



ASX Announcement

Tuesday, 14 May 2019

Investor Briefing

ERM Power Limited (ASX: EPW) is hosting an investor briefing today in Sydney for institutional investors and equity analysts. The briefing outlines how ERM Power is responding to the energy market's transition to renewables. This operationally focused briefing is a deep-dive into the evolving market and the opportunities it presents ERM Power.

Please find attached the presentation related to this briefing.

Phil Davis
Group General Counsel & Company Secretary
ERM Power Limited

About ERM Power

ERM Power is an Australian energy company operating electricity sales, generation and energy solutions businesses. The Company has grown to become the second largest electricity provider to commercial businesses and industrials in Australia by load¹. A growing range of energy solutions products and services are being delivered, including lighting and energy efficiency software and data analytics, to the Company's existing and new customer base. The Company operates 662 megawatts of low emission, gas-fired power stations in Western Australia and Queensland.

¹ Based on ERM Power analysis of latest published information.



ERM Power and the transition to renewables

Investor Briefing

14 May 2019

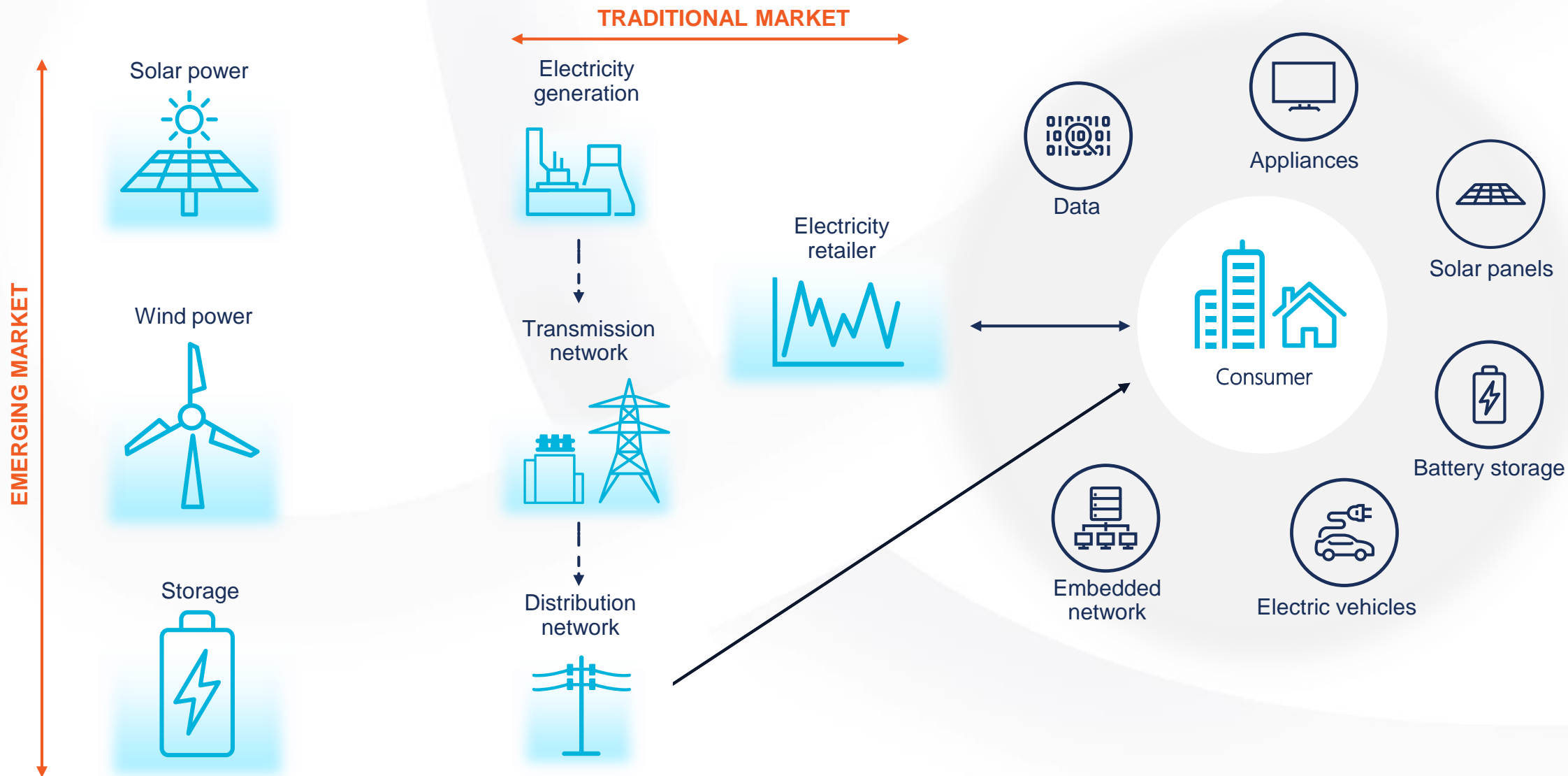


Overview

Jon Stretch, CEO

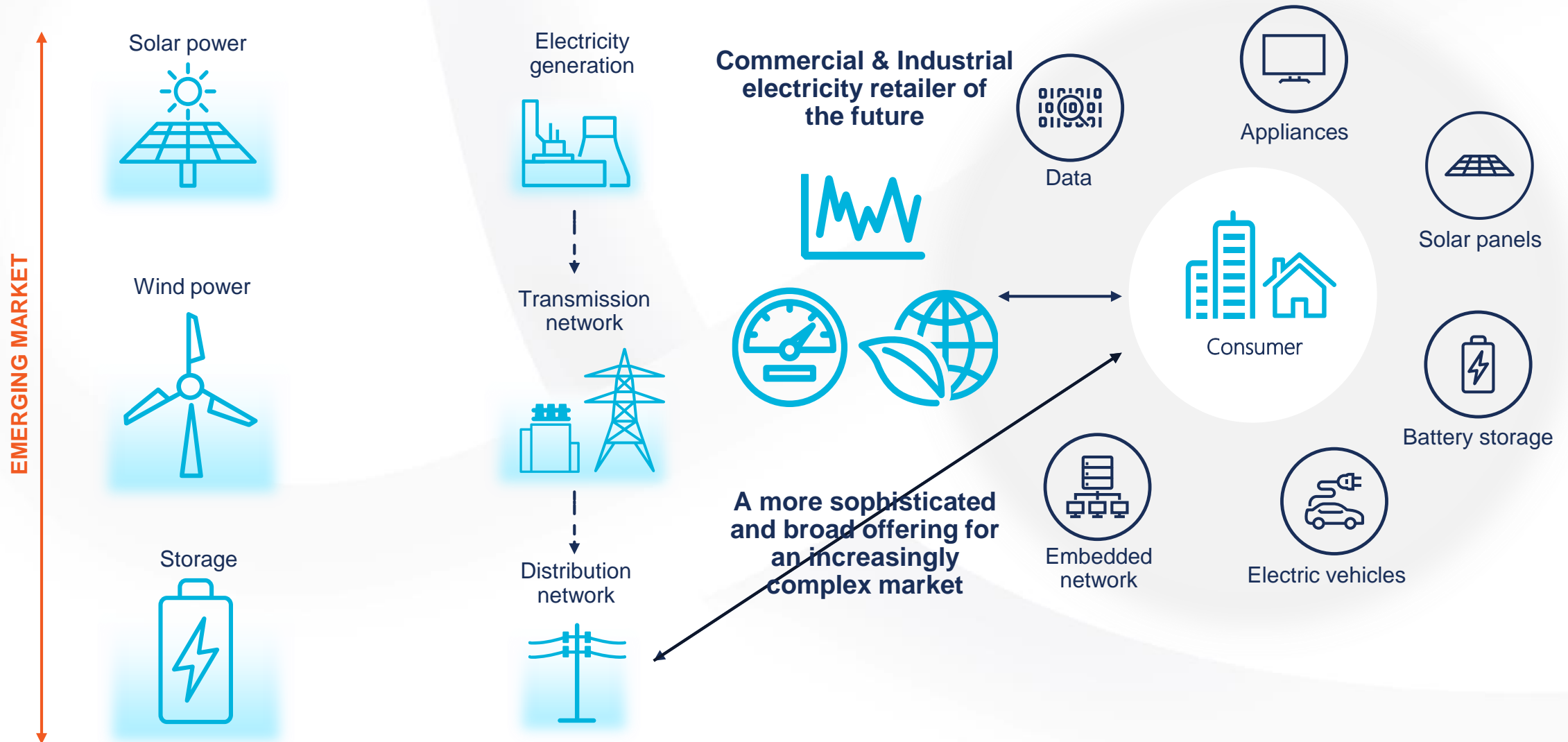
Energy market and environment in Australia

Seizing opportunities in a changing market



Energy market and environment in Australia

Seizing opportunities in a changing market



Meeting the end to end customer supply and demand needs

Seizing opportunities in a changing market



Peaking
Generation &
Wholesale Markets



Retail

Customers want help to:



