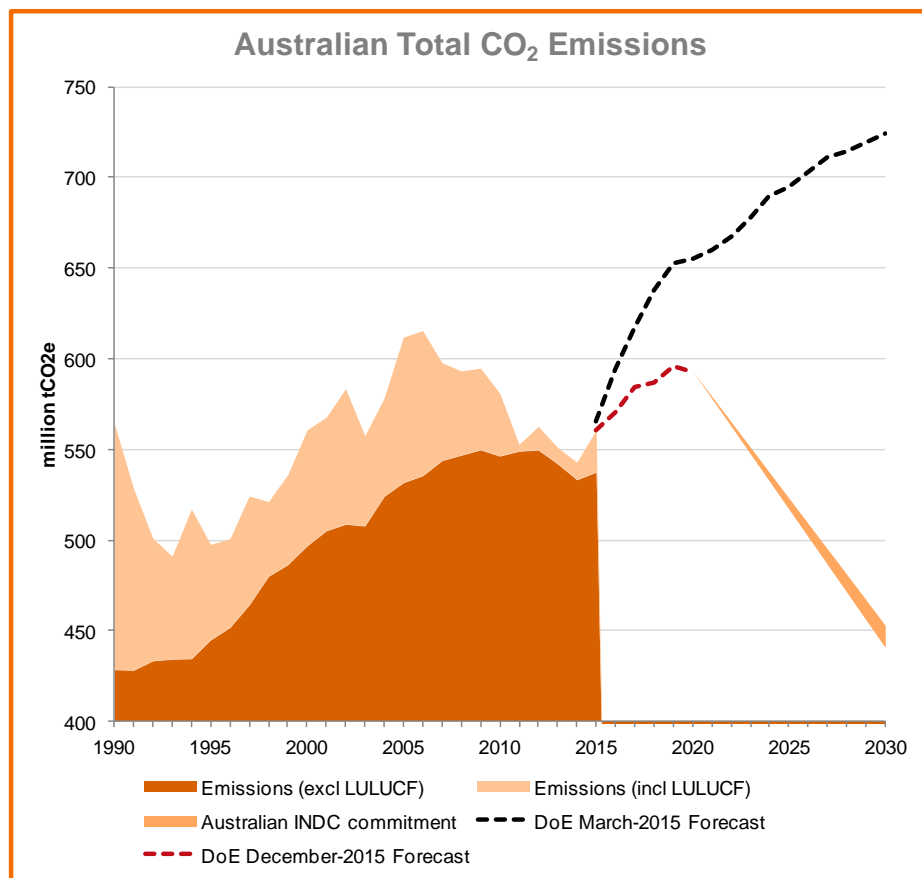
(1) AEMO data

Origin recognises that climate change is a global challenge and unequivocally supports measures to reduce carbon emissions



In Paris, Australia has committed to a 26% to 28% reduction in carbon emissions by 2030

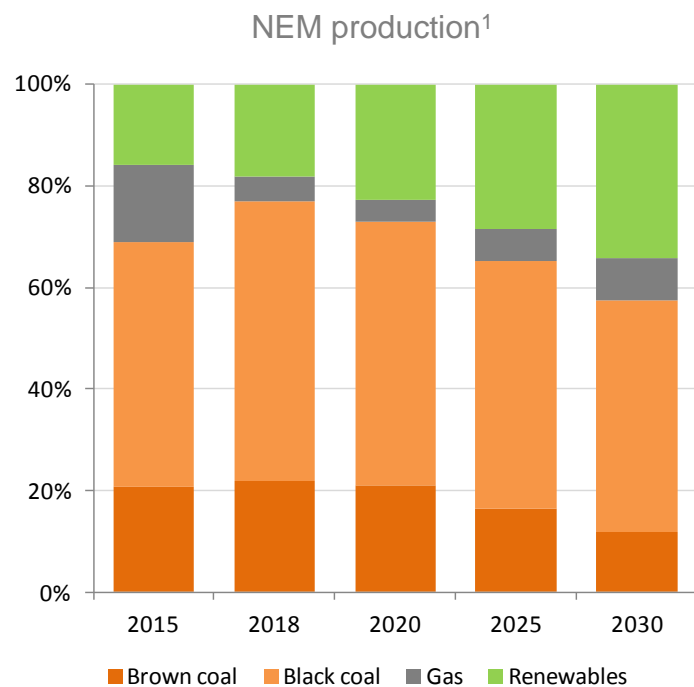
The electricity sector accounts for 33% of Australia's carbon emissions



Source: Department of Environment (DoE) and Origin Analysis

Renewable supply will be supported by flexible generation

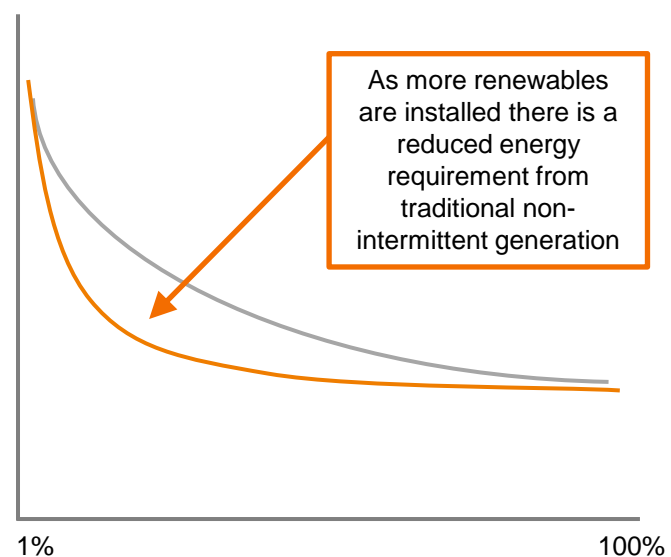
Supply shifting to renewables. Gas generation reducing however is more valuable



2015 gas-fired generation benefited from access to additional ramp gas available in market

Impact of renewables on the load duration curve

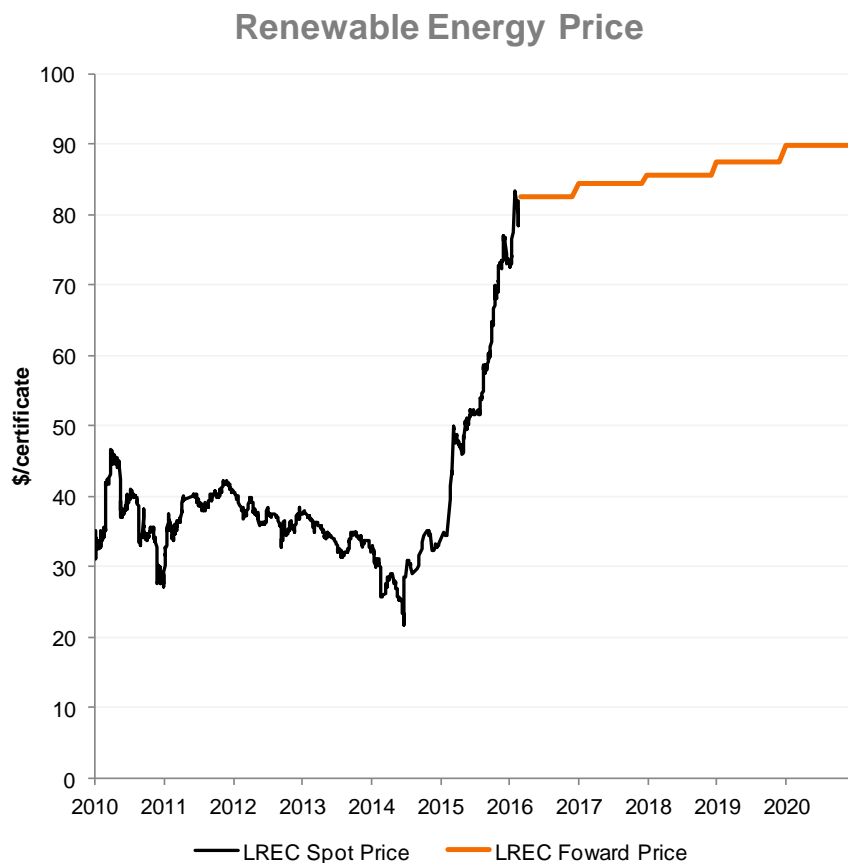
Change in NEM Load Duration Curve



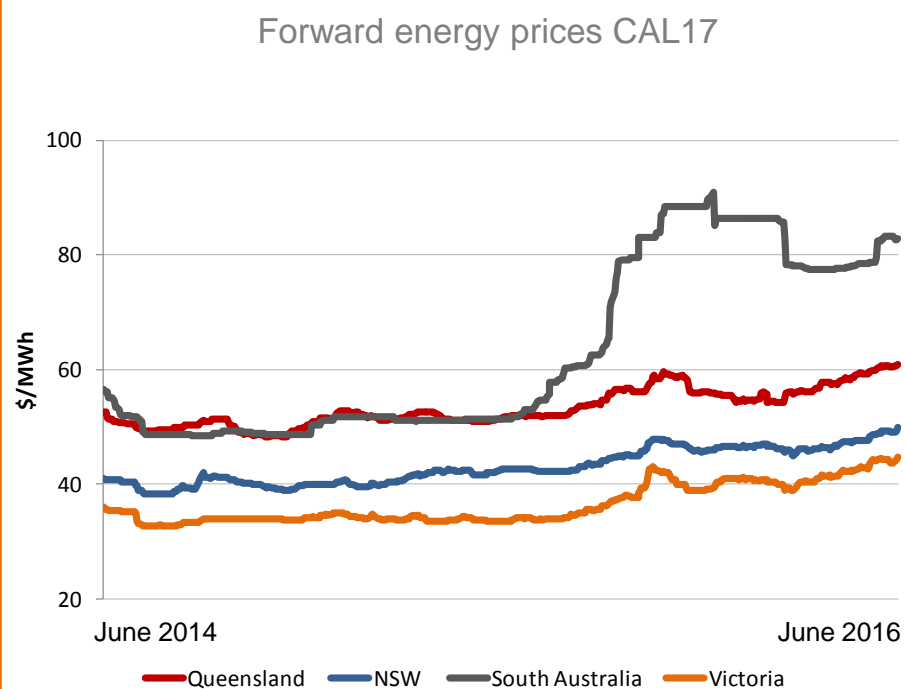
(1) Origin modelling

These trends will result in continued upward pressure in prices

Renewable energy prices increasing



Energy prices increasing in all markets, in particular South Australia



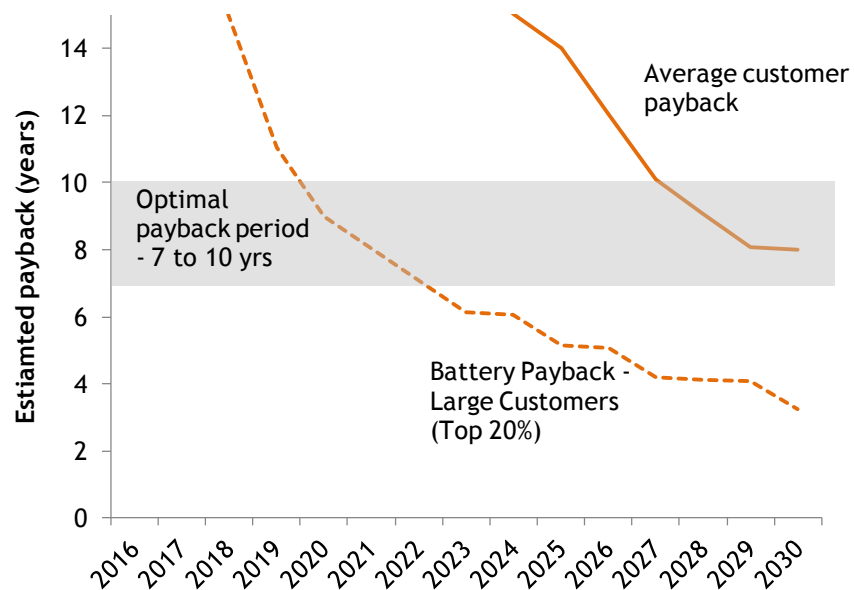
Source: AEMO; ASX

When economic, batteries will move energy within the day. OCGT will still be required to firm intermittent supply

Battery economics improving, but still a while before there is mass market appeal

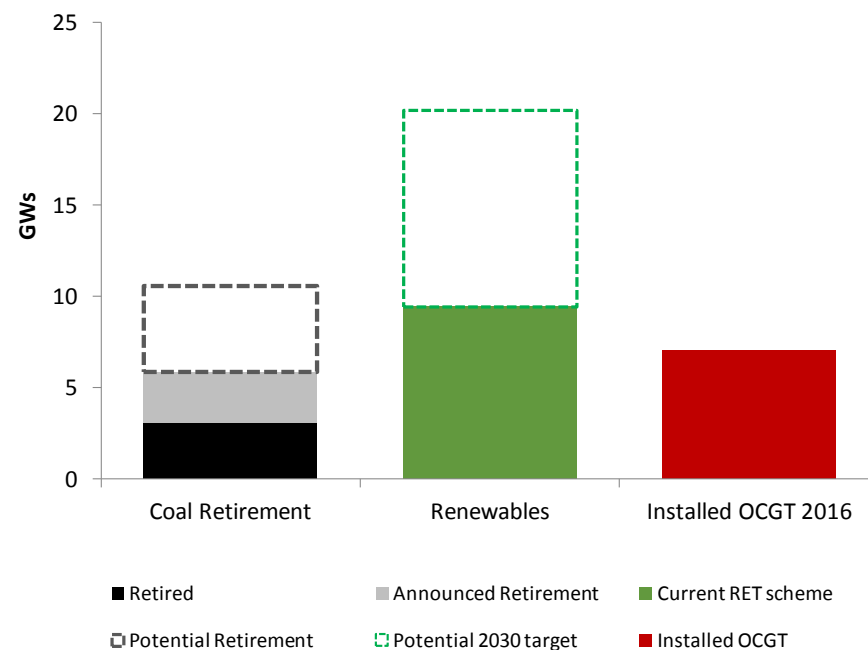
No new coal likely to be built

Customer battery payback



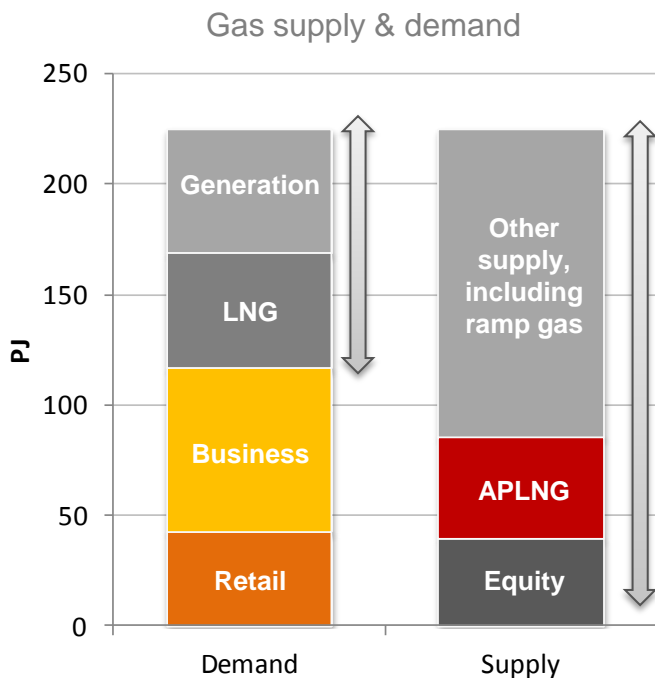
Source: Origin modeling

Renewable Build and Coal Retirement 2012 to 2030

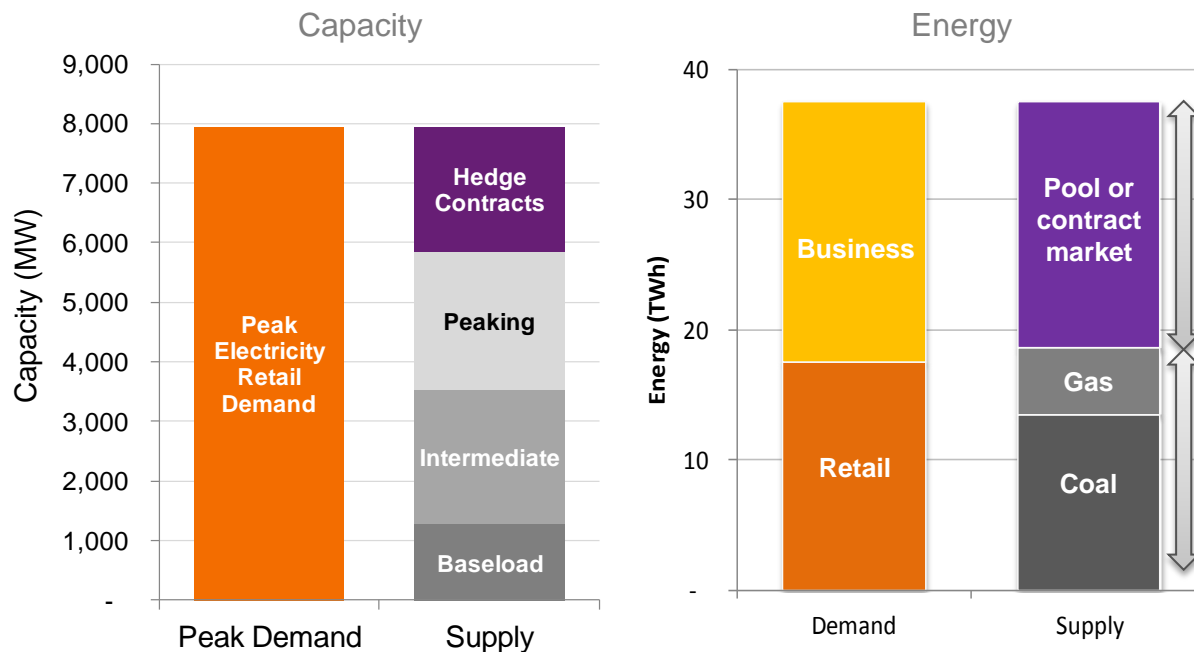


Balance between markets and fuels to deliver a competitive cost of energy

Flexibility through gas supply and transport



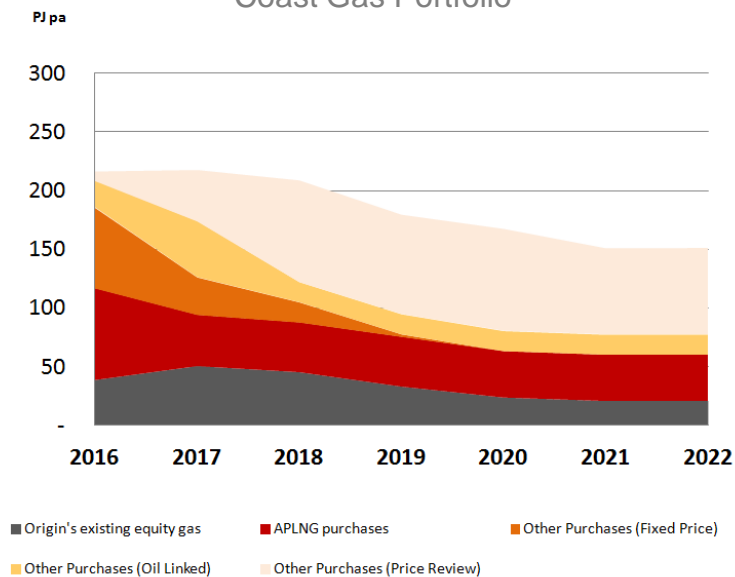
Flexibility through generation fuel and capacity, supported by competitively priced renewables



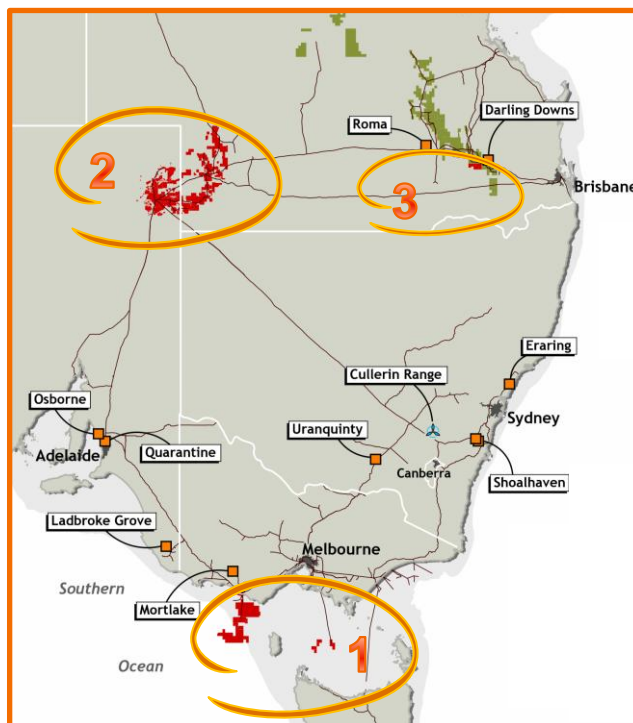
Access to reserves at competitive prices remains a competitive advantage