Manage volatility
through price certainty



Save money



Build energy
productivity



Make better
choices through data
insights



Improve
sustainability



Generate revenue
from energy assets



Energy Solutions



Culture

Record prices and public policy failing

Energy solutions rationale more powerful than ever

ERM Power Strategic Growth Path

- Leverage share of market and mind
- **Supply:** make the wholesale market work best for customers (wholesale shape, PPAs, Strategically Timed Energy Procurement)
- **Demand:** improve energy productivity (customer retail shape, consumption reduction, monetise in wholesale market)



- Exited US to focus on core business and growing opportunities in Australia
- Acquisitions to build Energy Solutions capability and proposition
- \$60m of capital being reserved for growth

Our credentials

Reducing cost, consumption and emissions



Experienced

10 years of unprecedented growth in Australia



Consistently high satisfaction

Employees, customers and intermediaries: 91% of employees are proud to work for ERM; 88% of customers satisfied or very satisfied; 89% broker satisfaction



Second largest electricity retailer

Second largest electricity retailer to commercial and industrial customers in Australia with 22% of market by electricity load and 24% by customer number



Energy Solutions

Only provider of end-to-end energy solutions, driving down consumption for cost and environmental benefits



Gas-fired peaking generation

Oakey and Neerabup Power Stations



Renewables

Offtake agreements underpinning solar and wind farms. First of a new generation of renewable derivative products



Wholesale market participant

Australia's largest wholesale buyer and one of the largest traders/hedgers of electricity, gas and renewables in Australia



Australian owned

ASX-listed; Australian owned and operated



Demand response

One of the largest programs in the National Electricity Market



Batteries

Remote dispatch of battery technology



Wholesale Markets and Generation

David Guiver, EGM Wholesale Markets

The regulatory landscape

Experts in navigating an evolving environment

ERM Power is well positioned to manage and implement upcoming regulatory changes including:

- Introduction of the Retailer Reliability Obligation (1 July 2019)
- Introduction of the 5 minute settlement (1 July 2021)
- Potentially a new national emissions policy