Sources of Energy Markets East Coast Gas Portfolio¹



1) Includes ramp gas

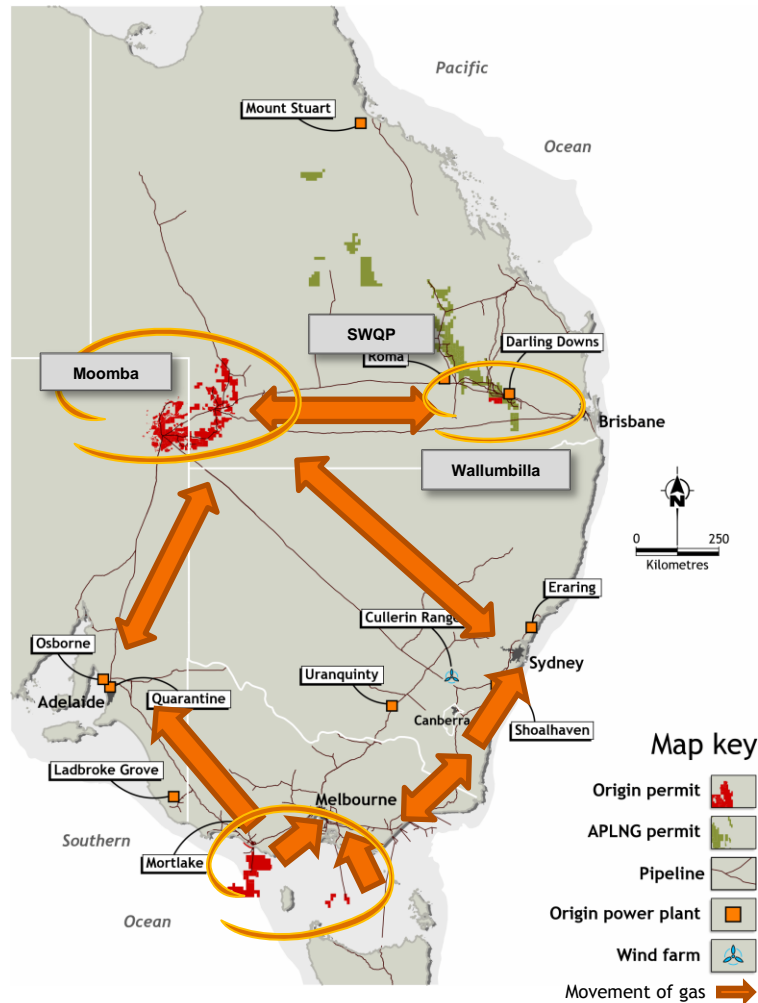


- 1** Equity resources (Bass Gas and Otway) and long dated contract with BHP / Esso provides significant volumes in the south
- 2** Beach gas contracted until December 2024 plus Origin equity gas (Cooper JV)
- 3** Gas from APLNG contracted until 2034 at legacy prices

Map key



Access to transport enables us to manage swings in gas market demand and supply



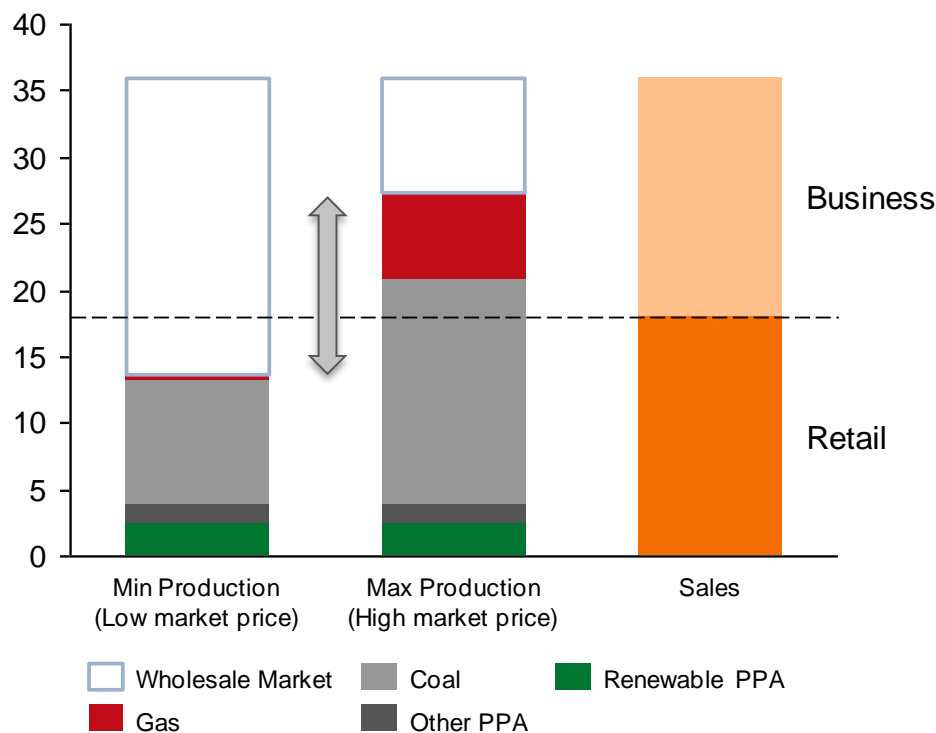
- ✓ Move gas to highest priced markets
- ✓ Provide services to LNG market
- ✓ Connect resources to electricity and gas markets

Flexible fuel and generation portfolios compliment a market with increasing renewable supply



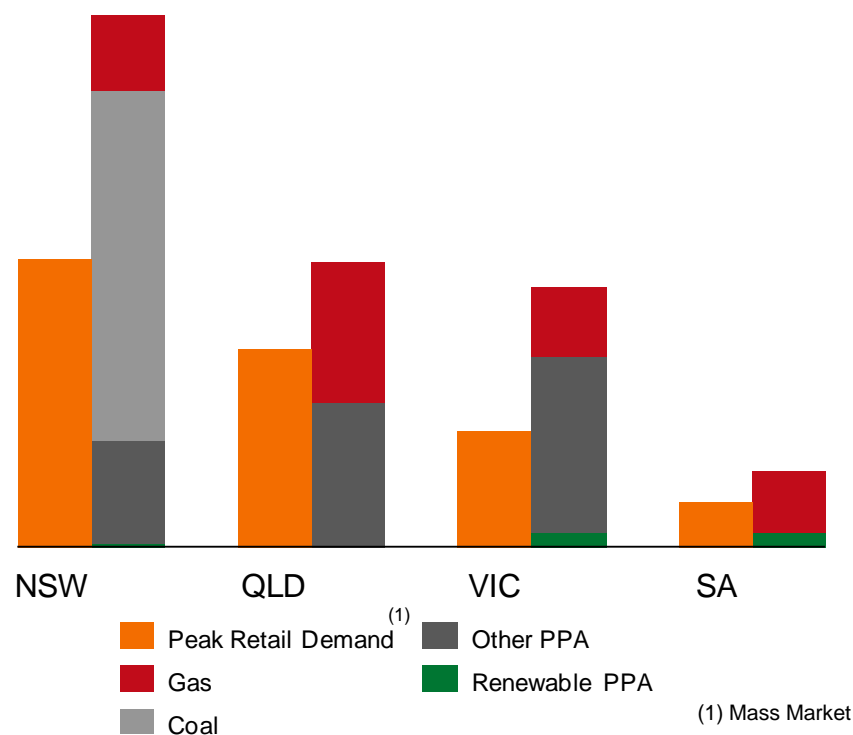
Origin's energy portfolio flexibility

TWh (FY2015 volumes)

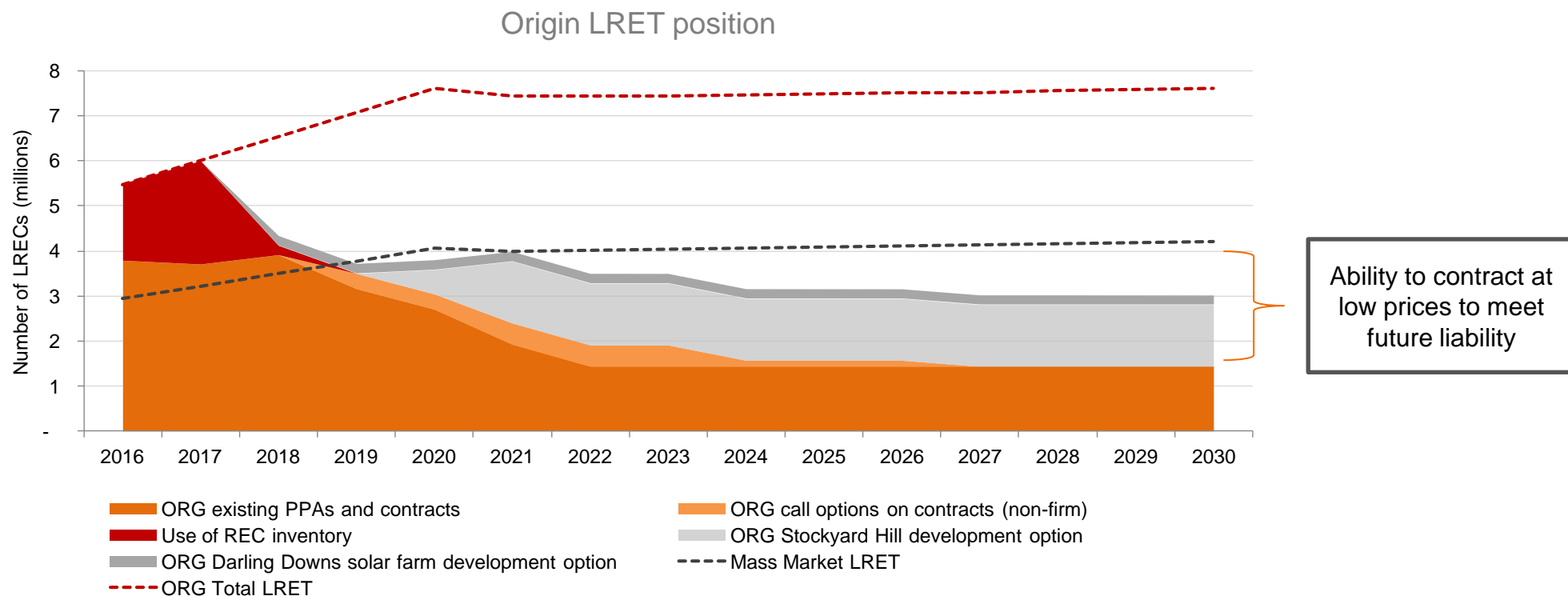


Long capacity with geographic diversity

Capacity, MW



With more certainty on the renewable energy target and reducing PPA prices, our renewable strategy will see us contract more of our future liability at historically low prices



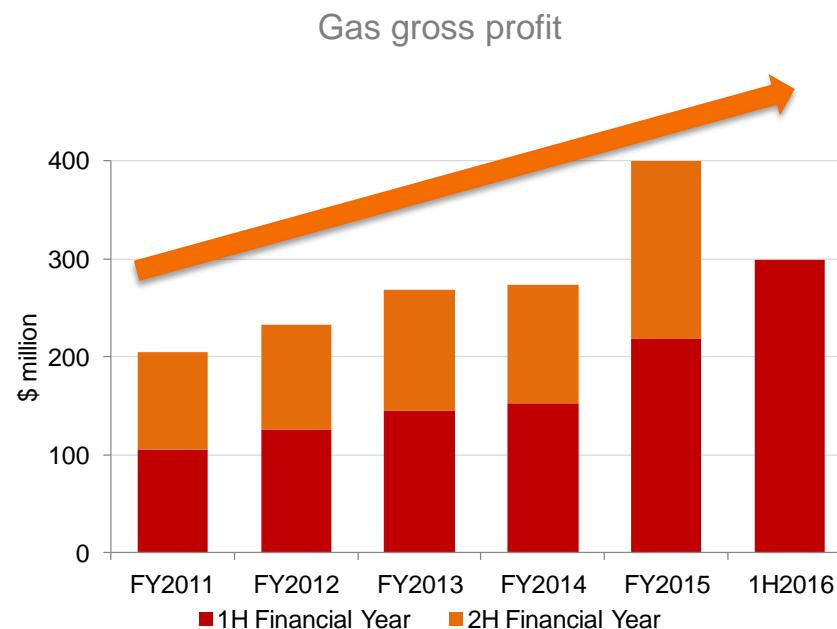
Execution of our gas strategy has created significant value



Competitive fuel position & access to transport

- ✓ Service provider to LNG market, providing ~1 mtpa of LNG for export
- ✓ Execution of long dated, flexible sales agreements to LNG projects
- ✓ Benefits from rising domestic gas prices
- ✓ Ability to significantly benefit from ramp gas
- ✓ Capture future opportunities in volatile gas markets

Significant uplift in gas gross profit

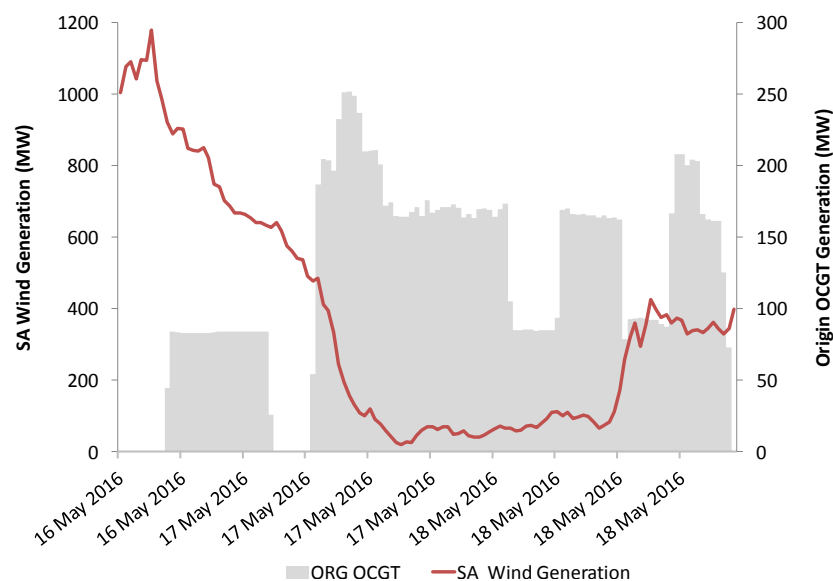


Execution of our generation strategy is capturing volatility in the market



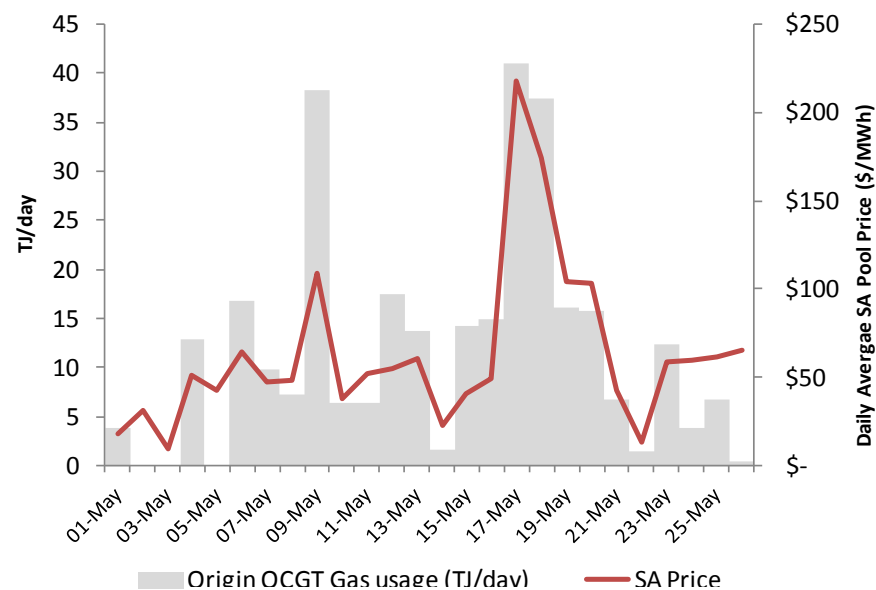
Wind supplemented by gas-fired generation

SA Wind output and Origin OCGT



Fuel and generation flexibility capturing price spikes

Origin SA Gas usage and SA Power price

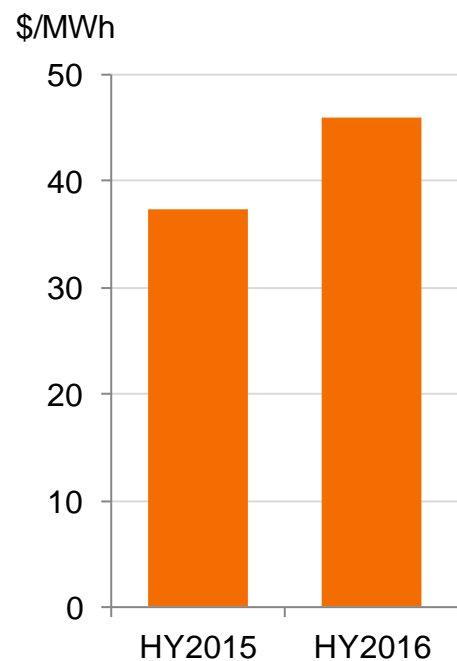


Source: AEMO

In a rising market, our integrated portfolio costs were flat in 1H2016

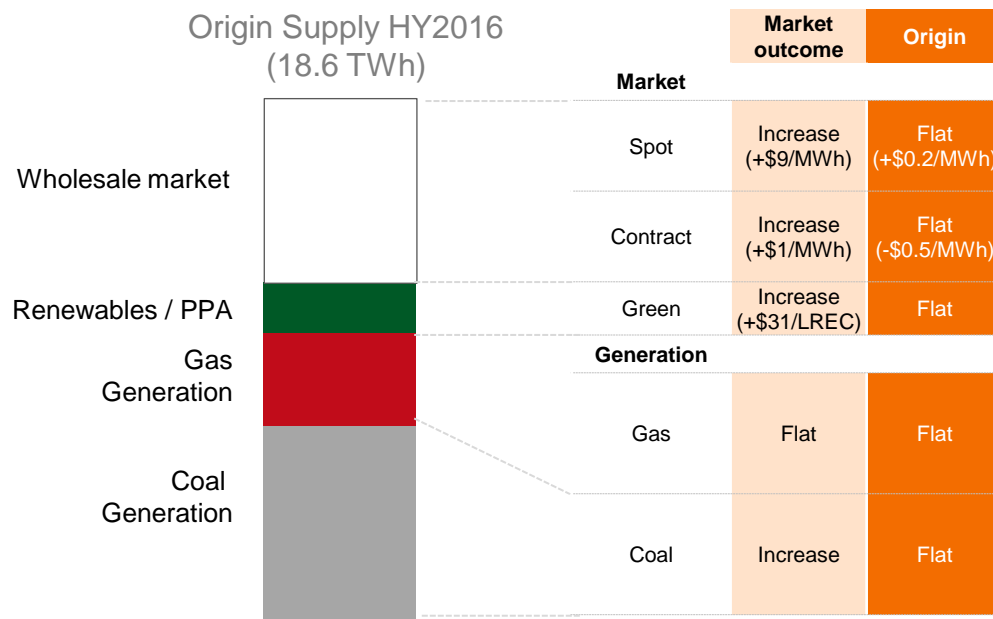


NEM Spot Prices Rise 23%



Source: AEMO

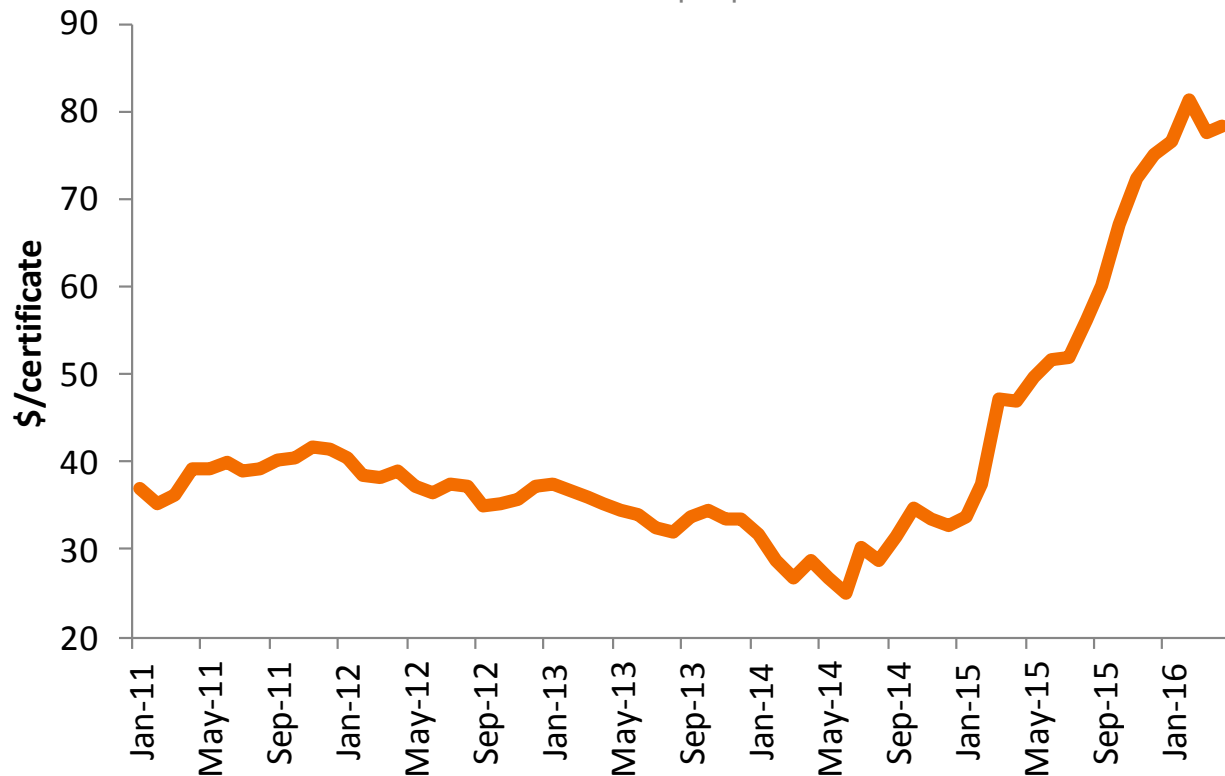
Origin's Energy Procurement Cost Flat



Execution of our renewable strategy enabled us to buy certificates at low prices for surrender in future years