Electricity price curve

Market remains volatile and uncertain causing price increases

Victoria

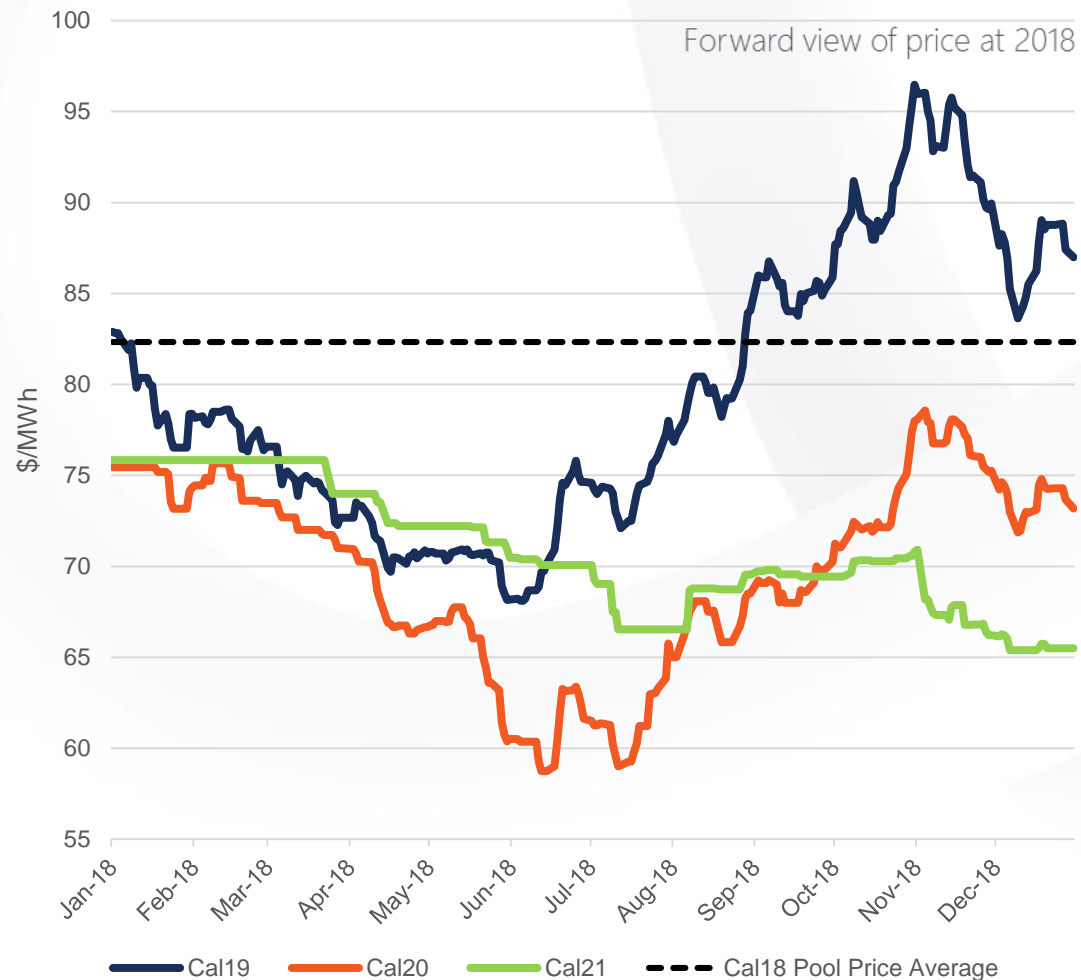


- Year-on-year forward contract prices lower
- However a trend of contract prices increasing as time elapses
- Largely driven by a combination of:
 - Reducing reliability of existing generation fleet
 - Delay in new generation projects connecting to the grid and/or reaching full dispatch capacity
 - Market changes and increased project costs making some planned projects unviable in the near term
- Consistent situation across the larger NEM states

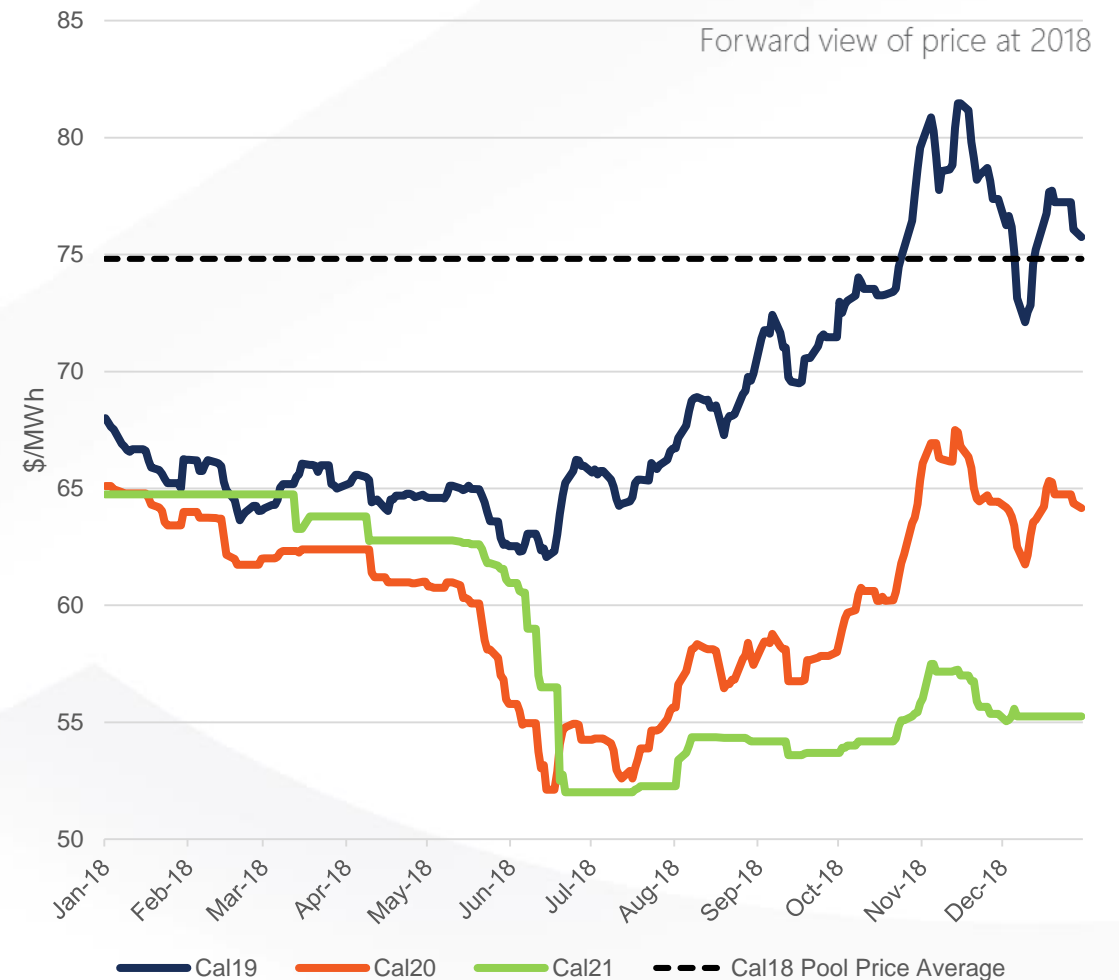
Electricity price curve

Market remains volatile and uncertain causing price increases

New South Wales



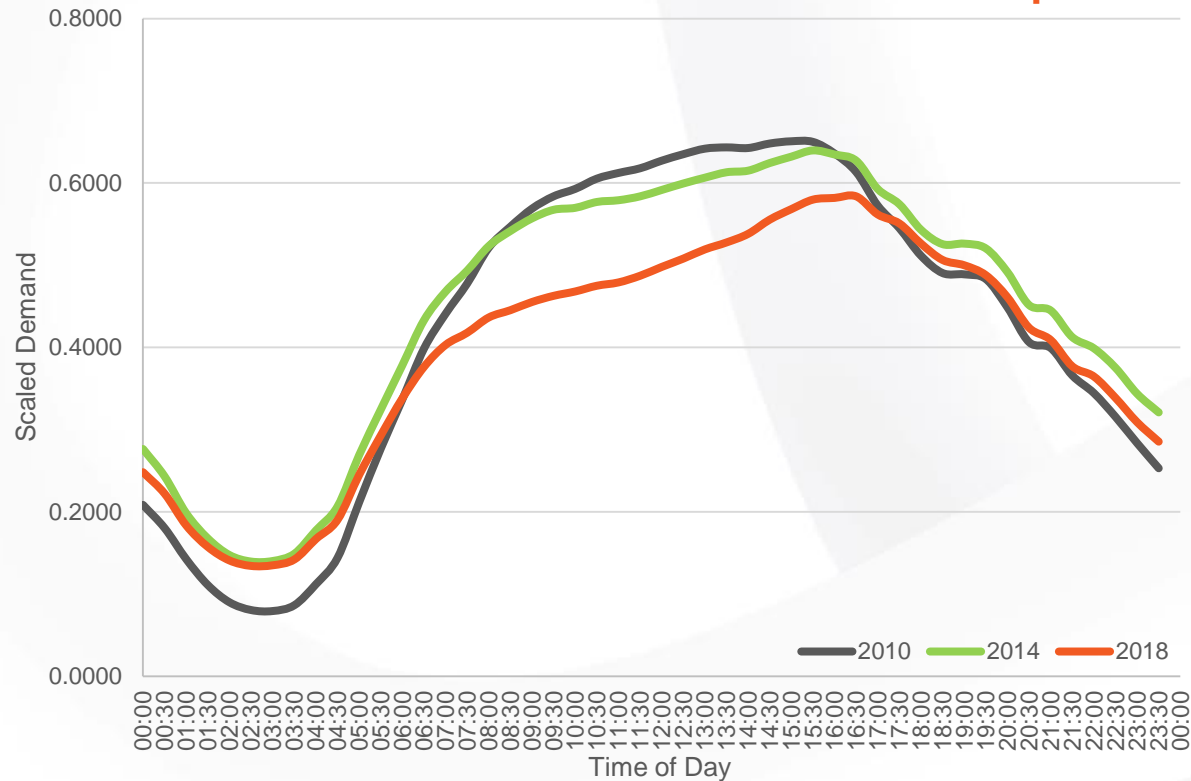
Queensland