LREC spot prices



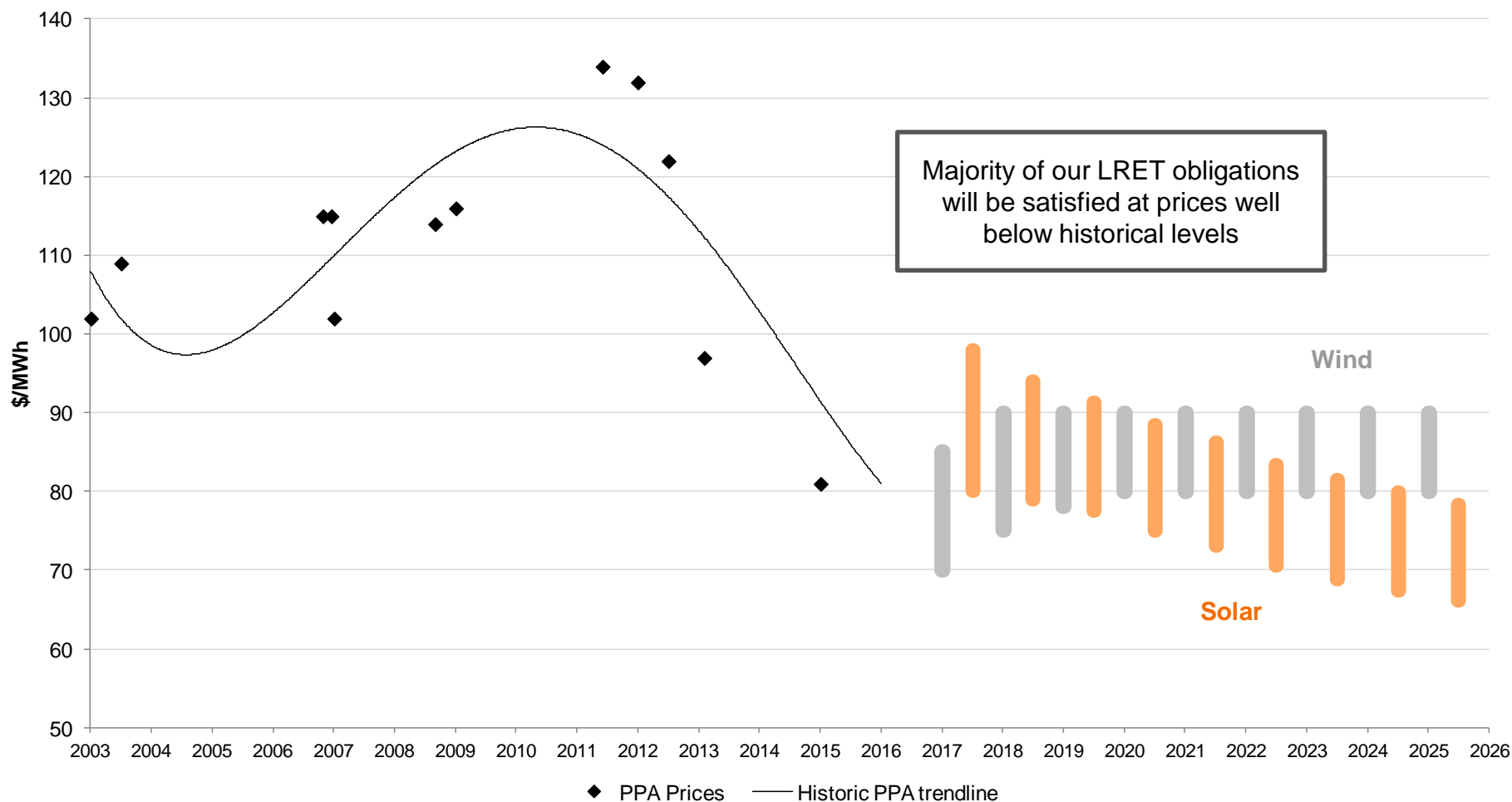
- Purchase of certificates when the market was oversupplied has allowed us to bank certificates for surrender against future liabilities
- This strategy has also allowed Origin to take advantage of lower renewable technology costs

Source: AEMO

Our renewable strategy to date has been prudent as renewable energy costs continue to fall with utility-scale solar challenging wind as the lowest cost



Australian Renewable PPA Prices (\$2016) and Forward Cost Estimates



Source: Origin internal analysis



origin

CUSTOMER STRATEGY

Jon Briskin | General Manager Retail

1

Outlook

- Competition remains predominantly price led
- Churn stabilising
- Price deregulation

2

Customer Strategy

- Leading customer experience & service
- Low cost business model
- Increase customer lifetime value
- Innovative & differentiated products and services

3

Execution

- Digitally enabled service design
- Cost to serve reducing
- Focus on high value customers
- Predictable Plan launched

The market remains competitive, although churn is stabilising



Competitive offers in market

Switch your electricity & gas to Alinta Energy

35% off electricity usage*

FREE MONTH OF ELECTRICITY & NATURAL GAS USAGE AND SUPPLY AFTER 6 MONTHS

Get up to **\$150** credit this winter.

20% OFF ELECTRICITY MARKET USAGE RATES*

Switch your electricity to Dodo and get a generous discount off our market usage rates when you pay on time*. Call or register your interest today.

SAVE up to 30% OFF! your ENERGY BILLS! *discount varies per state

Unbeatable. Unmatched. Unstoppable.

27% PAY ON TIME DISCOUNT MONTHLY BILLING JOIN NOW

5% PAY ON TIME DISCOUNT MONTHLY BILLING

30% PRE-PAY MONTHLY DISCOUNT MONTHLY BILLING SELECT

30% OFF electricity usage charges*

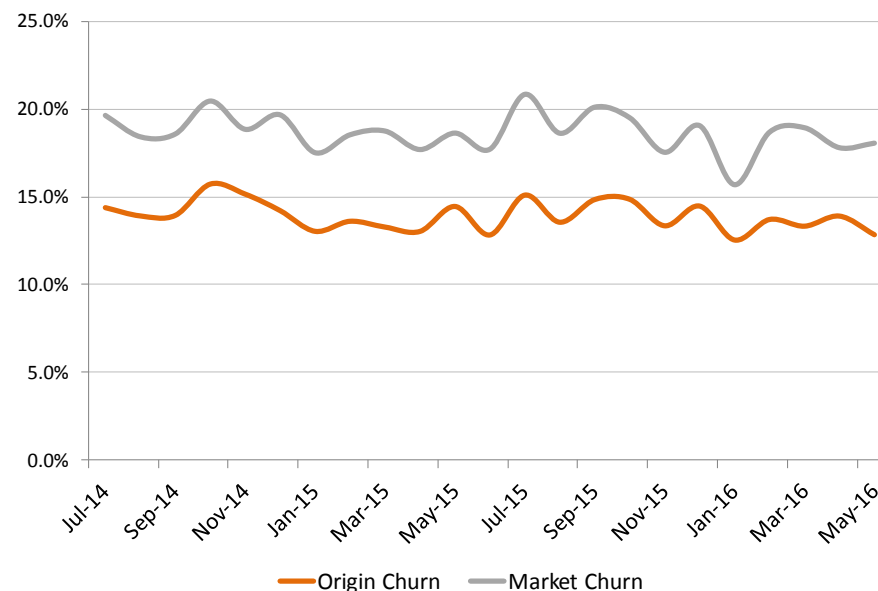
15% OFF gas usage charges*

Discounted Victorian Energy Offers.

\$50 CREDIT*

Churn is stabilising

Electricity and Natural Gas Churn Rates



Source: AEMO; Origin internal analysis

We are rapidly becoming a digitally enabled retail organisation, clearly focused on increasing customer lifetime value and delivering innovative & differentiated products & services



**Leading
customer
experience &
service**



**Low cost
business model**



**Increase
customer
lifetime value**



**Innovative &
differentiated
products &
services**

DIGITAL



ANALYTICS



**INNOVATIVE
CULTURE**



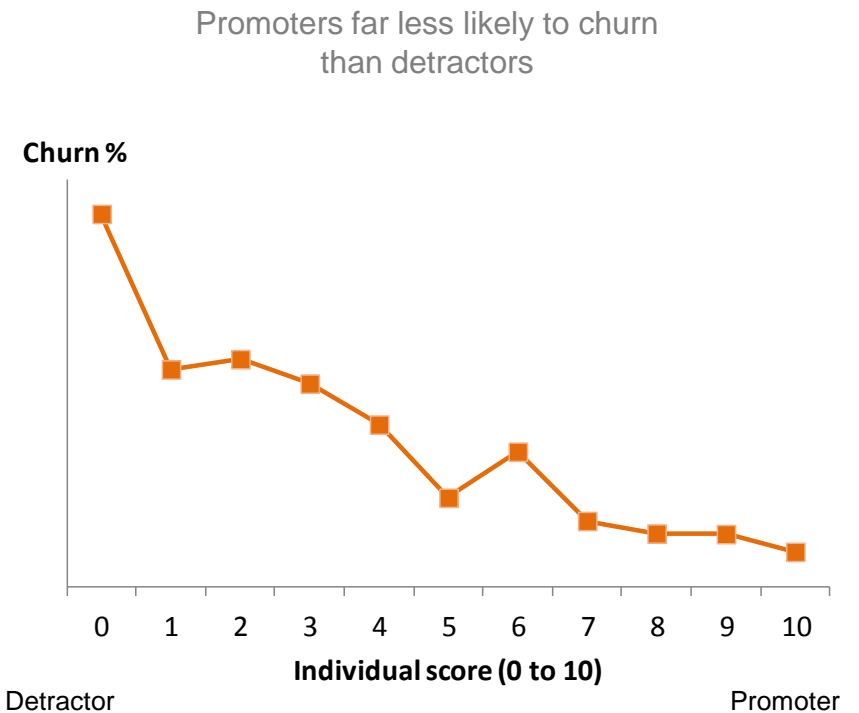
Customer first culture and digitally enabled service design driving customer experience and service



Core metrics improving

	Jun 13		May 16
Customers registered on MyAccount	183k	▶	1,010k
Customers taking up eBilling	157k	▶	1,539k
Calls per customer	1.6	▶	1.3
Ombudsman complaints (per 1,000 customers)	9.0	▶	3.5
Interaction Net Promoter Score	+8 ⁽¹⁾	▶	+12

Experience & service will drive lower churn over time



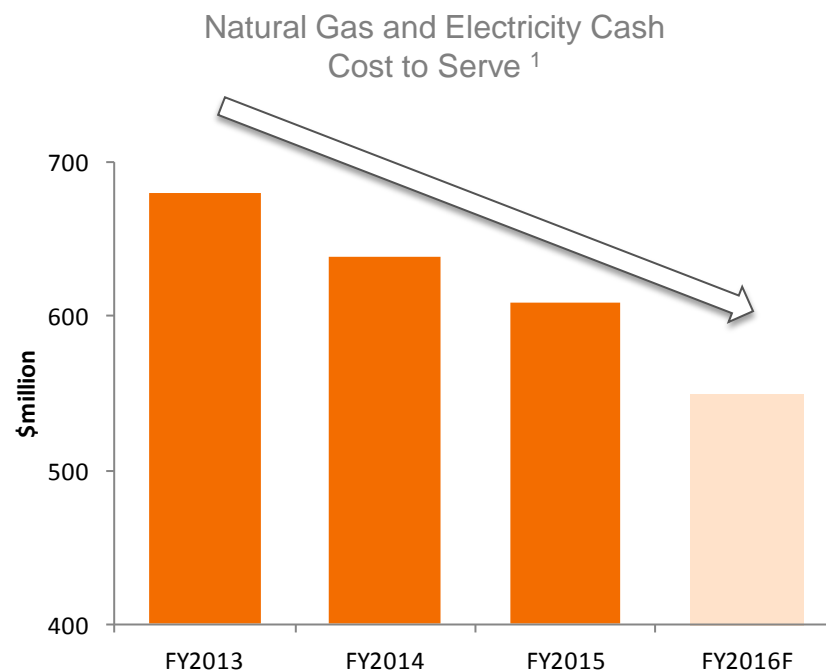
Continued focus on process innovation and optimisation to enable a low cost business model



Improvement in our operational performance

- ✓ Back office efficiencies with new business process outsourcing partner
- ✓ Industry leading bad and doubtful debts
- ✓ Digitisation and automation
- ✓ Improved customer experience reducing complaints
- ✓ Overhead reduction
- ✓ Monthly billing and shorter time to pay improving working capital

Cash cost to serve down

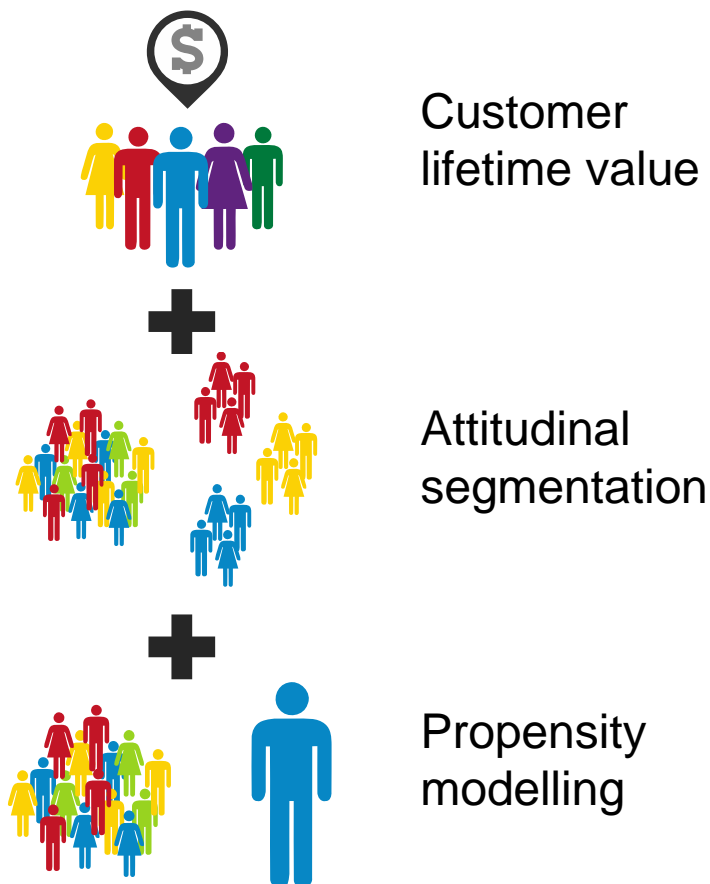


(1) Excludes Generation opex

Managing customer lifetime value to provide differential treatment and improve margins



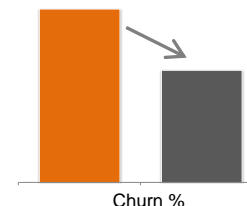
Using data and analytics to understand our customers' value and needs



Differentiated treatments creating value

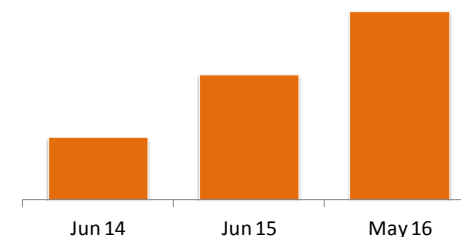
Lower churn across the customer lifecycle

Targeted renewal treatments reducing high value customer churn



Increase revenue from cross-sell

Increasing dual fuel penetration



Increase value through differentiated products

Discount Offers

Tailored Offers

26% OFF

ORIGIN PREDICTABLE PLAN

Australia's first fixed price energy plan

First to market with an innovative & different product proposition



Insight driven proposition underpinned by analytics

"I just wish I knew how much I was going to pay each month."

**PAY THE SAME AMOUNT
NO MATTER HOW MUCH YOU USE**

For your electricity or natural gas for 12 months. No more nasty surprises.

Predictable Plan ☎ 13 24 61



- ✓ It's **PREDICTABLE** – pay the same amount for 12 months
- ✓ **Tailored pricing** for each customer and their home
- ✓ **Easy budgeting** with fortnightly or monthly payments
- ✓ No exit fees or lock in contracts
- ✓ **Hassle free** eBilling and eCorrespondence with direct debit payments made automatically
- ✓ Green energy options

Driving positive customer and business outcomes



Daily Telegraph
**Powering up
set-price bills**
Fixed rate end to bill shock

"The Predictable Plan is certainly a welcome change to the standard, confusing energy contracts that Australian consumers are used to."



- Sales exceeding expectations
- eBilling and direct debit features improving cost to serve

NEW ENERGY SOLUTIONS

Frank Calabria CEO Energy Markets

Phil Mackey

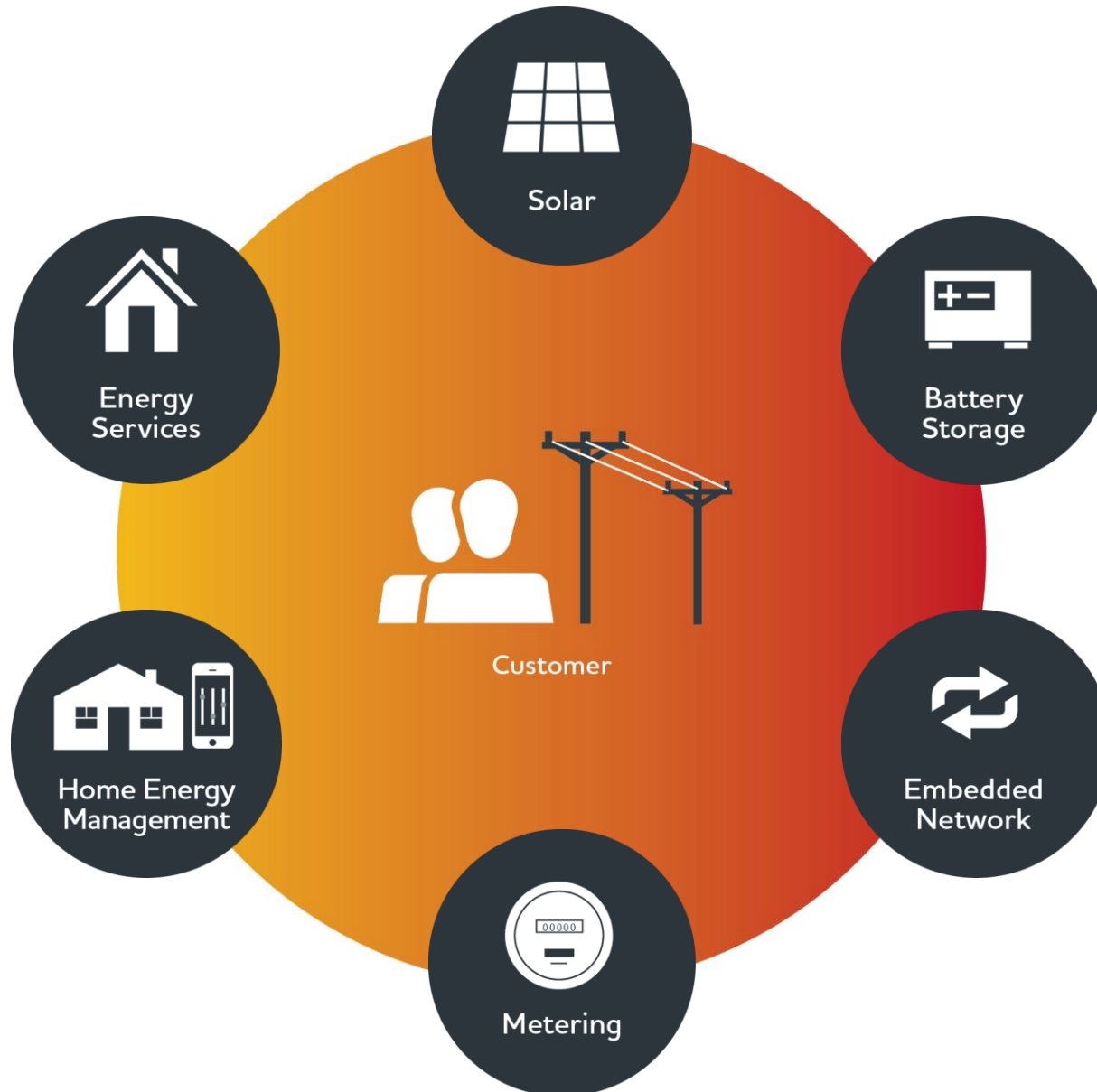
General Manager Solar and Emerging Businesses



origin



Extending beyond grid based energy supply to offer new energy solutions to consumers



1

Solar & storage

- Strong growth in business segment
- Solar and battery storage solutions

2

Centralised energy services

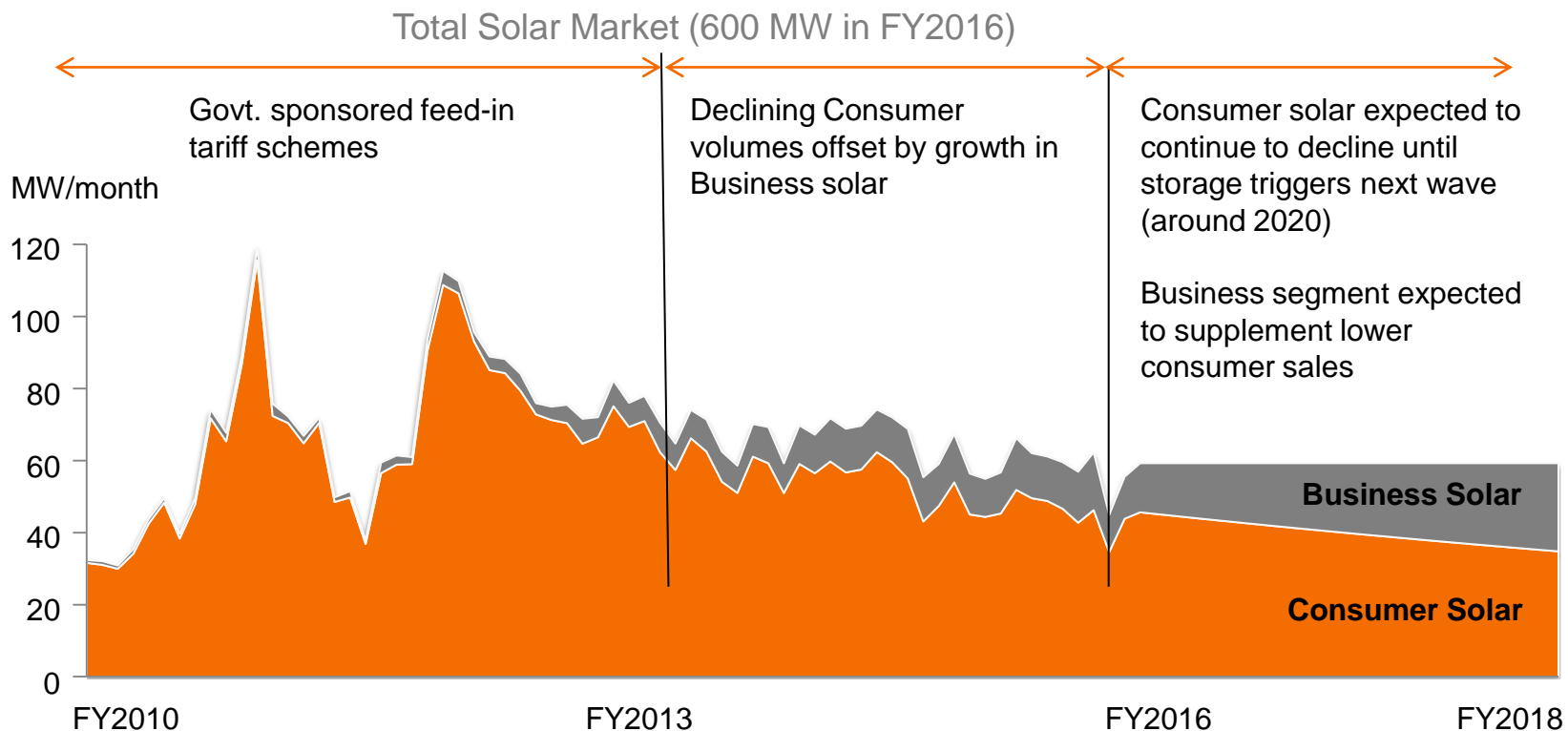
- Market leading position in serviced hot water
- Growing presence in embedded networks

3

Metering

- Rapidly scaling up capability
- Roll out of meters continues to ramp up

Demand for innovative solar solutions in the business segment is growing



Source: Sunwiz; Origin internal analysis

Solar and battery storage solutions will ultimately integrate with our core commodity offering



Solar proposition resonating with business segment



- ✓ Sales of Solar as a Service increasing
- ✓ Strong position in the business market
- ✓ Extend into solar servicing & repairs

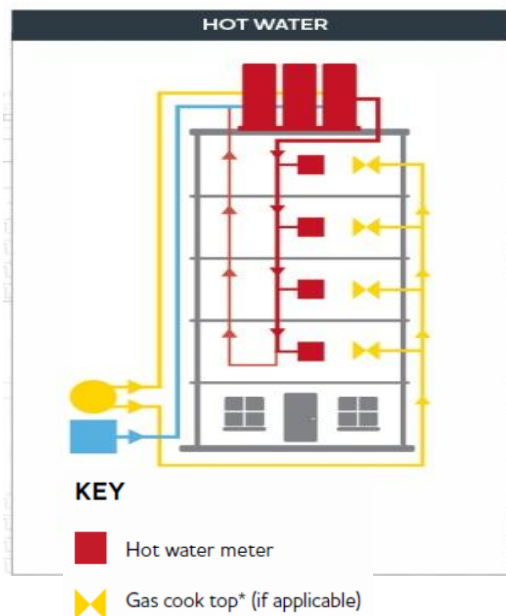
Battery proposition remains niche at current prices



- ✓ Storage solution being integrated with solar plus grid
- ✓ Costs falling, but product remains niche in the broader market

Strong growth opportunities in Centralised Energy Services

Serviced Hot Water



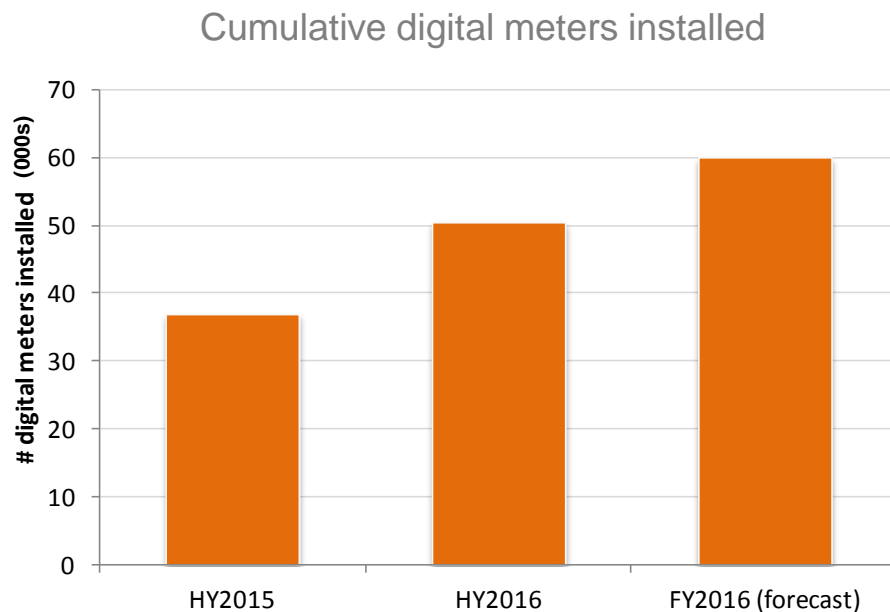
- ✓ 122k customers
- ✓ Strong growth track record and potential

Embedded Electrical Networks



- ✓ Growth opportunity, particularly in NSW
- ✓ Synergies with Acumen Metering
- ✓ Potential to grow beyond energy services

Growing our capability in digital metering



- ✓ Building capability for low cost, efficient deployment of digital meters
- ✓ Foundation for product innovation and differentiation
- ✓ Clear focus on customer experience
- ✓ Current run rate of 2,500 installations per month

IMPROVING RETURNS IN ENERGY MARKETS



origin

Becoming the most trusted energy solutions provider



Integrated wholesale portfolio strategy



- Increasing investment in renewables
- Competitively priced fuel position
- Access to transport
- Generation flexibility

Customer strategy



- Leading customer experience & service
- Increase customer lifetime value
- Low cost business model
- Innovative & differentiated products & services

New energy solutions strategy



- Solar, business & residential
- Centralised energy services
- Digital metering
- Energy services
- Home energy management

Strong growth opportunities over the next two years



✓ **Stabilising Natural Gas margins**

- Maintaining already strong gas margins
- Upside exposure to higher oil prices longer term
- Gas market volatility may provide further opportunities

✓ **Improving Electricity margins**

- Increasing wholesale returns; investment in renewables at low cost
- Improving customer lifetime value

✓ **Growing new energy solutions**

- Grow our position in the business solar market
- Grow our Centralised Energy Services business through embedded networks
- Increasing roll out of digital meters & associated propositions
- Launch Home Energy Services business

✓ **Reducing operating costs and capital expenditure; improving cash flow & returns**

- Targeting further reductions in Natural Gas & Electricity cash cost to serve and Generation opex
- Ongoing capital expenditure expected to be similar to FY2016 levels
- Improving working capital through debtor management strategies (monthly billing; reduced time to pay)
- Asset divestment program to further improve returns

ORIGIN ENERGY

FUELLING BETTER LIVES

David Baldwin CEO Integrated Gas

Investor Day 9 June 2016



Integrated Gas remains committed to the priorities we outlined in February



Continue execution momentum



Deepen resilience to sustained low oil price



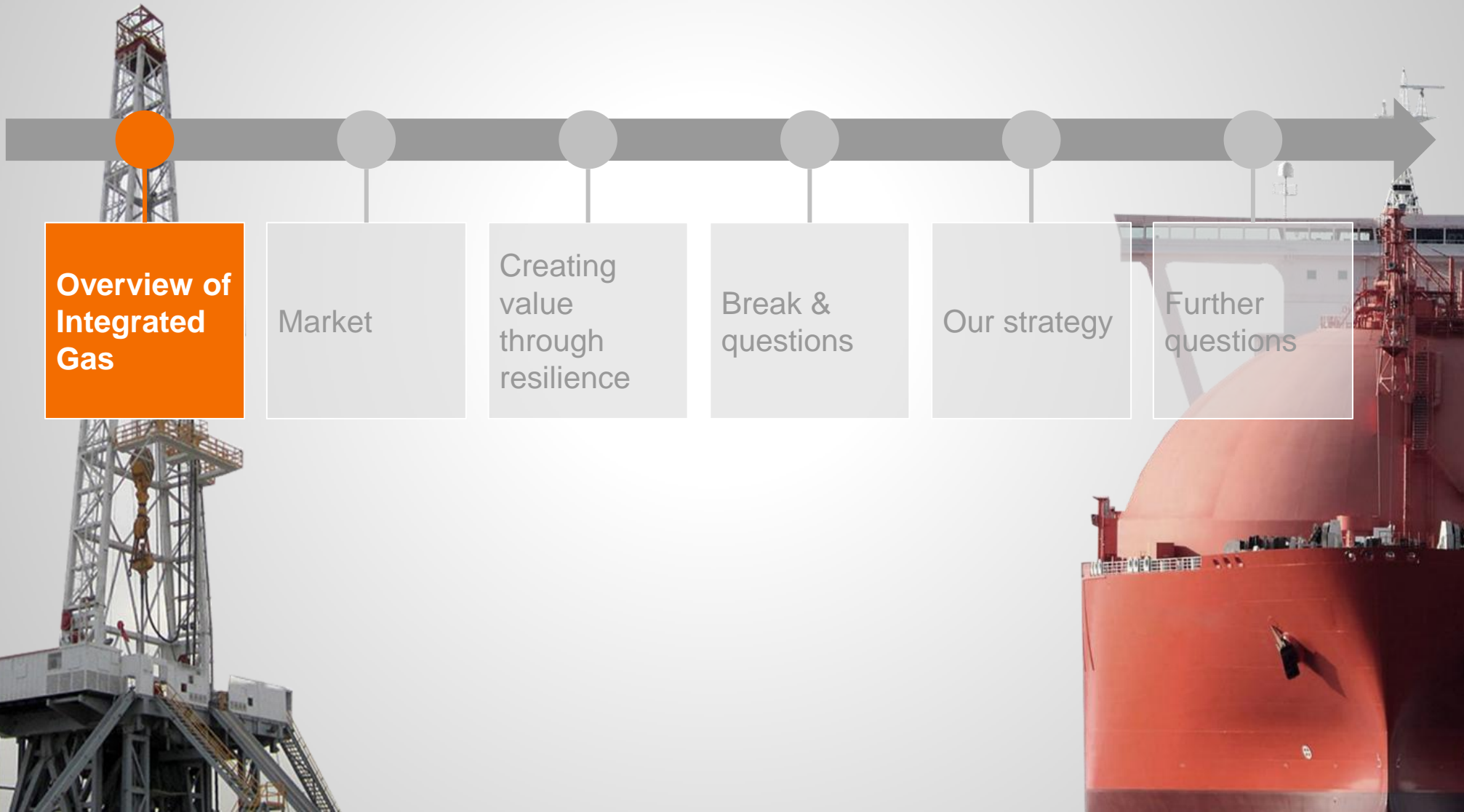
Secure new high value markets



Manage the portfolio with discipline



Build the capability and culture to deliver





MARKETS OUR CUSTOMERS

MIDDLE EAST/ INDIA



JAPAN



CHINA



AUSTRALIAN DOMESTIC



OUR PEOPLE, IN COMMUNITY



INNOVATION



Our focus



REPUTATION



SAFETY



LEADERSHIP



PERFORMANCE



STRATEGY



An example – being in community



REPUTATION



ORIGIN'S COMMUNITIES CHARTER



Within our community we build shared understanding, unite on common values and respect the differences that make us unique. Mutual value is built and maintained through trust. Earning and growing our trust with the community is at the heart of everything we do.

	Everyone knows how they connect	<ul style="list-style-type: none">• We seek to understand and recognise that good communication relies on active listening.• Our communication with landholders, neighbours and community is planned, purposeful and frequent.• We talk regularly, act promptly and share openly.
	Relationships are Everything	<ul style="list-style-type: none">• We build relationships on mutual respect, trust, empathy and know that relationships underpin community success.• We care for and value relationships which guides our decisions.
	Value is Shared	<ul style="list-style-type: none">• We are conscious of our impacts on landholders, neighbours & communities and reflect this in our actions.• We actively seek to share real value with communities.
	We Involve	<ul style="list-style-type: none">• We identify and care about our stakeholders and we involve and consider them in planning and change.• We say what we'll do, and we do what we've said – in alignment with Origin's Compass.
	OUR CHARTER HELPS GUIDE OUR ACTIONS. WE HAVE THE SUPPORT AND AUTHORITY TO STOP THE JOB WHEN WE FEEL OUR COMMITMENTS UNDER THE CHARTER COULD BE IMPACTED.	

How we create value

Value proposition

Integrated Gas lowers the cost of Australia's vast onshore and near-shore resources and connects them to high-value markets

Underpinning beliefs

- Global demand for gas and oil grows
- From the early 2020s,
 - Global LNG market shifts from being long to short
 - East Coast gas market tightens toward export parity
 - East Coast gas supply gap creates opportunity
- Australian resources are globally competitive using existing infrastructure
- Connecting gas resources to export markets enhances value

A horizontal timeline diagram with a grey arrow pointing right. It contains seven circular markers. The second marker from the left is orange, while the others are grey. Below each marker is a rectangular box. The second box is orange and contains the word 'Market'. The other boxes are grey and contain the following text: 'Overview of Integrated Gas', 'Creating value through resilience', 'Break & questions', 'Our strategy', and 'Further questions'. The background of the slide shows an oil rig on the left and a large red oil tanker on the right.

Overview of
Integrated
Gas

Market

Creating
value
through
resilience

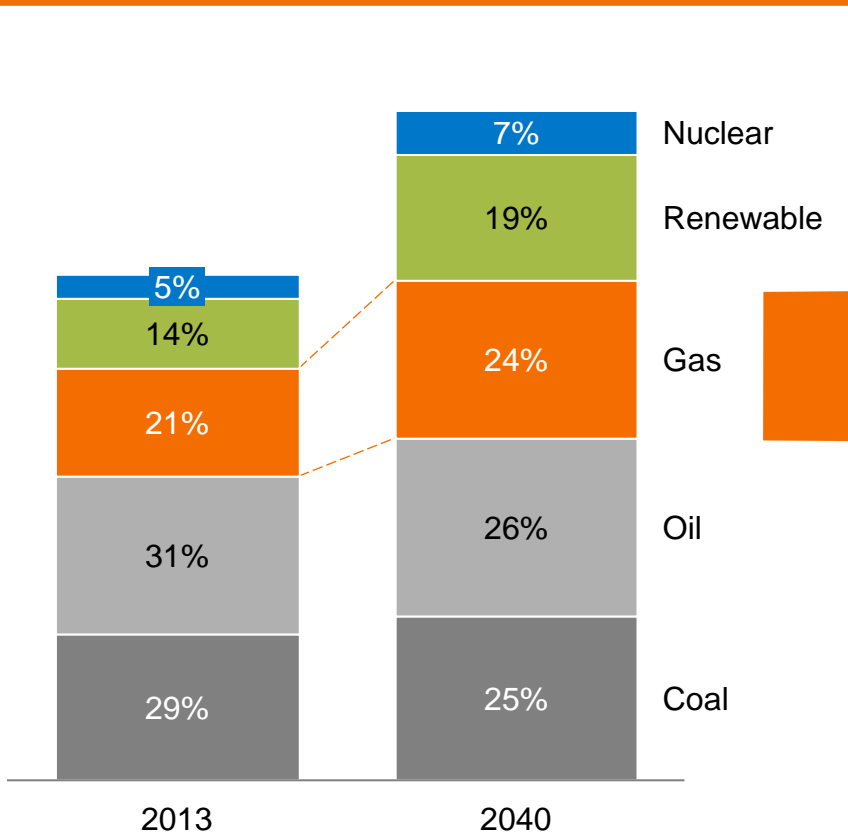
Break &
questions

Our strategy

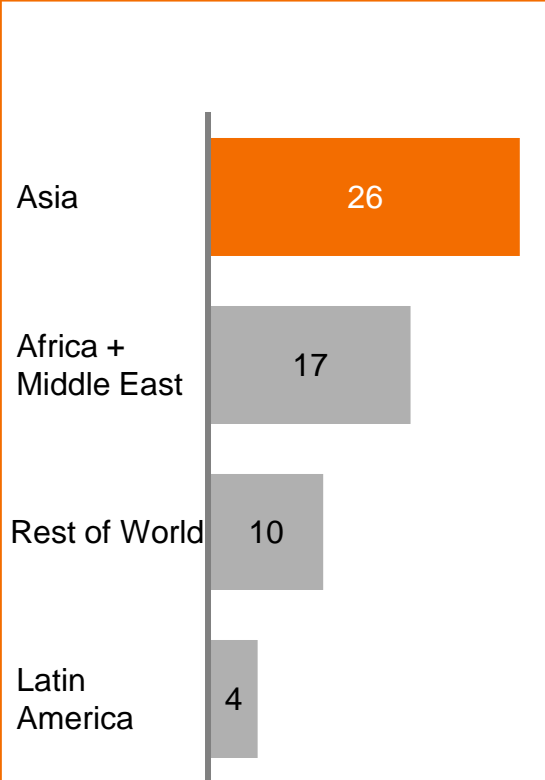
Further
questions

Gas is expected to be a major part of fuelling the future

World primary energy demand – new policies scenario

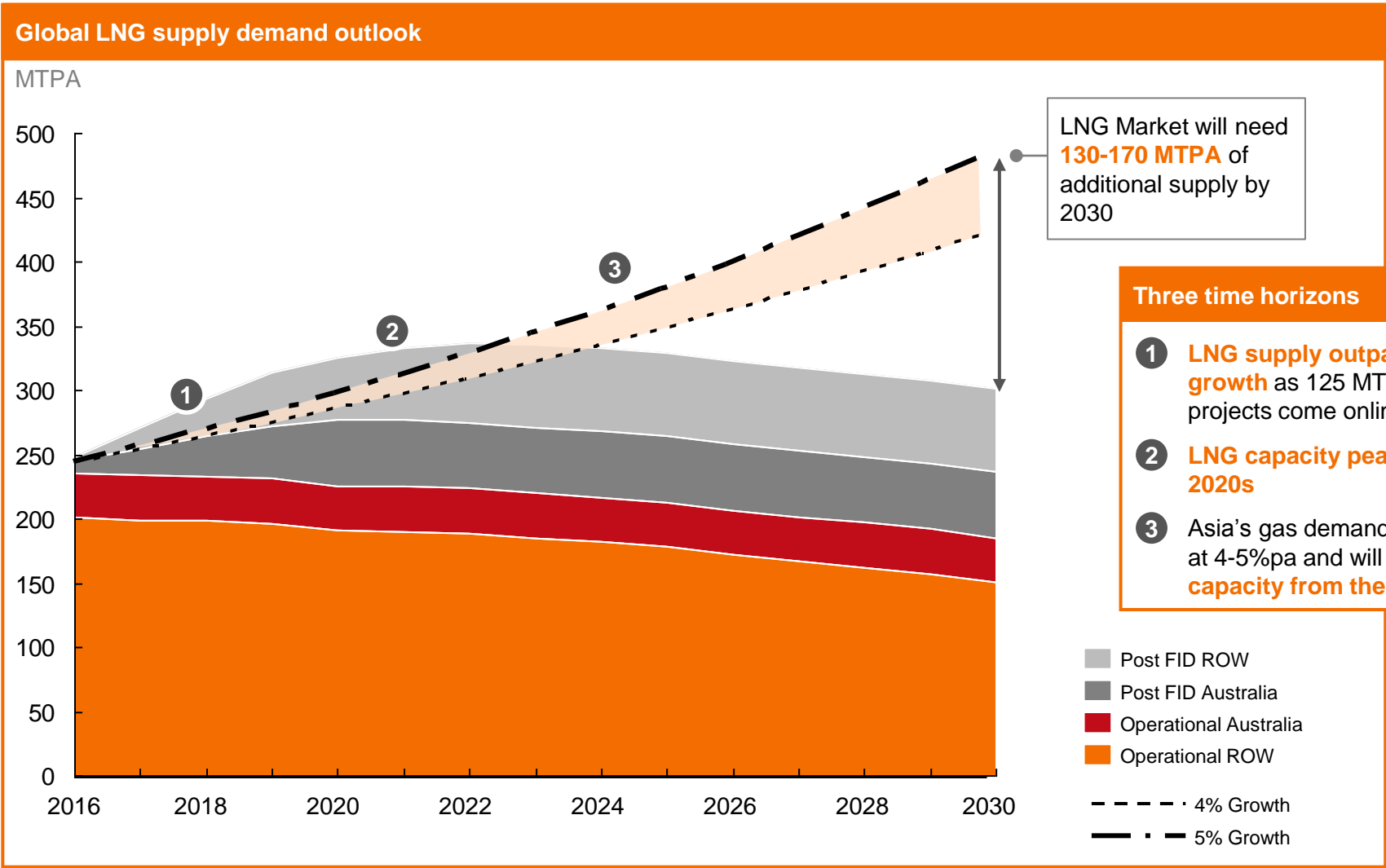


2013-40 growth in gas demand by region (000s of PJe)



- **Gas and renewables** increase most as the world transitions toward a cleaner future
- **Gas growth** is driven by non-OECD **Asia** of which **LNG** is **37%**
- **Demand for oil** continues to increase due to global population and GDP per capita drivers