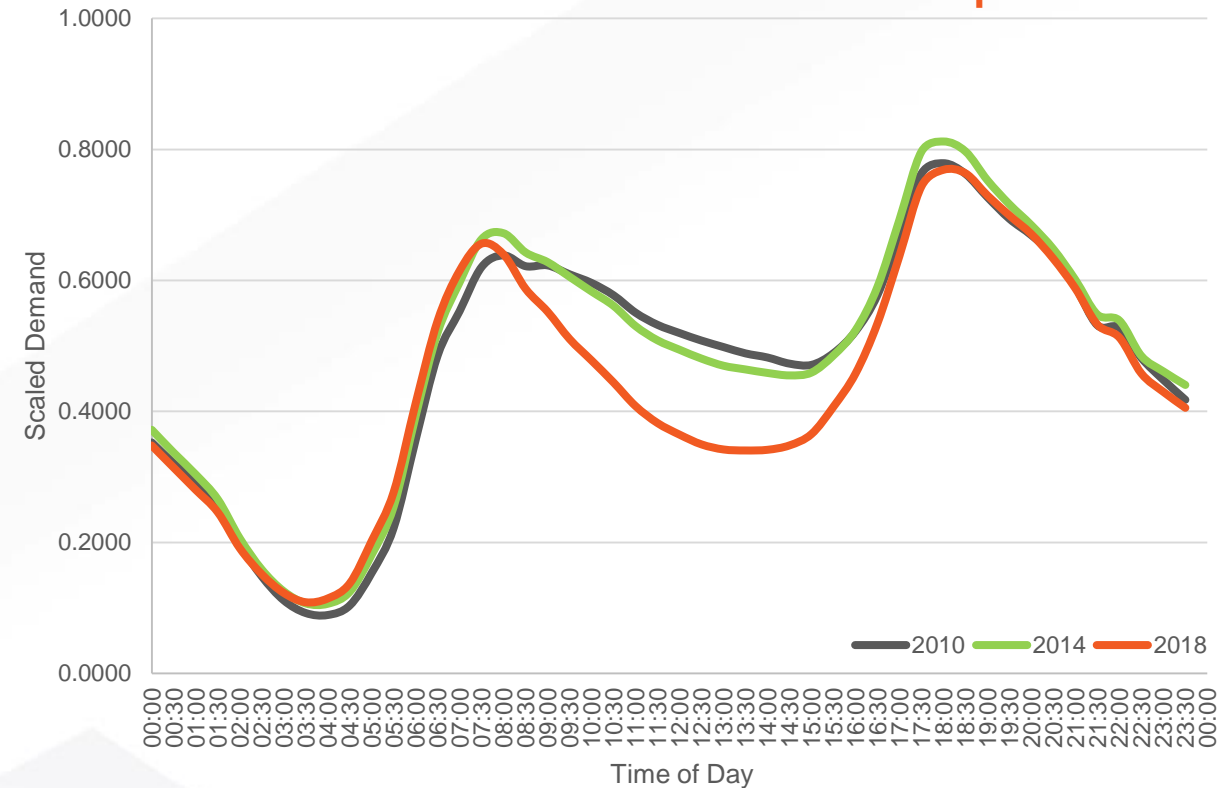
Changing demand profiles

Price impact and dispatch of changing energy mix

NSW Summer Demand Shape



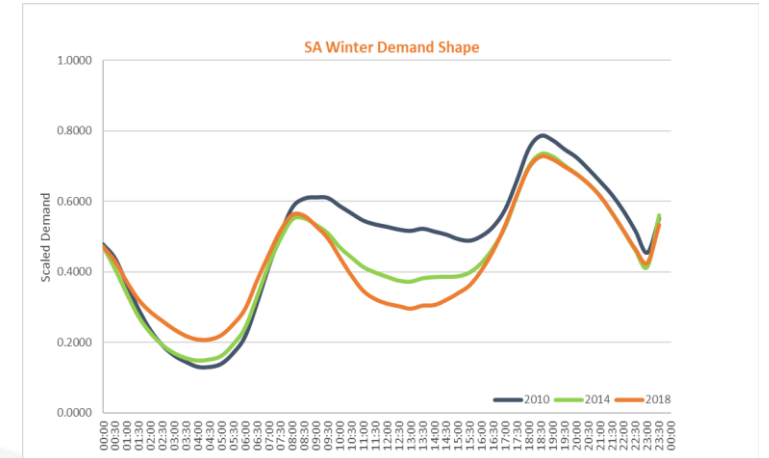
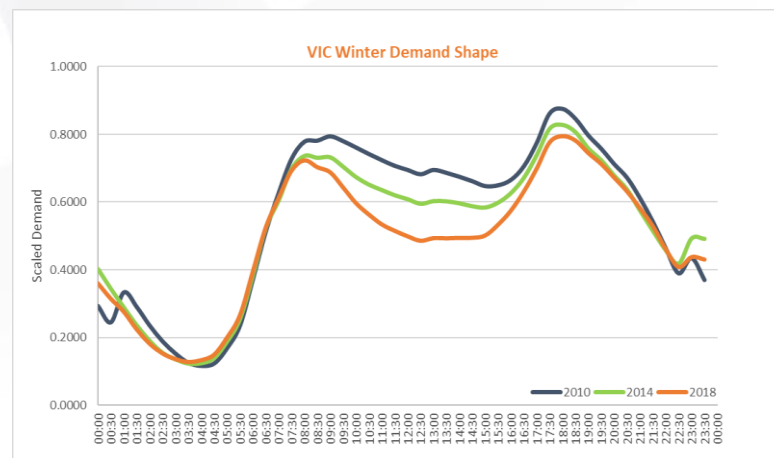