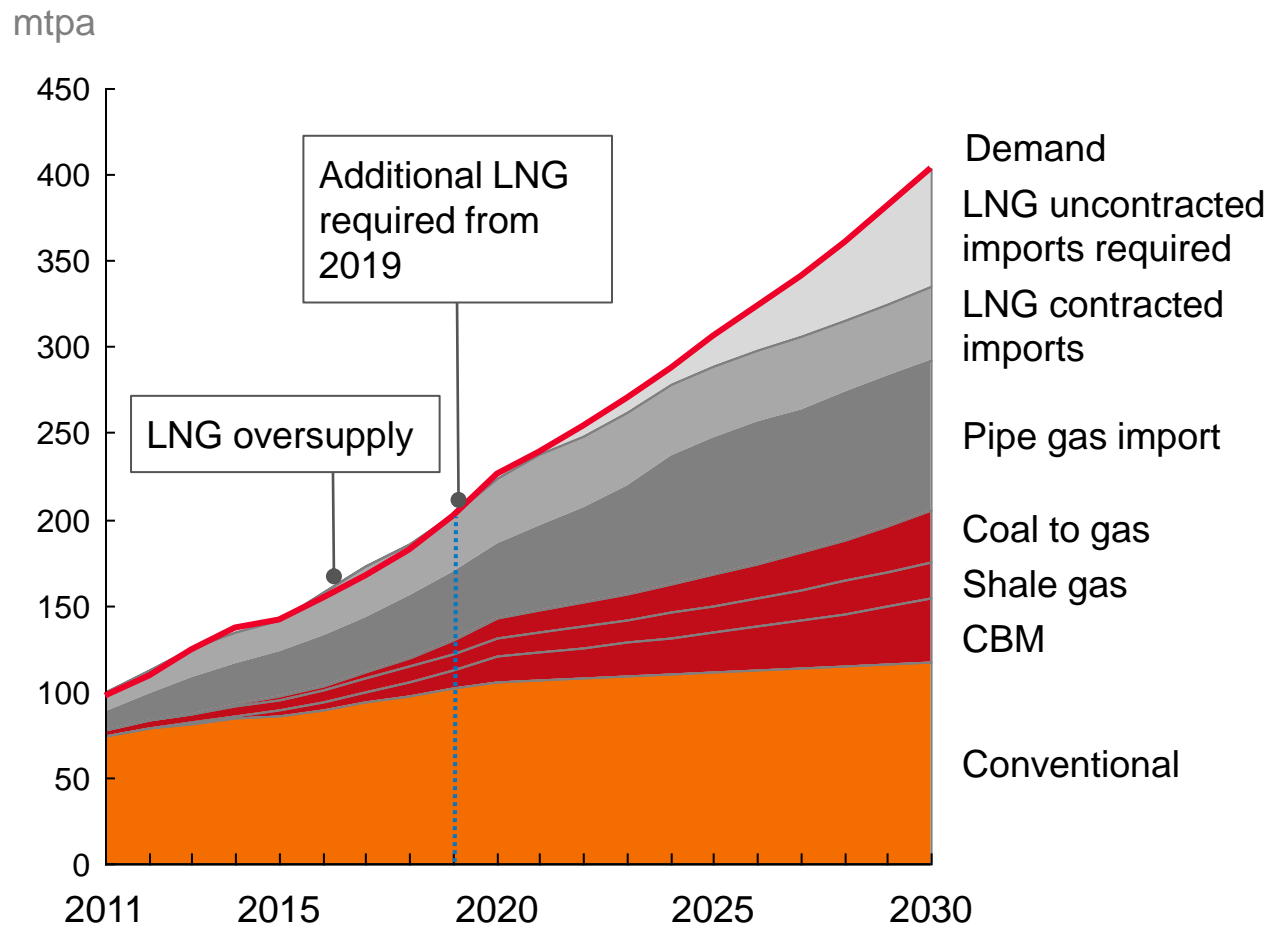
The global LNG market is forecast to be oversupplied until the early 2020s, after which new supply will be required



China gas growth is a key driver of LNG demand recovery. Potential upside if Chinese domestic unconventional resources or pipe gas import fall short of forecast



China gas supply demand outlook¹



- China is expected to be long contracted LNG in the short term, further LNG supply is expected to be required from 2019
- China gas demand is expected to grow 6-7% p.a to 2030
- Uncertainty in unconventional and pipeline import forecasts

Sinopec is growing import capacity and APLNG has well-aligned project ownership structure



Sinopec's APLNG receiving terminals

Tianjin LNG, Tianjin (3mtpa)
Under construction due to come online in 1H CY2017

Qingdao LNG, Shandong (3mtpa)
Receiving APLNG cargoes
Plans to double terminal capacity to 6mtpa

Beihai LNG, Guangxi (3mtpa)
Received its first cargo from APLNG in March 2016

Australia Pacific LNG

Strong shareholders and operators



37.5%



37.5%



25%

Strong offtake contracts with creditworthy customers



1 mtpa contracted



7.6 mtpa contracted

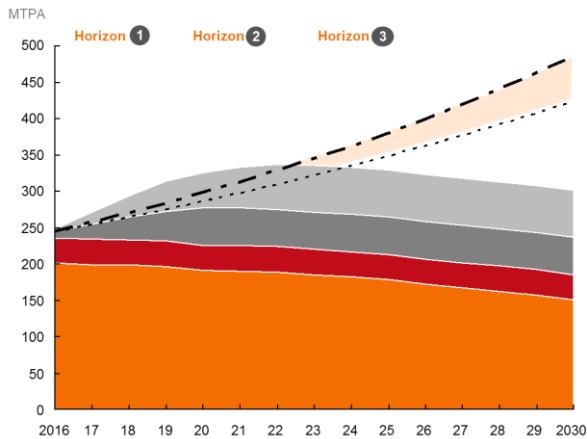
Project finance underpinned by Chinese and US export credit agencies



LNG spot prices are expected to remain weak until the market tightens in the early 2020s

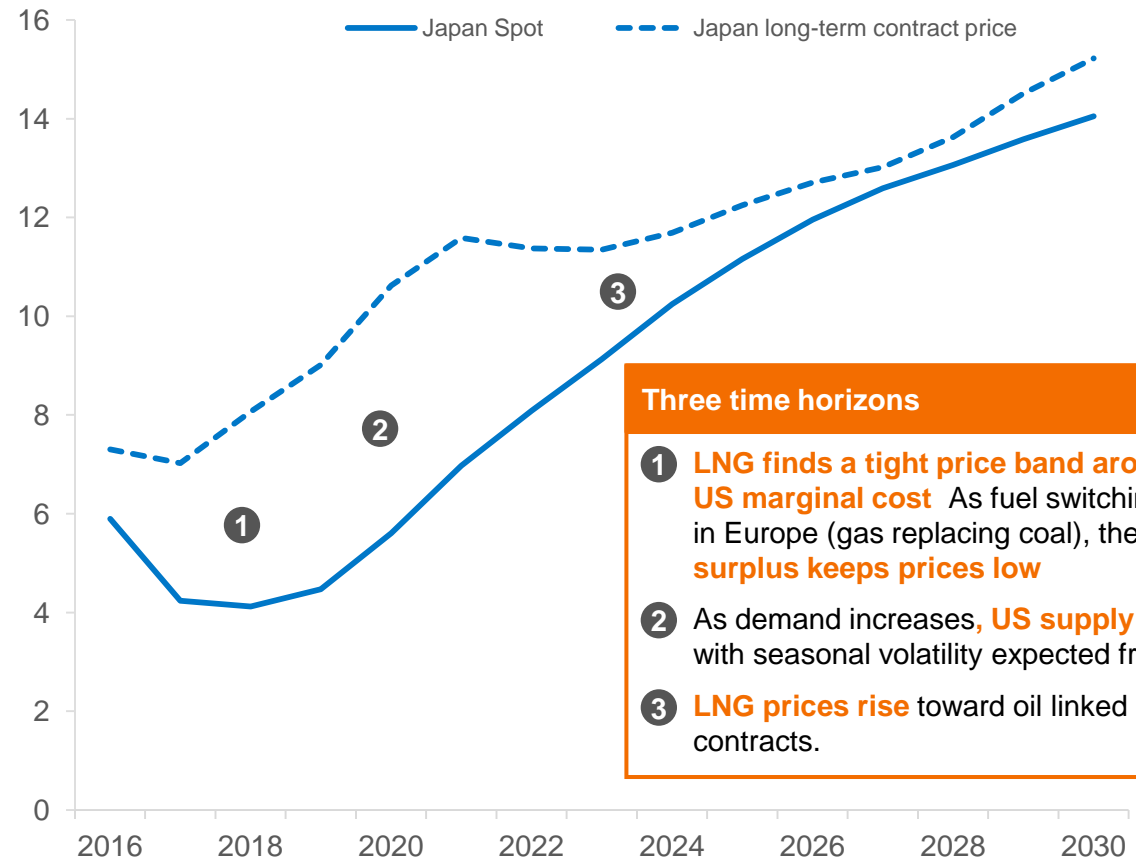


Global LNG supply demand



Asian LNG price forecast

Nominal \$US/mmbtu



Three time horizons

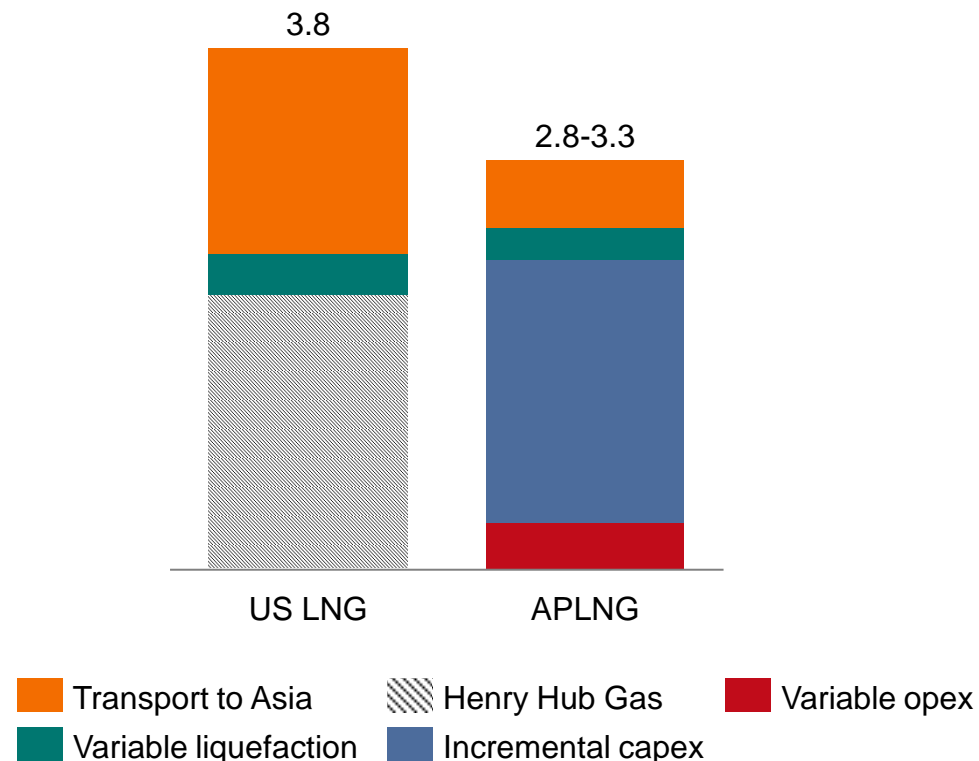
- ① **LNG finds a tight price band around the US marginal cost** As fuel switching occurs in Europe (gas replacing coal), the **US surplus keeps prices low**
- ② As demand increases, **US supply tightens** with seasonal volatility expected from 2020
- ③ **LNG prices rise** toward oil linked long term contracts.

APLNG's marginal cost to supply incremental volumes is competitive with US LNG and lower than forecast spot prices



LNG short run marginal cost

DES North Asia today, US \$/mmbtu

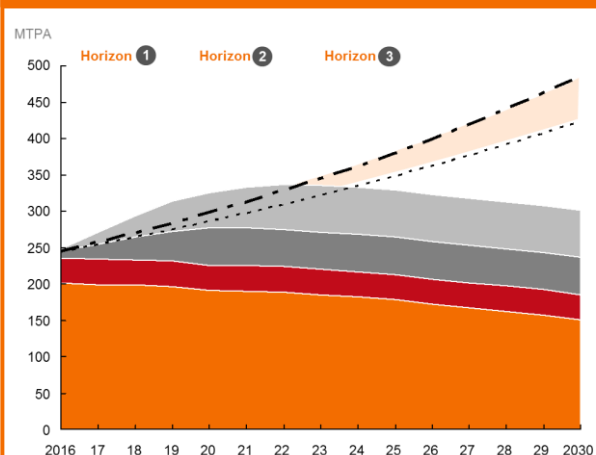


- APLNG's marginal cost structure supports continued development and production above contracted volumes
- IRR of incremental wells above base programme is >30%, with payback period of ~2 years

From the 2020s, most new LNG supply is expected to come from the US. LNG pricing is expected to reflect this



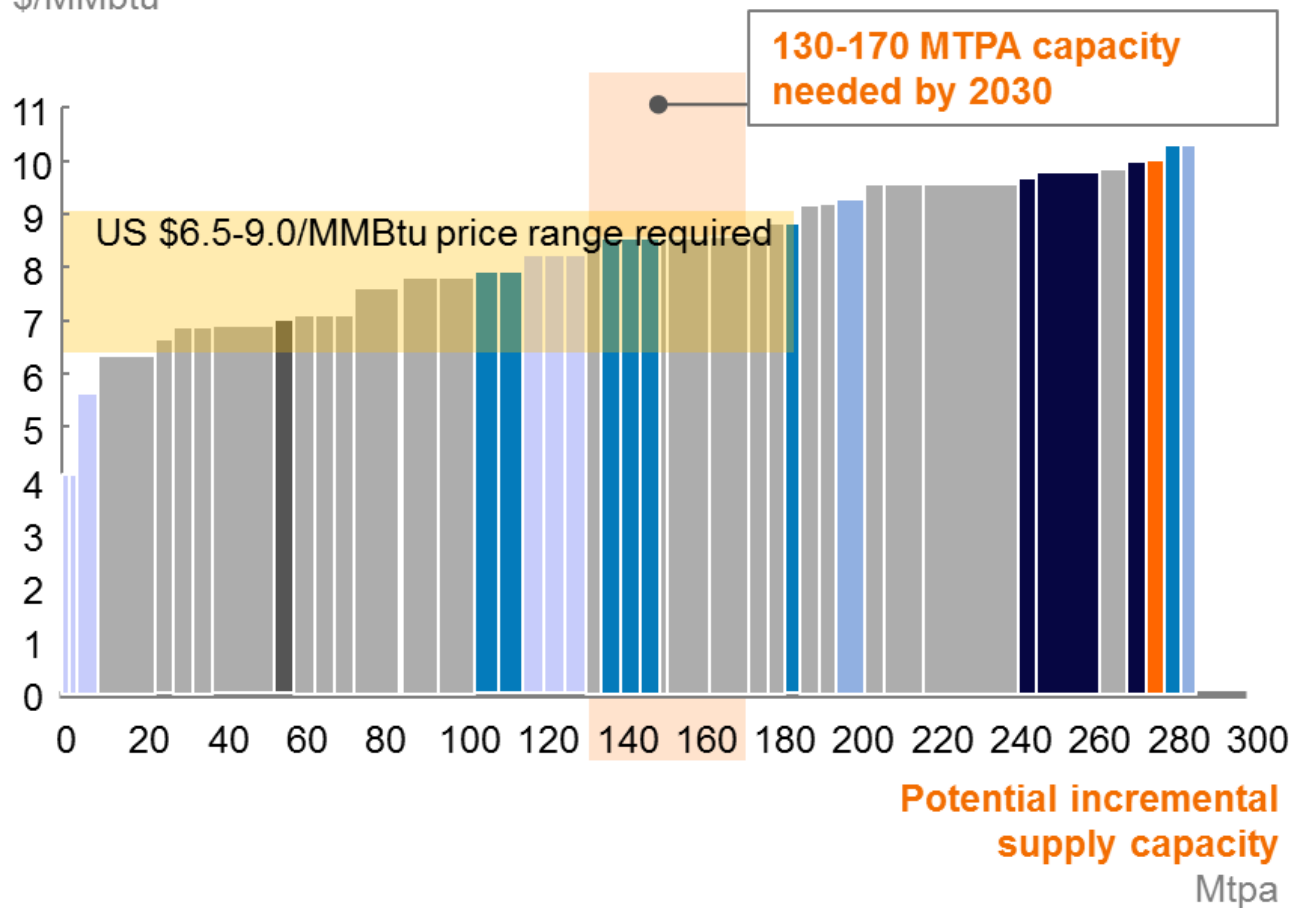
Global LNG supply demand



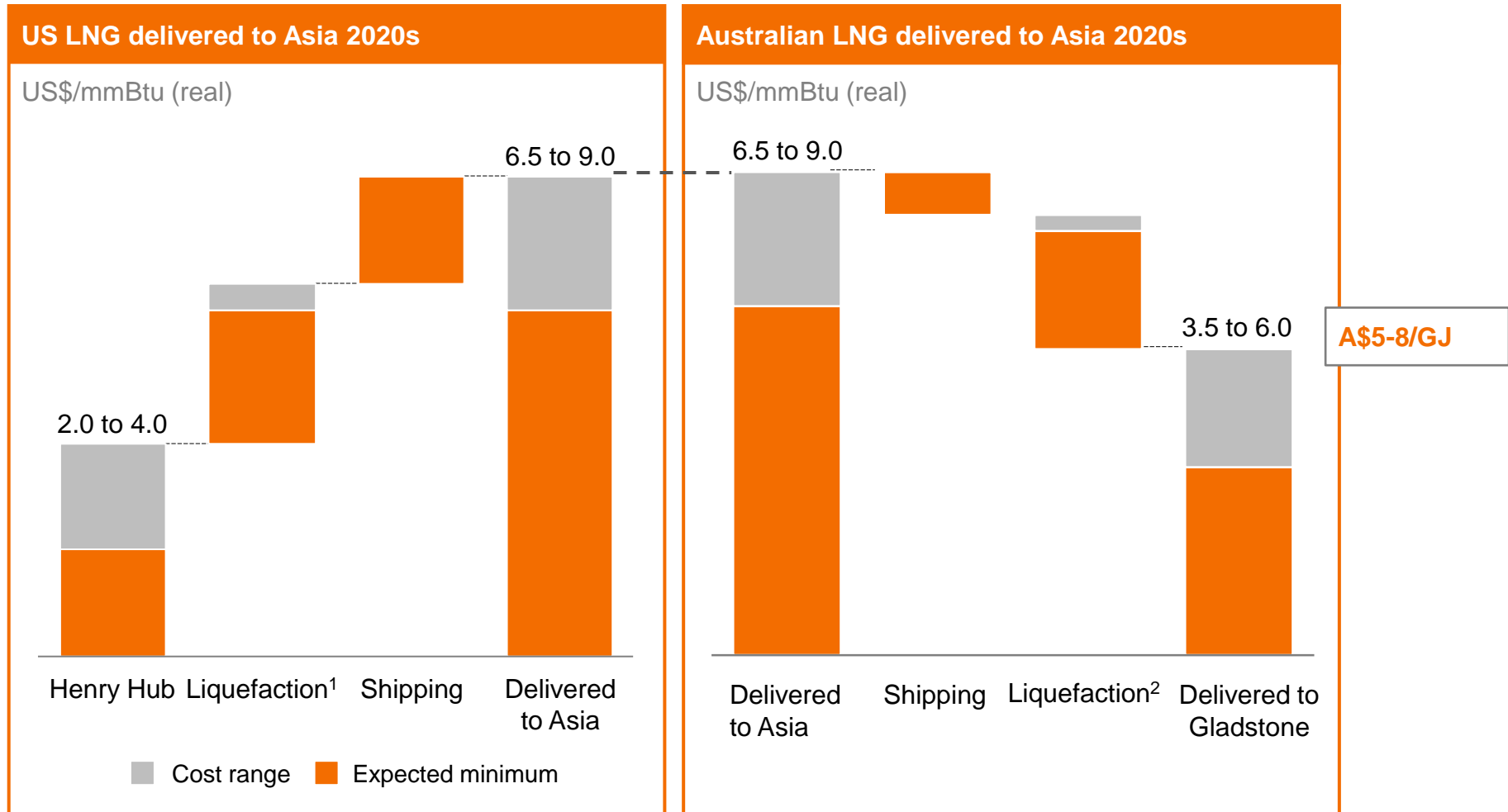
Cost curve of unsanctioned projects available to meet demand¹

Break-even prices
delivered to Asia
\$/MMBtu

Australia North America Asia Other
South America Middle East Africa



Longer term, Australian gas delivered into Gladstone LNG plants at US\$6/mmBtu is expected to compete with US exports



(1) Full return on capital, new build

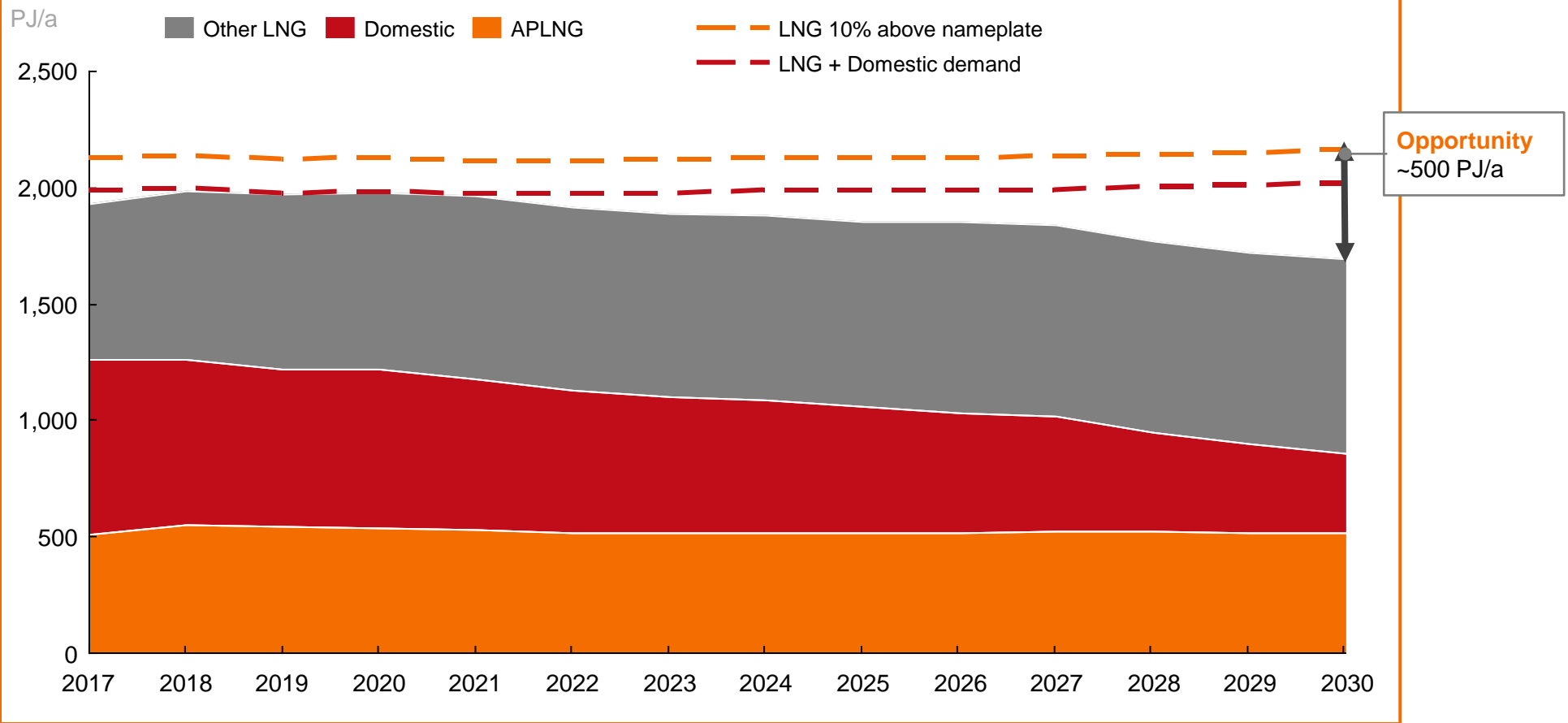
(2) Tolling estimate for existing infrastructure