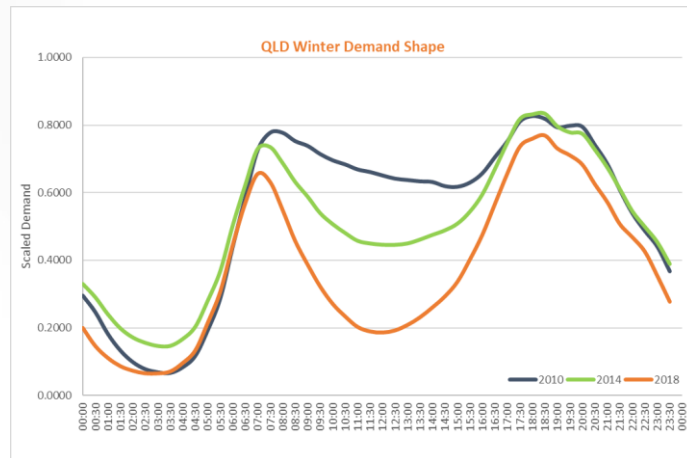
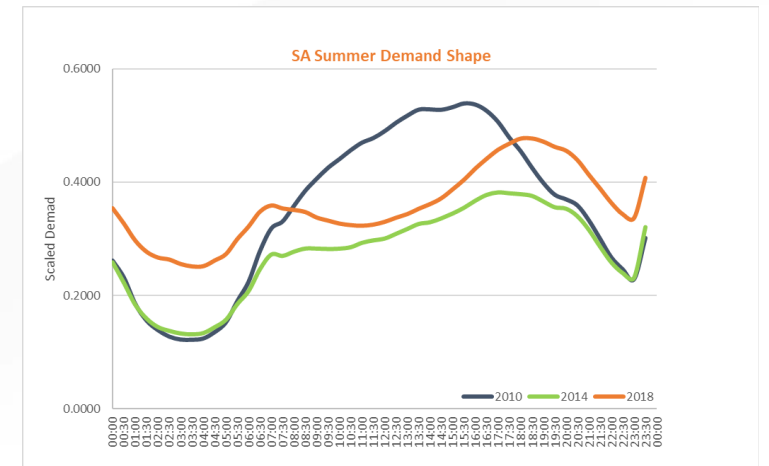
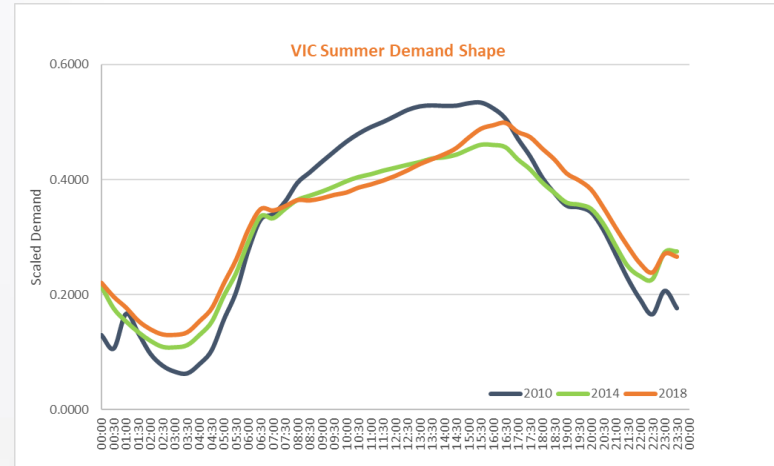
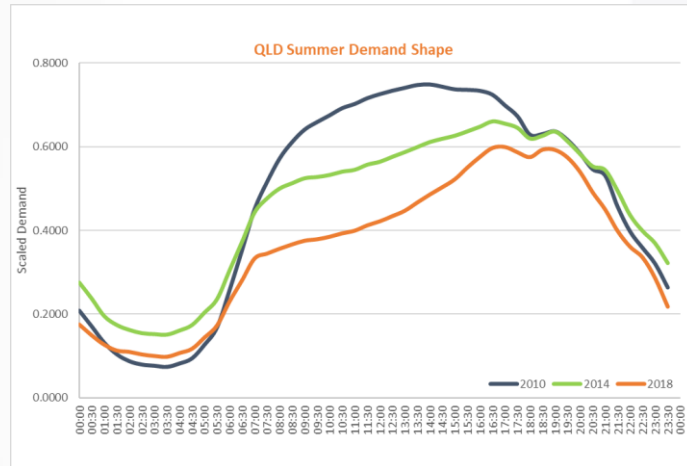
NSW Winter Demand Shape