Source: Origin modelling based on McKinsey Energy Insights

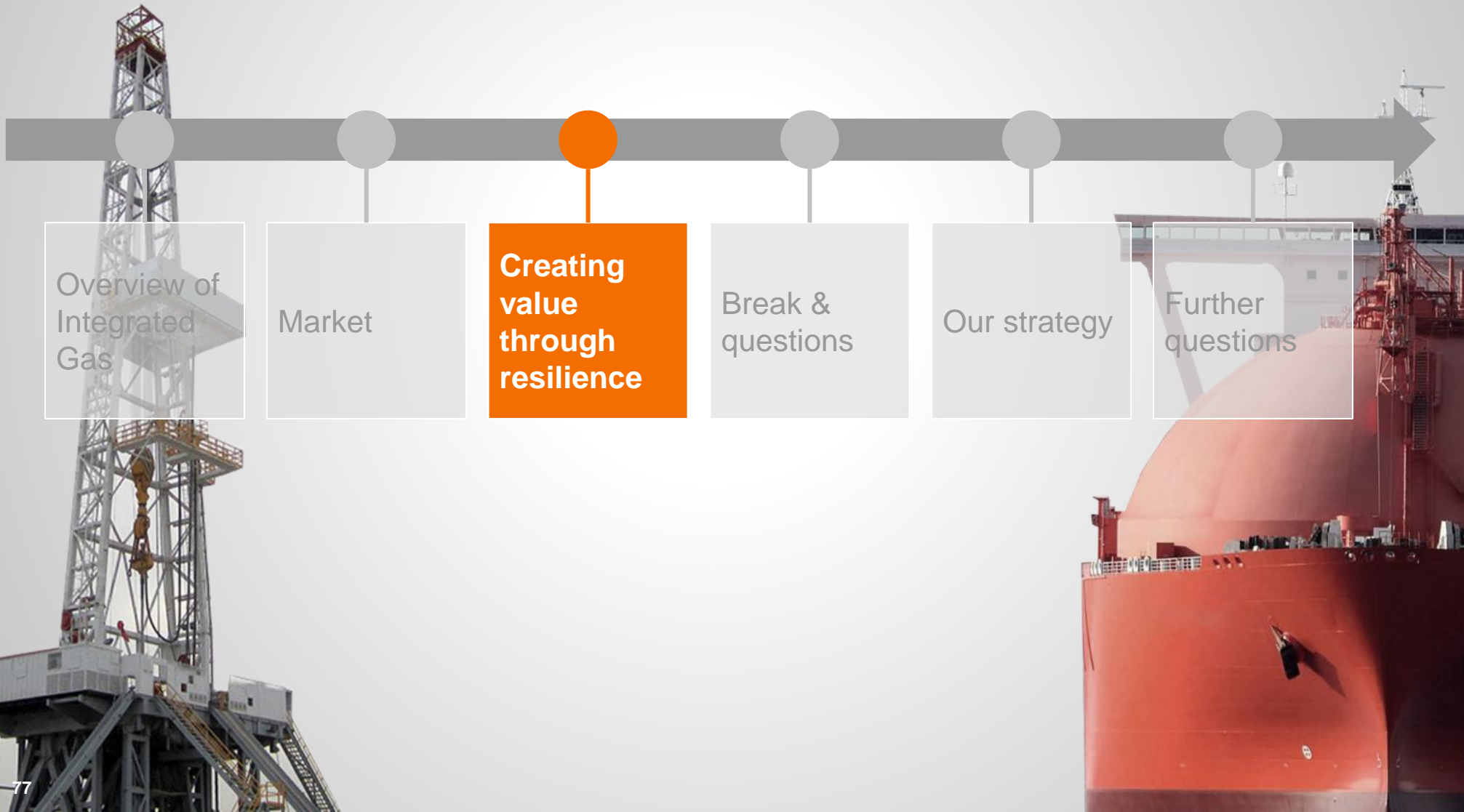
East Coast gas market is expected to tighten from the early 2020s...



East Coast Australia supply demand outlook



... Origin is well-positioned to compete for the supply opportunity



The APLNG project is nearly complete with strong operational performance both in upstream and downstream



Upstream project 100% complete

Downstream project 97% complete



APLNG current performance ...

- Since starting the Bechtel Performance Test, Train 1 has exceeded nameplate capacity
- 22 LNG cargoes shipped to date, mostly to Sinopec
- Revenues from Train 2 are expected to be recognised in earnings from Q3 FY2017
- ~A\$1b Origin contribution remaining from January 2016 until APLNG is self funding, as per guidance

Focus remains on ...

- H1 FY2017
 - Train 2 First Cargo
 - Train 1 project finance lenders tests
- CY 2017 Train 2 project finance lenders tests
- Further reduction in break-even by US\$2-3/boe

Integrated Gas is managing oil and LNG price risk



Oil price risk management

- Integrated Gas annual oil exposure of 23-25 mmboe
- December 2015: purchased 15 mmboe JCC indexed FY17 put options at a strike of US\$40/bbl (or A\$55/bbl)
- Managing ongoing oil exposure

LNG price risk management

- LNG spot price exposure via APLNG
- Developed internal capabilities to manage physical and financial LNG price risk
- October 2013: Purchased 0.25 mtpa from Cameron LNG for 20 years on a Henry Hub linked basis
- December 2015: FY16-18 spot LNG exposure managed via fixed price sale

APLNG's average operating costs are consistent with guidance



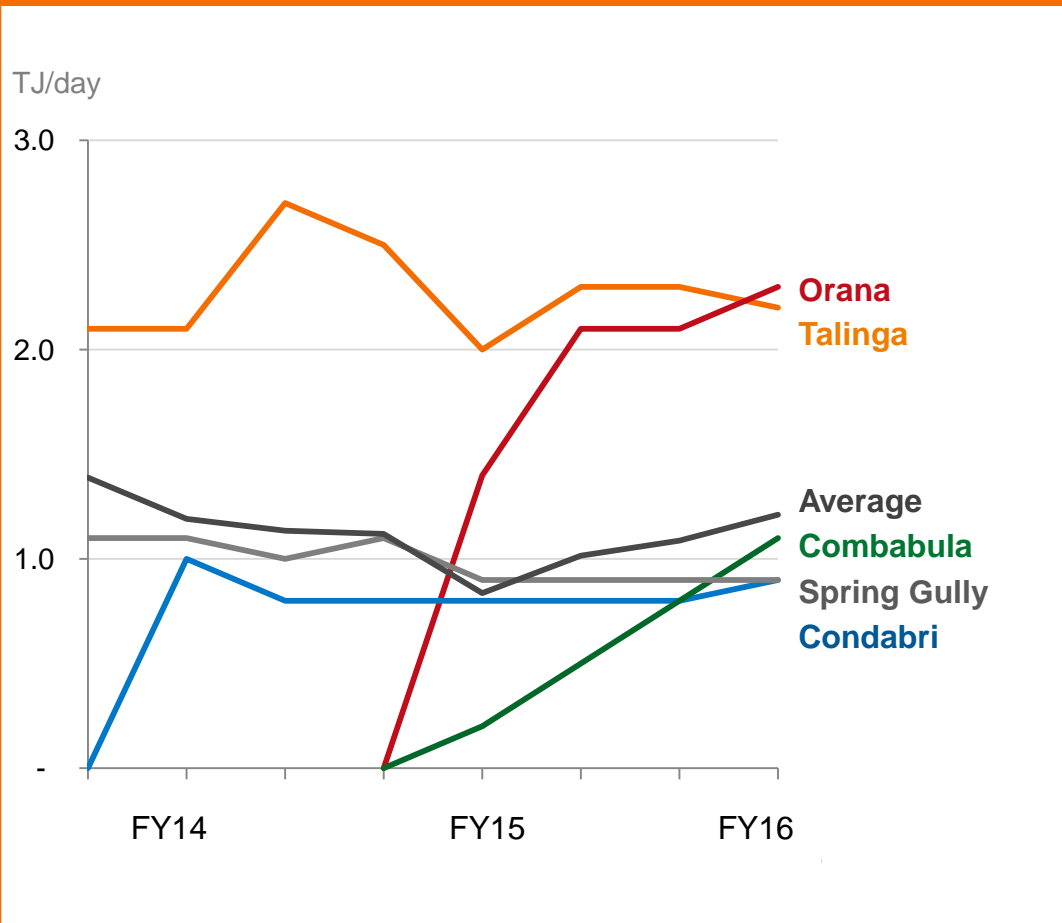
Cash cost Targeted average steady state FY17-23	Feb 16 average A\$b	June 16 average A\$b
A Capital expenditure – Sustain	1.2-1.4	1.4
B Capital expenditure – E&A	0.1	0.1
C Operating expenses	1.5	1.3
Less: Domestic revenue	(0.4)	(0.4)
D Operating costs	2.4–2.6	2.4

- A** In operated fields, additional wells in later years in lower permeability areas are offset by lower well costs. Increase in non-operated costs
- B** E&A is required to support APLNG volumes. May invest more to capture opportunities
- C** Operating expenditure corrected to exclude internal tariffs and updated for expected improved controllable costs
- D** A further US\$2-3/boe opportunity exists to monetise production above nameplate and realise further cost compression associated with low oil
 - After correcting the conversion factor to US\$/boe from 69 mmboe to 62 mmboe, APLNG's distribution breakeven is US\$42/boe on average

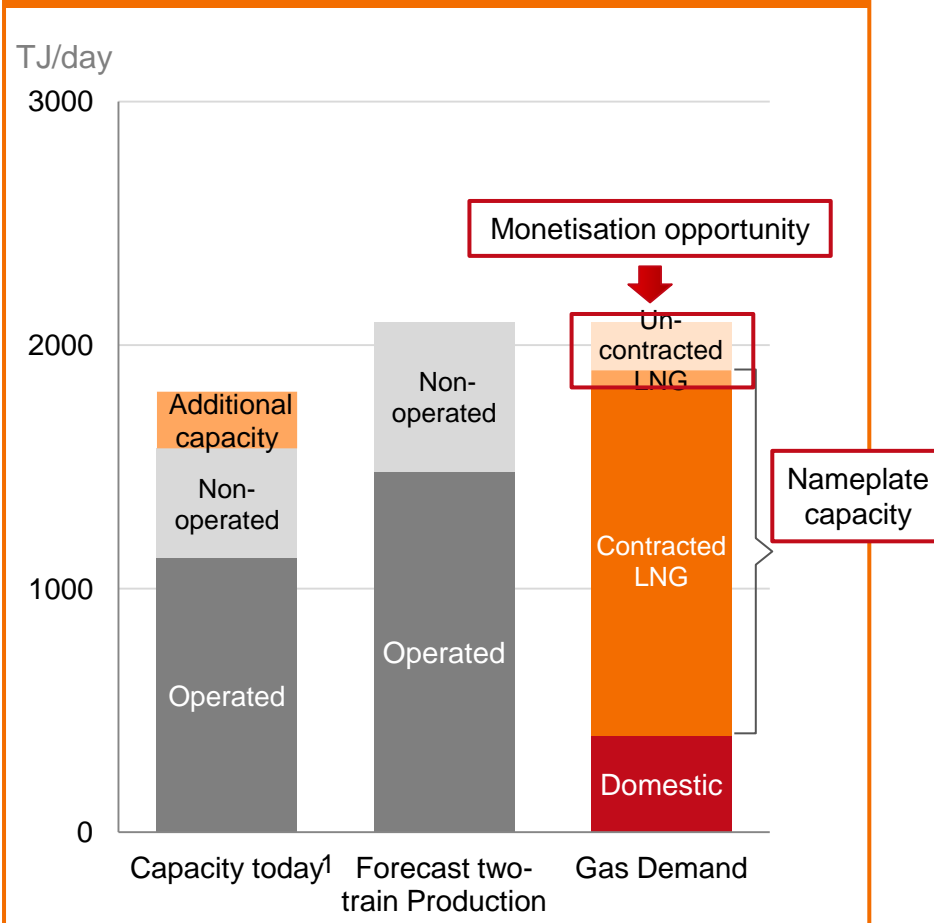
Supply for two trains is on track, production capacity is increasing



Well deliverability rising in Orana and Combabula with dewatering



Supply for both trains is on track



Overall type curves are flatter and longer than FID estimates, with stable EUR. Sustain capital expenditure is in line with guidance due to reductions in operated well costs



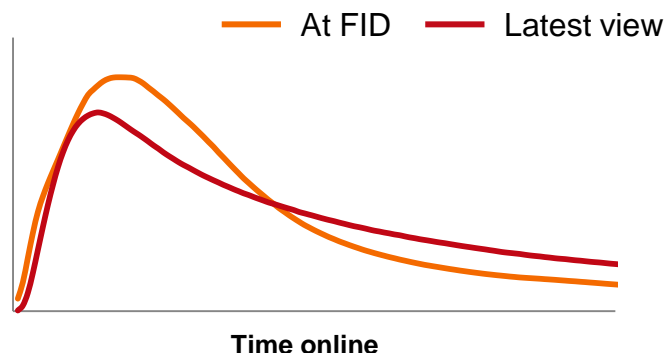
Average type curves

Actions

Spring Gully, Condabri, Combabula

- Lower permeability
- Stable EUR per well

Condabri and Combabula

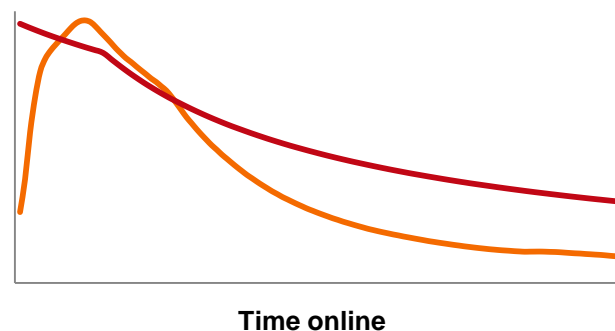


- Targeting reduced Walloons well costs from A\$4.6m in Phase 1 to average A\$2.4m in FY17-23
- New well types (H-V pairs, “Octopus” wells) to increase recovery at lower \$/GJ
- Low permeability areas require more wells in later years

Orana, Talinga

- Higher permeability
- Many wells at 2-3 TJ/day early on – very rapid dewatering

Orana and Talinga



- Optimising well spacing to reduce development costs
- Shut in wells to await demand if needed

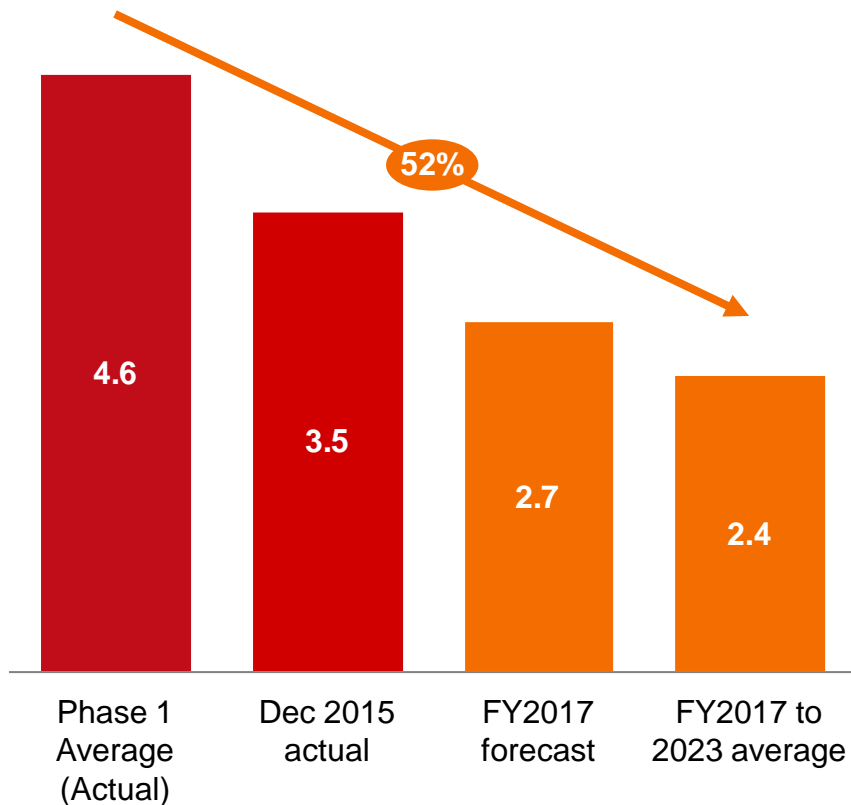
In operated fields, growing from ~300 wells in FY17 to ~500 wells in FY23, for an average of 370 wells per year FY17-23

Origin's push to reduce \$/well and \$/GJ continues through Crystal



Targeting cost per well down >50% from Phase 1

Full costs for an average Walloons vertical well, A\$m



Example Crystal initiatives

No low-value activities.

Reduction in well clean out operations during completions

>6 hours per well

A\$4m per year

New contracting models.

Collaborative Well Delivery model

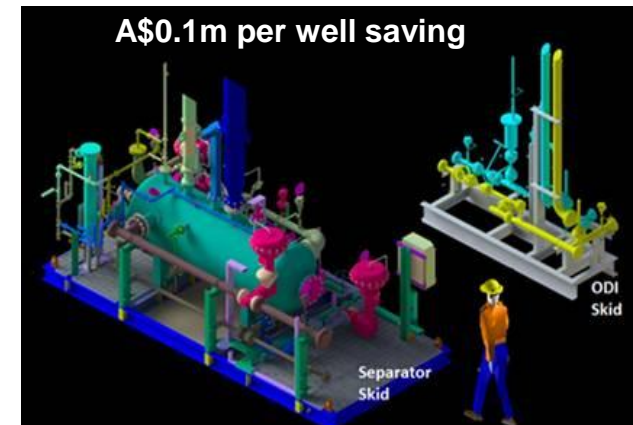
45% of per well

gathering costs

- Consolidates scope
- Incentivises innovation
- Fewer design changes
- Improves safety

Technical innovation.

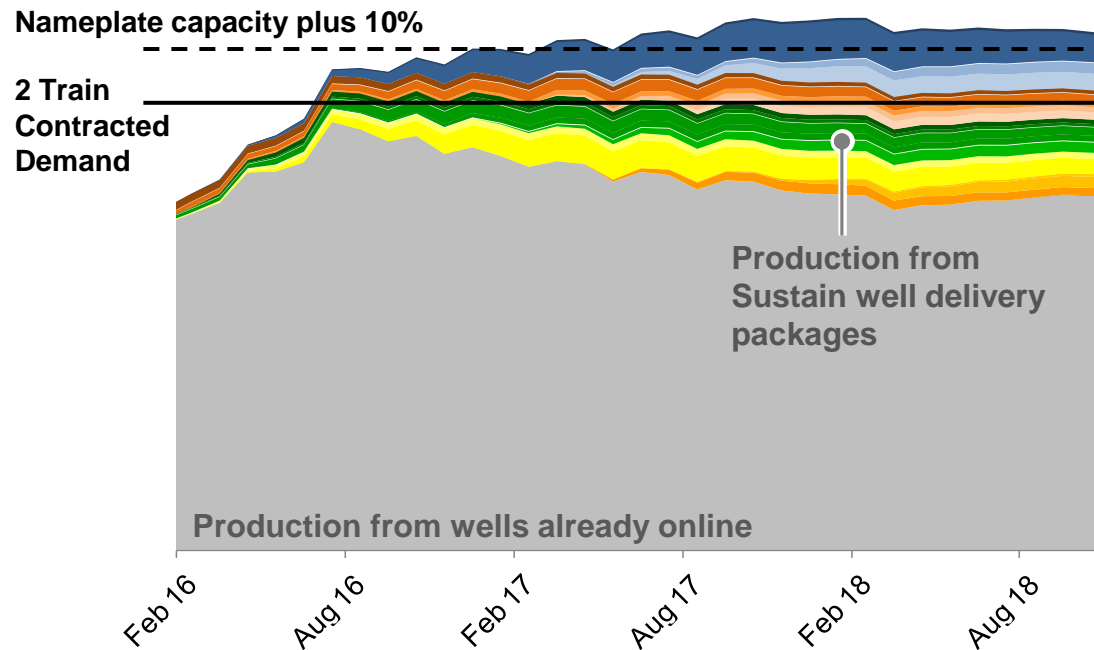
One-day install wellhead skids



Origin is raising the metabolism of learning by bringing wells online several times faster



APLNG Gas Production (TJ/d)



- Delivery Packages of 10-100 wells are ranked based on breakeven price (\$/GJ) and reservoir and execution risks
- At any given time, a surplus of executable Delivery Package options provides flexibility
- Vast reduction in time to bring a well online allows rapid learning and adjustment of the Field Development Plan

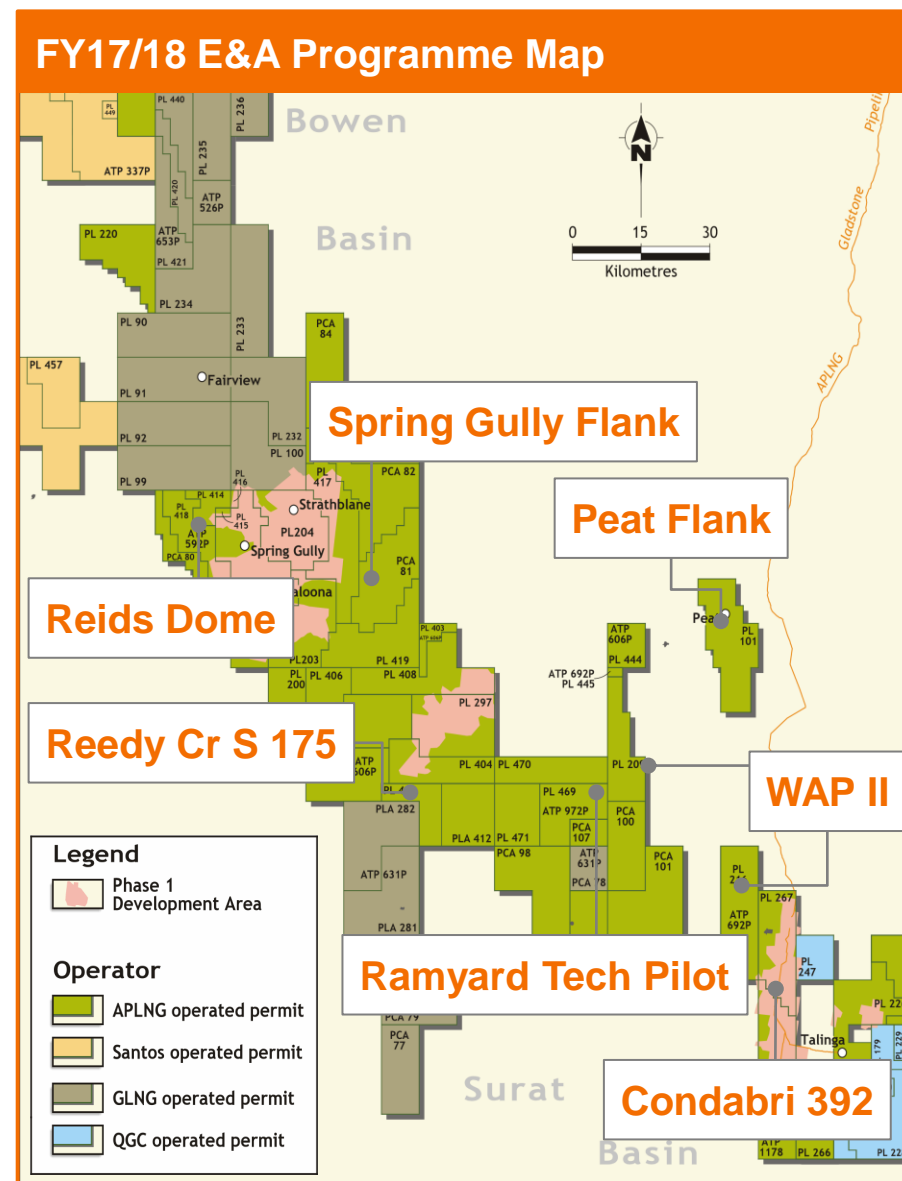
Value of a rapid metabolism

Year drilled	Low-flow wells
2012-14	7-12%
2015	2%
2016	0%

E&A programme focused on appraising new areas and trialling new technologies in FY17/18



Example FY17/18 projects	Scope
Spring Gully Flank	Test horizontal well types in new areas
Peat Flank	
Reedy Cr S 175	De-risk upcoming development; find sweet spots
Condabri 392	
Reids Dome	Technology trials and permeability mapping in lower permeability areas
Walloons Appraisal	
Ramyard Technology Pilot	

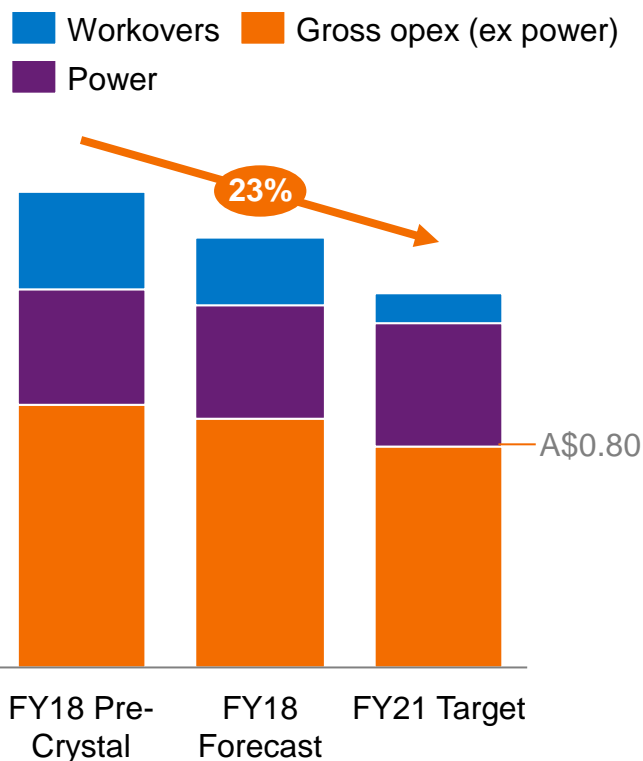


Targeting reduced operating cost by scaling up efficiently and improving reliability



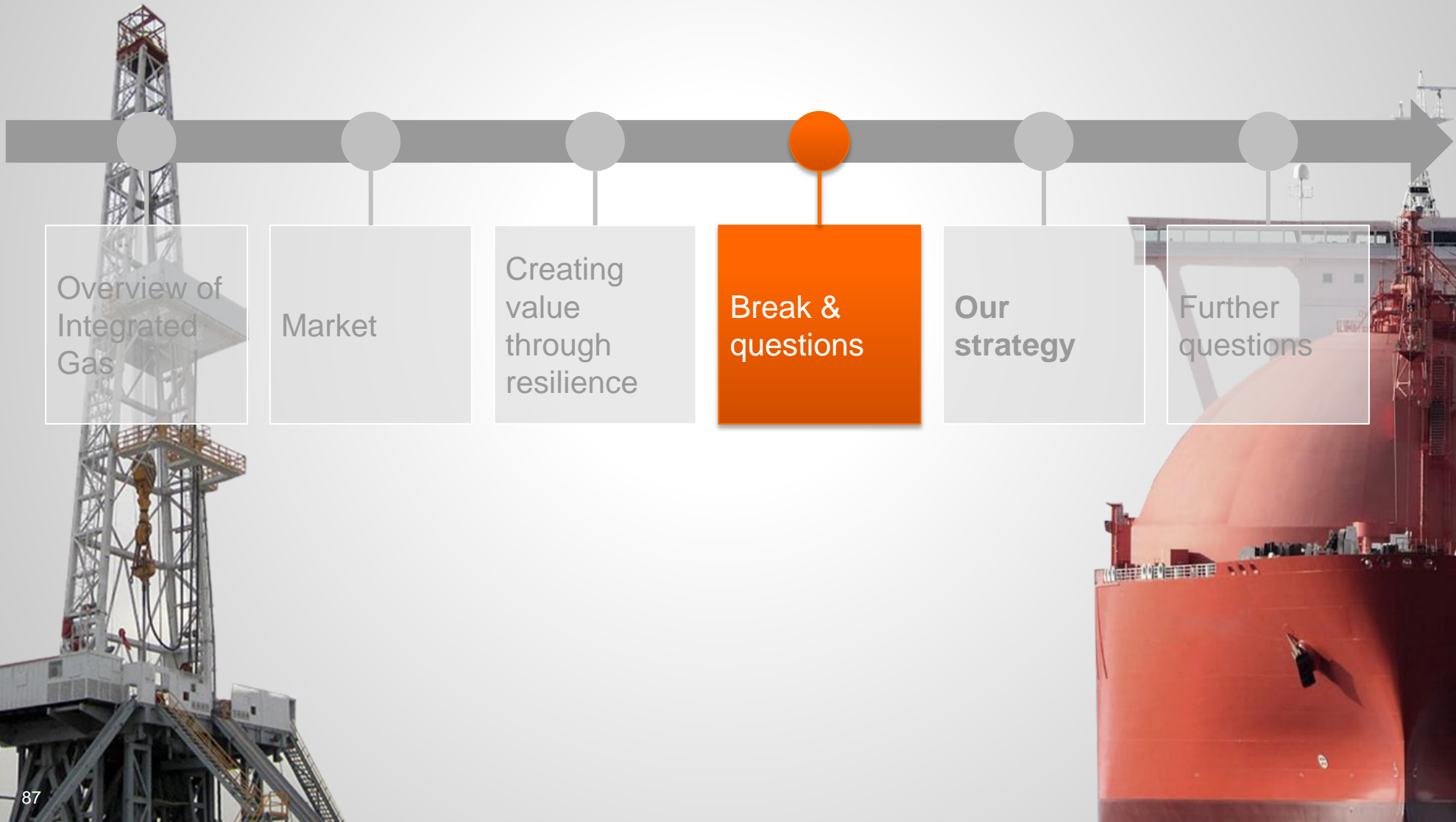
Initiatives to reduce operating costs are in place

APLNG operational costs for operated assets A\$/GJ



Example initiatives to deliver operating cost reductions

Improvement area	Current performance	FY21 target
Operate by exception		
Wells per full time employee		
Standardise work practice		
Eliminate defects	4.4	9.5
Automation process		
Well interventions		
Annual workover costs (A\$m)		
Simple execution practice	116	50
Apply optimal pump technology		



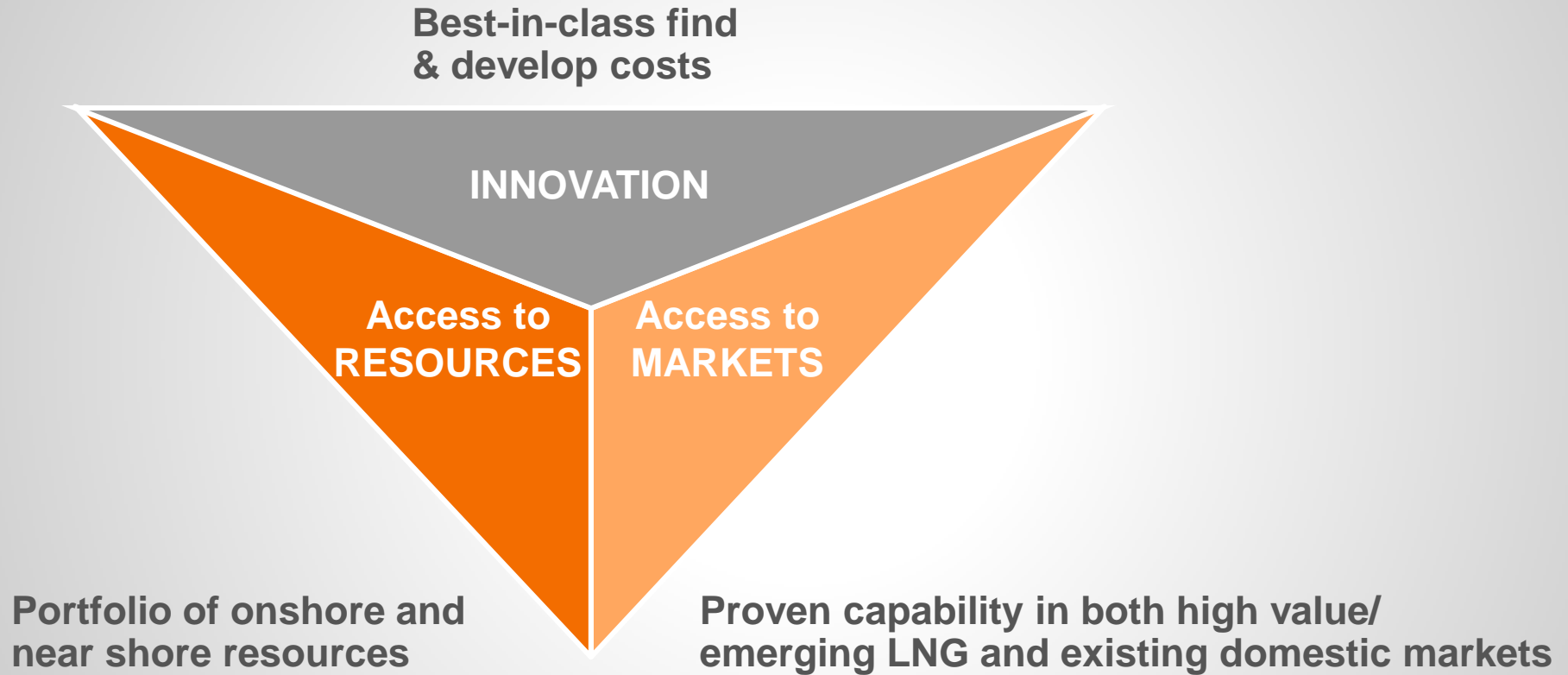
So far today we have covered...



- ✓ Global demand for gas and oil grows
- ✓ From the early 2020s,
 - Global LNG market shifts from being long to short
 - East Coast gas market tightens toward export parity
 - East Coast gas supply gap creates opportunity
- ✓ Australian resources are globally competitive using existing infrastructure
- ✓ Connecting gas resources to export markets enhances value
- ✓ APLNG is nearly complete with robust upstream and downstream performance
- ✓ Crystal provides a strong platform for further innovation



Our strategy is to lower the cost of Australia's vast onshore and near-shore gas resources and connect them to high-value markets

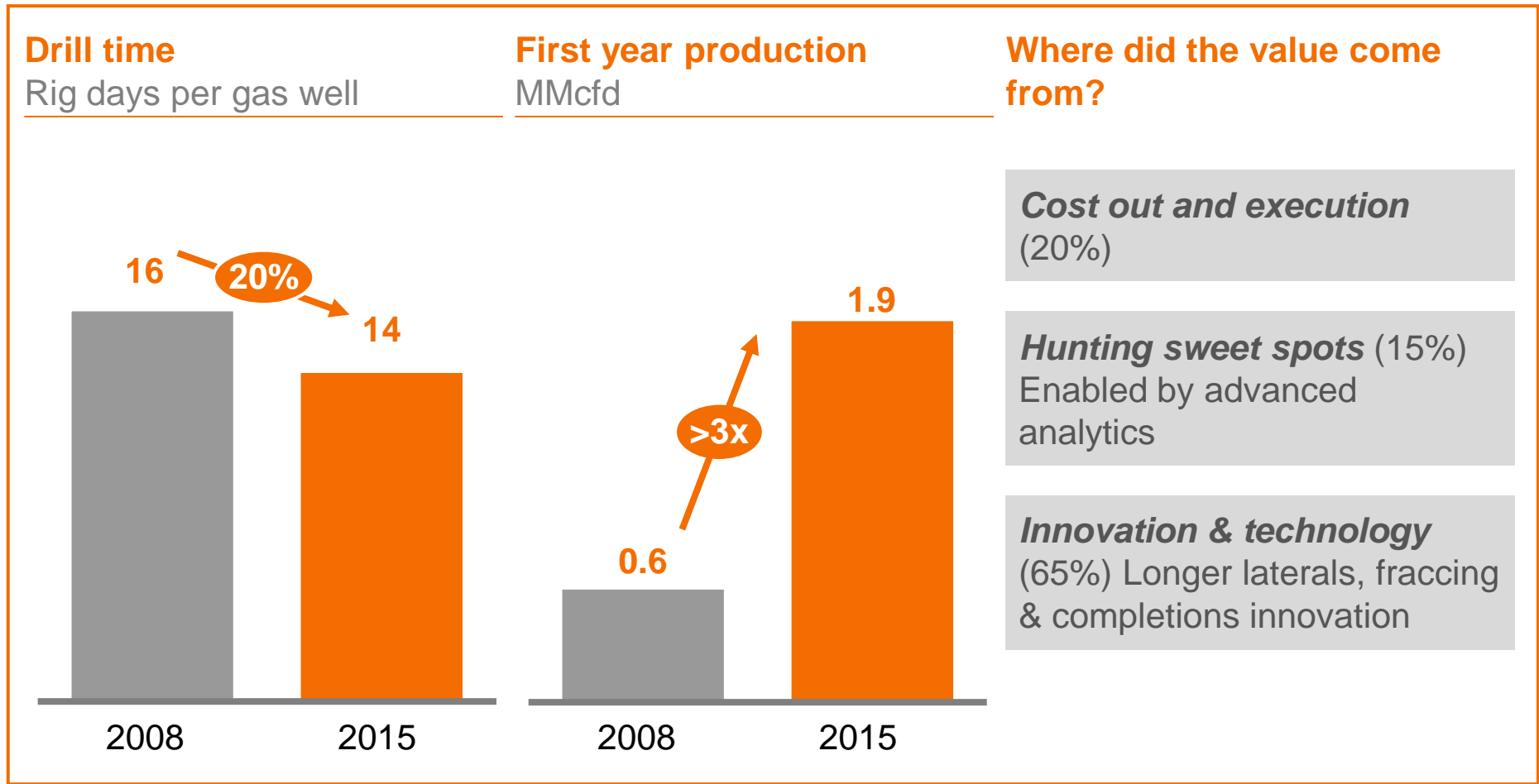


The underpinning capabilities and culture are our competitive advantage

**Best-in-class find
& develop costs**

INNOVATION

Origin is just beginning the CSG learning curve – US shale producers have brought \$/GJ down by 5x in the last decade ...



Source: Navport, Baker Hughes

Crystal is a culture ... and a platform for innovation



Crystal

- Process
- Targets we didn't know how we'd meet
- Any good idea can be implemented
- Bias to action
- Quantifying ideas
- Cross-functional collaboration

10x it – tweaks to foster innovation

Nail the basics

Simple, automated core processes. Clear accountabilities

10x aspirations

Change the industry. 10x, not 5%.

Bigger & better ideas

Scientific method: analyse, experiment, prototype

Accelerate

Fast, fast, fast. Kill failing ideas early. Failed idea ≠ failed career

Scale up efficiently

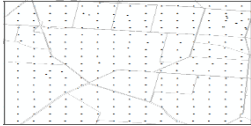

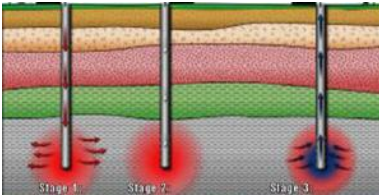
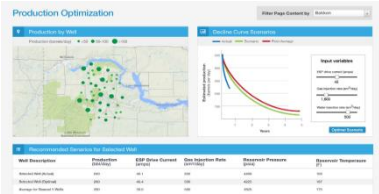
Starve ideas until they are proven

Mobilise and learn

Rapid feedback loop, straight back to engineer

Six current innovation experiments tackle high value levers, while strengthening our innovation culture



		Objective	Technical experiment	Potential annual value	Where we end up
Sweet spots		Optimised well design and field layout	<ul style="list-style-type: none"> Apply to 2016 well pack 12 weeks 	A\$10-30m	Every well is an opportunity to innovate and learn
Cost out		Increase Mean Time To Failure	<ul style="list-style-type: none"> Off-the-shelf app for downhole pumps 6 weeks 	A\$10-20m	Our field learns in real time
Innovation Technology		Cheap compression	<ul style="list-style-type: none"> 10 prototypes 12 weeks 	A\$10-20m	The A\$1m well. A library of options.
		Microbially enhanced recovery	<ul style="list-style-type: none"> 5 depleted high perm wells 16 weeks 	A\$10-20m	Technology to crack currently uneconomic resources
Nail the basics		Portfolio visualisation in real time	<ul style="list-style-type: none"> 2 weeks 	Maximise margin	All our models talk to each other
		Seamless content management in the cloud	<ul style="list-style-type: none"> Implement for end-to-end process 4 weeks, no IT infrastructure 	Better engagement, compliance, data security	We only do value-adding work

A large, inverted triangle is centered on the page. It is divided into three sections by two lines that meet at a point in the center. The top section is a gray triangle. The bottom-left section is a dark orange triangle, and the bottom-right section is a lighter orange triangle. The text 'Access to RESOURCES' is written in white, bold, sans-serif font across the dark orange section.

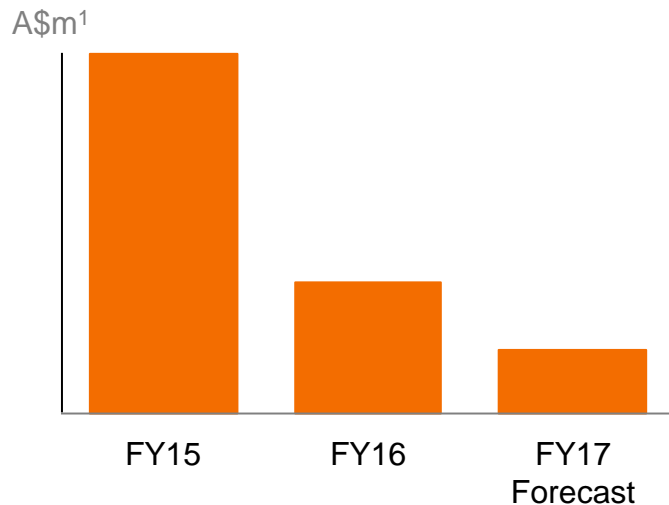
**Access to
RESOURCES**

**Portfolio of onshore and
near shore resources**

Capital spend has been reduced and investment decision making improved



Non-APLNG capital spend reduced



Remaining capital focused on near shore & onshore development and exploration opportunities within existing fields:

- Halladale/Speculant development
- Yolla compression project
- Beetaloo exploration

Better investment decisions

Origin has **reviewed past E&P investments** and improved **capital investment process** and **decision analytics**.

This has resulted in a new **capital decision making process** with:

- strict enforcement of **project stage gates**
- strengthened use of **probabilistics**;
- requirement for structured **project pre-mortems** to challenge technical, economic, commercial, organisational and political risks;

and a refocus to on-shore and near-shore E&P.

Halladale Speculant

Expected to be online early FY2017
Drives increased production and earnings in FY2017



- Speculant 1 and Speculant 2 flow test results as expected
- Robust economics, fast payback
- Gas sales optimised between domestic market and East Coast LNG projects
- Gas production uses latent capacity in existing Otway gas plant

Yolla

Yolla MLE Compression project is **progressing to schedule**
Increased production at BassGas Q2 calendar 2017



- Expected to be handed over to operations Q2 calendar 2017
- Existing BassGas production facilities utilised

Beetaloo

Beetaloo **exploration program is continuing on track**
Confirmation of extensive, gas saturated and over-pressured shales



- Best acreage in the Beetaloo Play Fairway
- Low finding costs with potential for substantial efficiency gains
- Stacked, thick target intervals & quality source rocks. Gas-in-place metrics: 60-80 Bcf/km² in Middle Velkerri target alone
- Significant resource potential

Non-APLNG execution focused on the highest value projects and exploration



Kupe – New Zealand



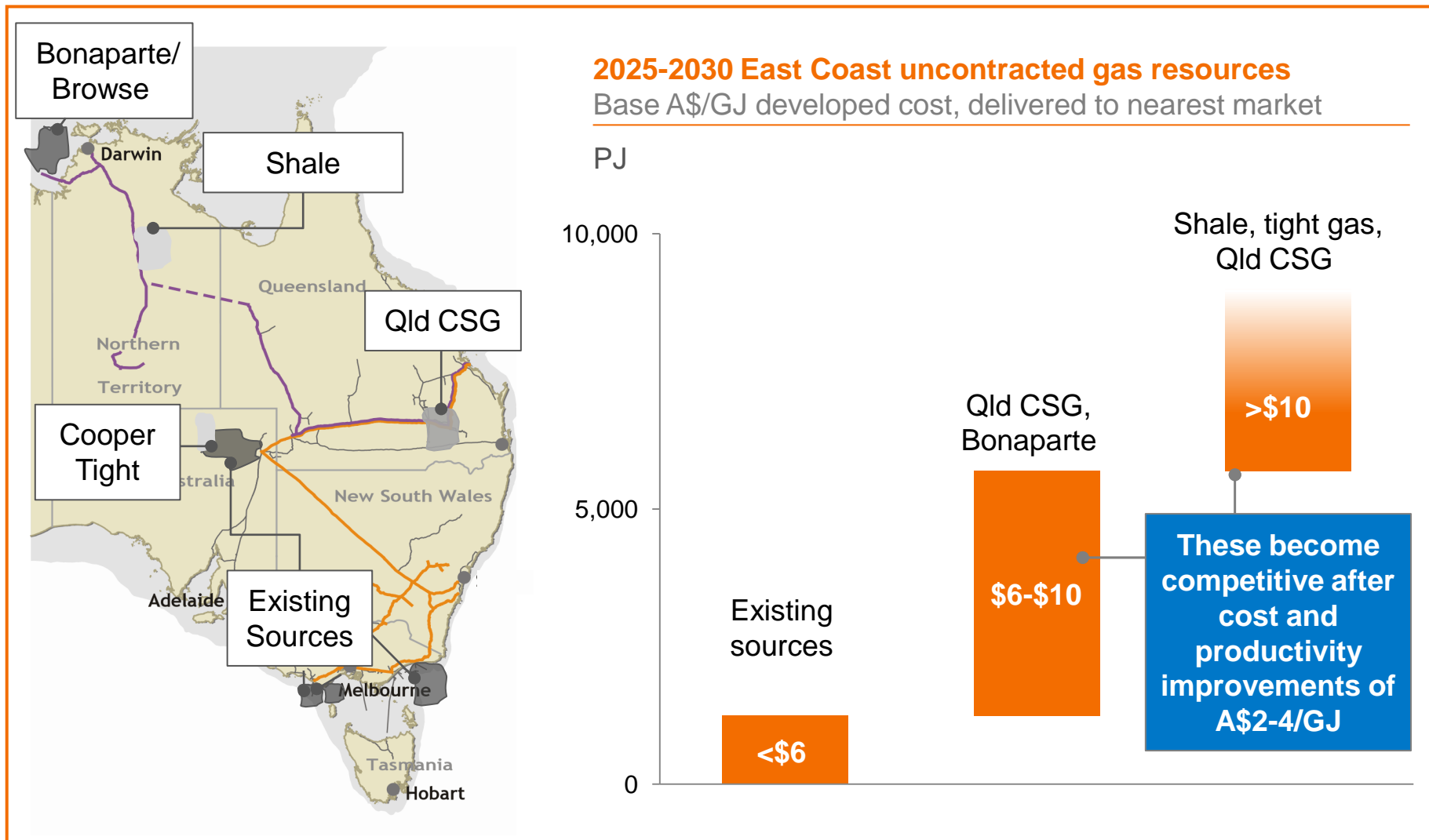
- Field performing strongly compared to prior expectations
- Expect reserves upgrade for Origin via 30 June 2016 reserves report
- Improved performance allows deferral of development capital

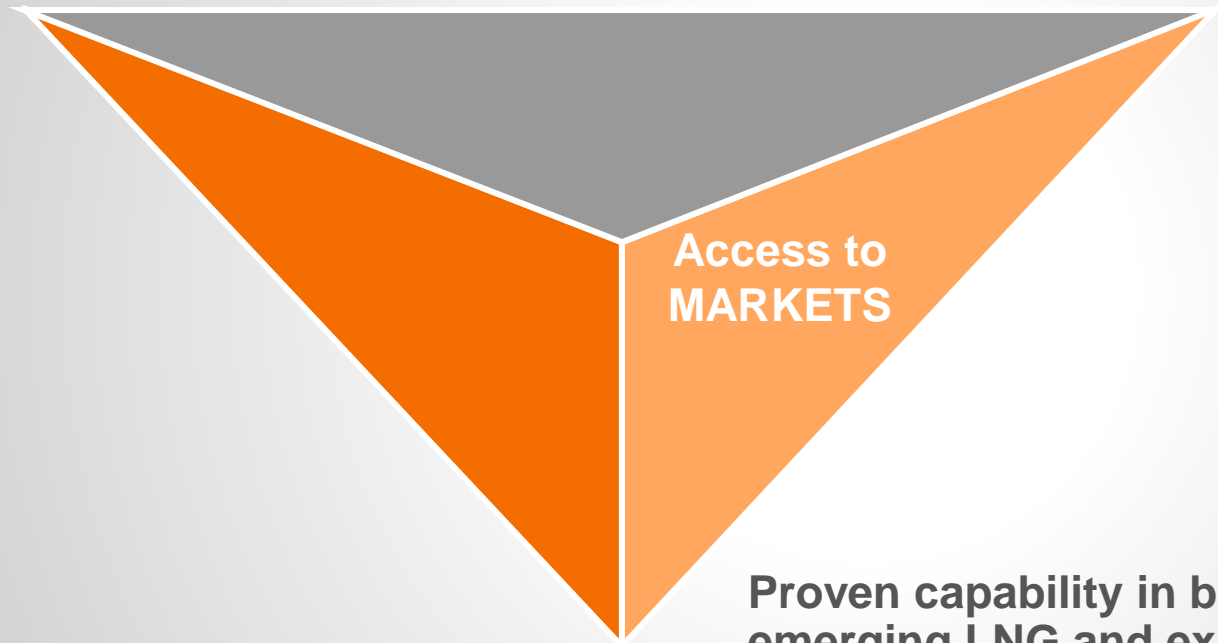
Western Australia



- Waitsia well test confirms excellent reservoir properties at depth
- Expect reserves upgrade for Origin via 30 June 2016 reserves report
- First 10 TJ/d expected online by Q1 FY17
- Sale process progressing with a number of interested parties

Applying Origin's low cost development capability today could make vast new onshore resources competitive





Origin is creating a portfolio of resources & market positions to maximise value



Portfolio of markets

Domestic

- Supplying Origin's domestic Energy Markets gas & electricity portfolio
- Sales to East Coast LNG projects, industrial gas users in Northern and Southern states

Emerging LNG markets

- China, India, Middle East, South East Asia, South America
- ENN –5 years from FY19, 0.5mtpa
- Middle East & India – FY16-18 multiple cargoes at fixed price

Origin will add LNG market positions over time



Portfolio of resources

Producing assets with development options

- Cooper
- Otway
- Bass Gas

Exploration and development assets

- Ironbark
- Beetaloo / Cooper unconventional
- Bonaparte/Browse

LNG offtake

- Cameron LNG from 2018

Future near shore & onshore resources

How we create value

Market led

- LNG buyers can pull Origin's assets 'forward in the queue' to develop

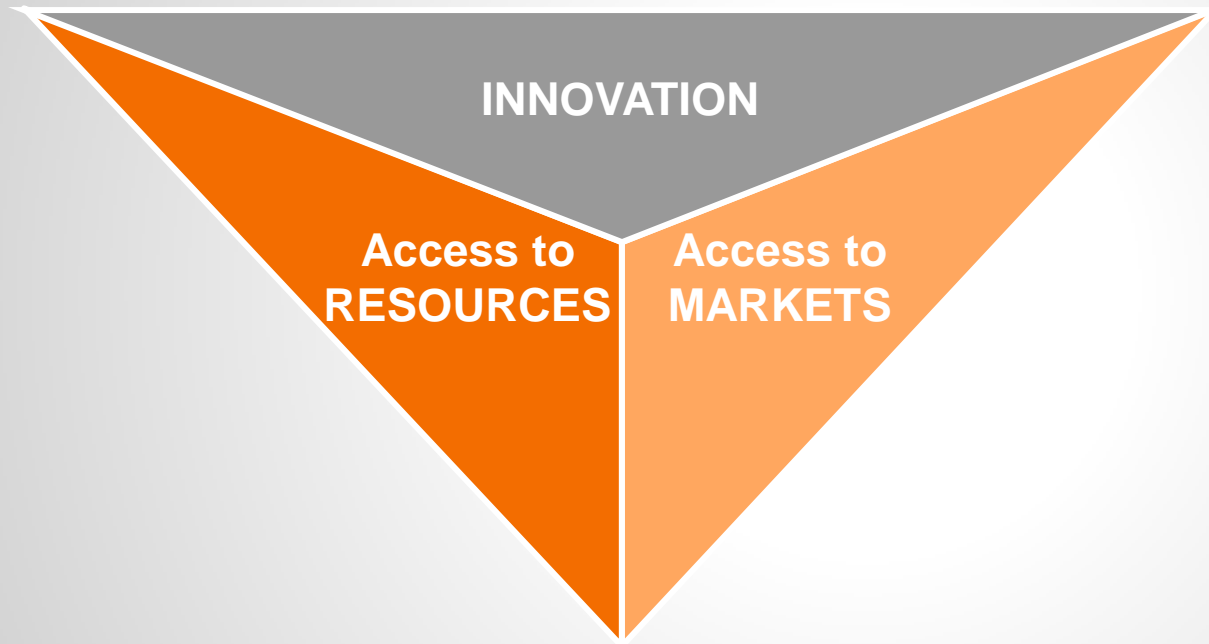
Optimise portfolio

- Lowest cost supply for chosen market positions through resource development timing, release of existing supply, and third party purchases
- Optimal market mix between domestic and LNG
- Delivered ex-ship sales

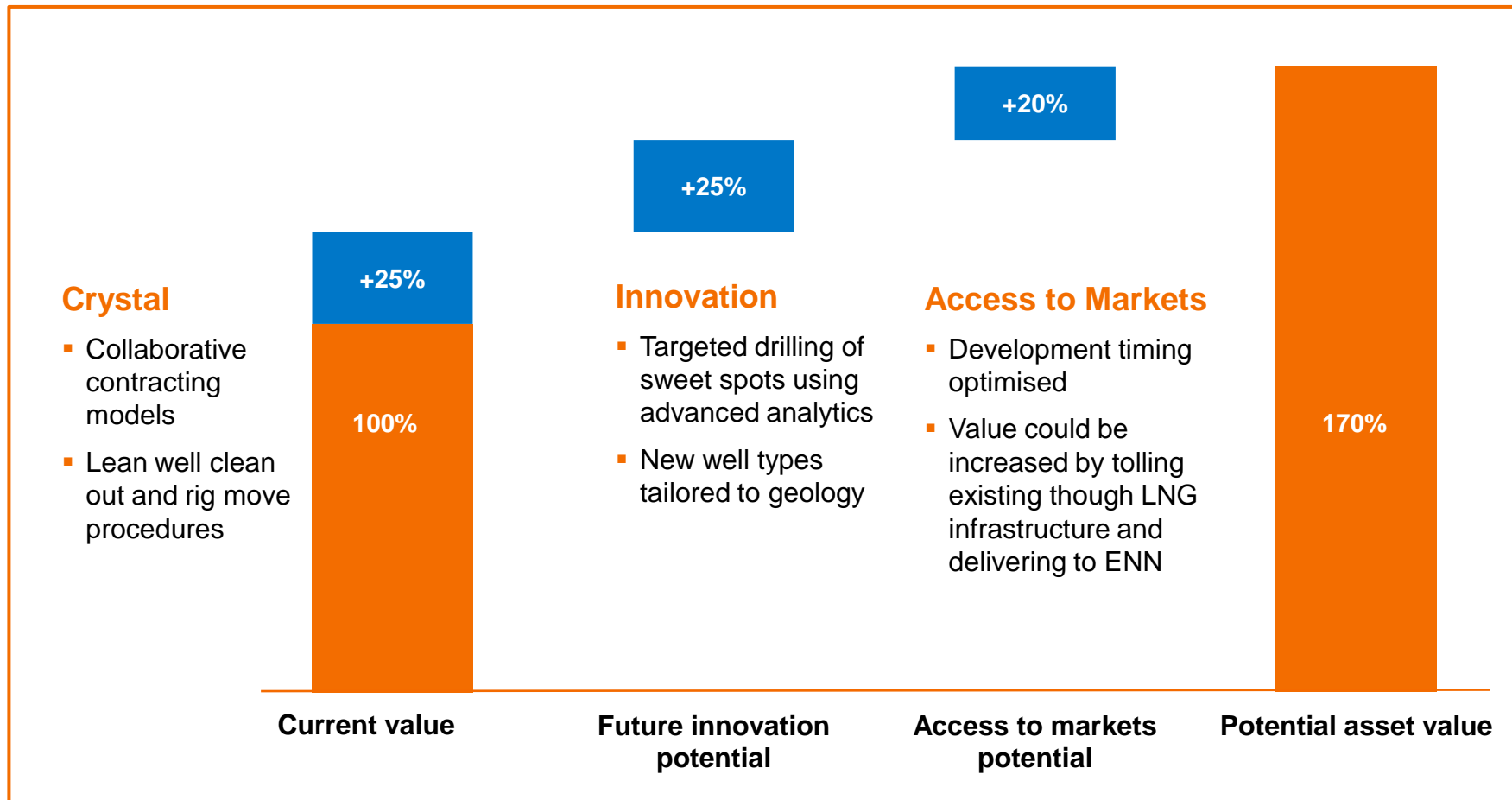
Reduce risk

- Exposure to different energy indices provides earnings diversification

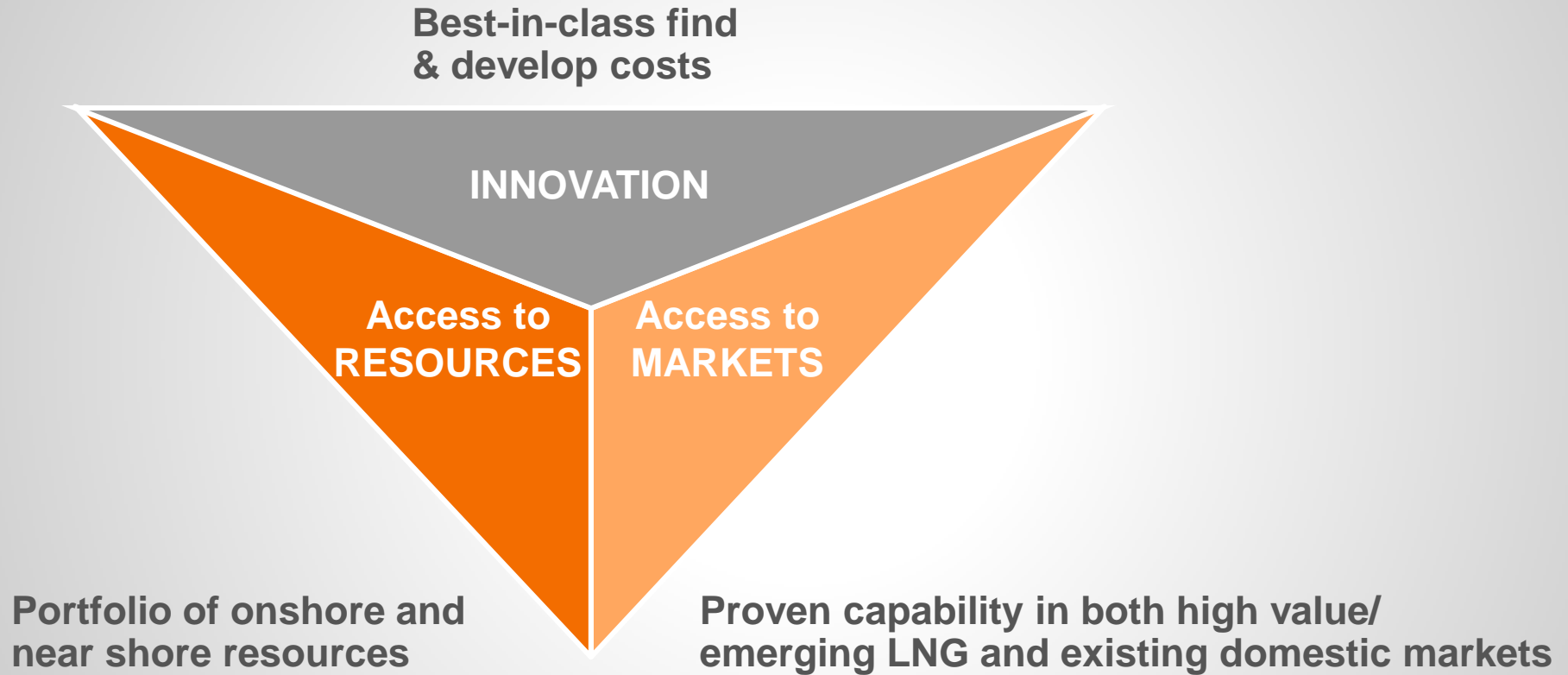
An illustration of the strategy: Lowering the cost of Ironbark's resources and connecting them to ENN



Ironbark is economic today. Additional value can be created through further innovation, access to LNG markets and optimising the timing of the investment decision



Our strategy is to lower the cost of Australia's vast onshore and near-shore gas resources and connect them to high-value markets



The underpinning capabilities and culture are our competitive advantage

Closing Comments

Grant King, Managing Director

In order to drive improved returns for shareholders in a low oil price environment, Origin's priorities are:



ENERGY MARKETS

GROWING CONTRIBUTION FROM ENERGY MARKETS

- Continue to build customer loyalty and trust
- Maximise value of core business
- Creating new energy solutions
- Engaged, high performing teams



INTEGRATED GAS

GROWING PRODUCTION AND REDUCING COST IN INTEGRATED GAS

- Continue execution momentum
- Deepen resilience to sustained low oil price
- Secure new high value markets
- Manage portfolio with discipline
- Building the capability and culture to deliver



ORIGIN ENERGY

MAINTAINING ADEQUATE FUNDING AND AN APPROPRIATE CAPITAL STRUCTURE

- Achieve targeted asset sales of at least \$800 million
- Reduce debt below \$9 billion by FY2017
- Ongoing debt reduction

Appendix

Curtis Island - August 2014 – Last Tour





APLNG can distribute to shareholders above a cash cost breakeven oil price of US\$42/boe



Cash cost (targeted average steady state FY17-23)	Previous Guidance A\$b	Updated guidance A\$b	Previous Guidance US\$/boe ^{1,2} (69mmboe)	Updated Guidance US\$/boe ^{1,2} (62mmboe)
A Capital expenditure – Sustain	1.2-1.4	1.4		
B Capital expenditure - E&A	0.1	0.1		
C Operating expenses	1.5	1.3		
Less: Domestic revenue	(0.4)	(0.4)		
Operating costs	2.4–2.6	2.4	23-25	27
Project finance interest	0.4	0.4	5	5
Debt reduction commences	2.8-3.0	2.8	28-30	32
Project finance principal	1	1	10	10
D Distribution commences	3.8-4.0	3.8	38-42	42

- A** In operated fields, additional wells in later years in lower permeability areas are offset by lower well costs. Increase in non-operated costs
- B** E&A is required to support APLNG volumes. May invest more to capture opportunities
- C** Operating expenditure corrected to exclude internal tariffs and updated for expected improved controllable costs
- D** A further US\$2-3/boe opportunity exists to monetise production above nameplate and realise further cost compression associated with low oil

After correcting the conversion factor to US\$/boe from 69 mmboe to 62 mmboe, APLNG's distribution breakeven is US\$42/boe on average

Upstream

	Estimated Steady State Metrics
Drilling rates	<ul style="list-style-type: none"> • Operated: ~370 single vertical equivalent wells per year on average • Non-operated: participate in ~300 single vertical equivalent wells per year on average
Gas Processing Facilities	<ul style="list-style-type: none"> • Spring Gully (3 GPF with capacity of 240TJ/day) • Talinga (1 GPF with capacity of 120TJ/day) • Orana (2 GPF with capacity of 200TJ/day) • Condabri (6 GPF with capacity of 540TJ/day) • Combabula (3 GPF with capacity of 300TJ/day) • Reedy Creek (2 GPF with capacity of 180TJ/d) • Eurombah Creek (2 GPF with capacity of 180TJ/d)
Water Treatment Facilities	<ul style="list-style-type: none"> • Talinga (20 ML/d) • Spring Gully (12 ML/d) • Reedy Creek (40 ML/d) • Condabri (40 ML/d)

Downstream

	Estimated Steady State Metrics
LNG production	<ul style="list-style-type: none"> • Two train capacity of 9.0 mtpa • ~730TJ/day gas rate per train (including fuel) • ~30,000m³/day of LNG per train
LNG Storage Tanks	<ul style="list-style-type: none"> • Capacity - 165,000m³ per tank • ~3 days to fill a Tank when two trains running
Cargoes	<ul style="list-style-type: none"> • Ship approximately every 3 days with two trains <ul style="list-style-type: none"> - ~120 cargoes per annum from two trains (2-3 cargoes per week) - ~3.9 PJ LNG per cargo • Ship Loading rate 12,500m³/hr (~13hrs to fill a 165,000m³ ship)
Maintenance	<ul style="list-style-type: none"> • Minor maintenance (one train at half rate for 2-5 days) every 6 months • Major Maintenance (one train at no rate for 30 days) every 3-5 years

APLNG Reference Information



LNG Sales

Reference	Metric	Source
LNG Export Contracts Terms	<p>20 year contracted off-take agreements with Sinopec and Kansai Electric, based on JCC - linked pricing:</p> <ul style="list-style-type: none"> - Sinopec 4.3 mtpa; signed April 2011 - Sinopec 3.3 mtpa; signed January 2012 - Kansai 1.0 mtpa; signed June 2012 	<p>ASX releases:</p> <p>21 April 2011 20 January 2012 29 June 2012</p>

Project Finance

Reference	Metric	Source
Quantum	US\$8.5 billion facility	ASX Release 24 May 2012
Banks	US EXIM, China EXIM, Commercial Banks	ASX Release 24 May 2012
Terms	<p>16 – 17 years from inception</p> <p>2028 – Commercial banks</p> <p>2029 – US EXIM</p> <p>2028 – China EXIM</p>	ASX Release 24 May 2012