- Demand profile changes observed in all mainland NEM states
- Impacts of solar (roof top and large-scale PV) most observable
- Different implications for winter and summer months
- Change in demand profiles result in changes to “time of day pricing”

Changing demand profiles

Price impact and dispatch of changing energy mix

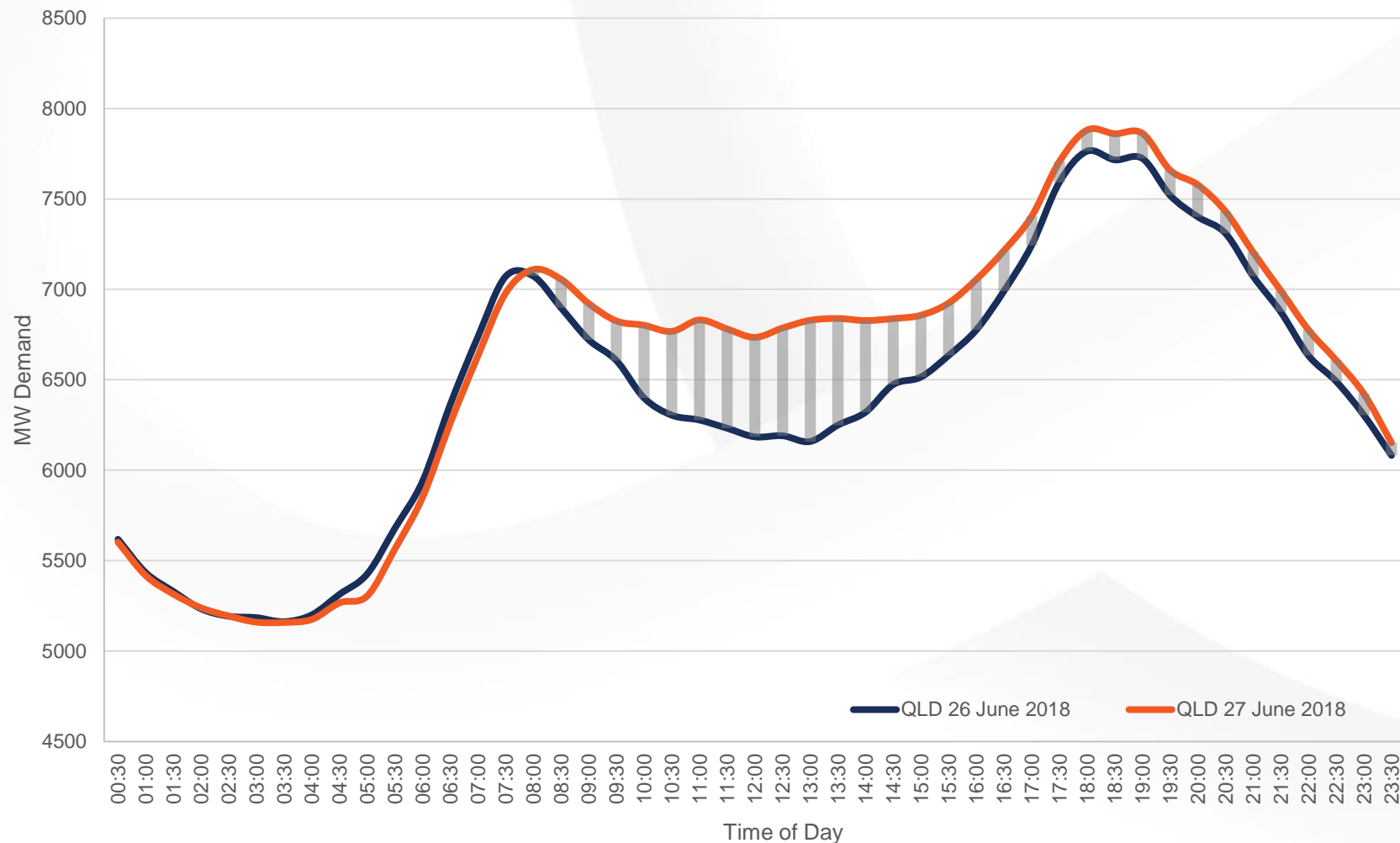


- Demand profile changes are more severe in some states, however, overall trends are broadly consistent

Day to day demand distributions

Highly sensitive to climatic conditions beyond temperature

QLD Cloudy vs. Non-Cloudy Day Demand 2018

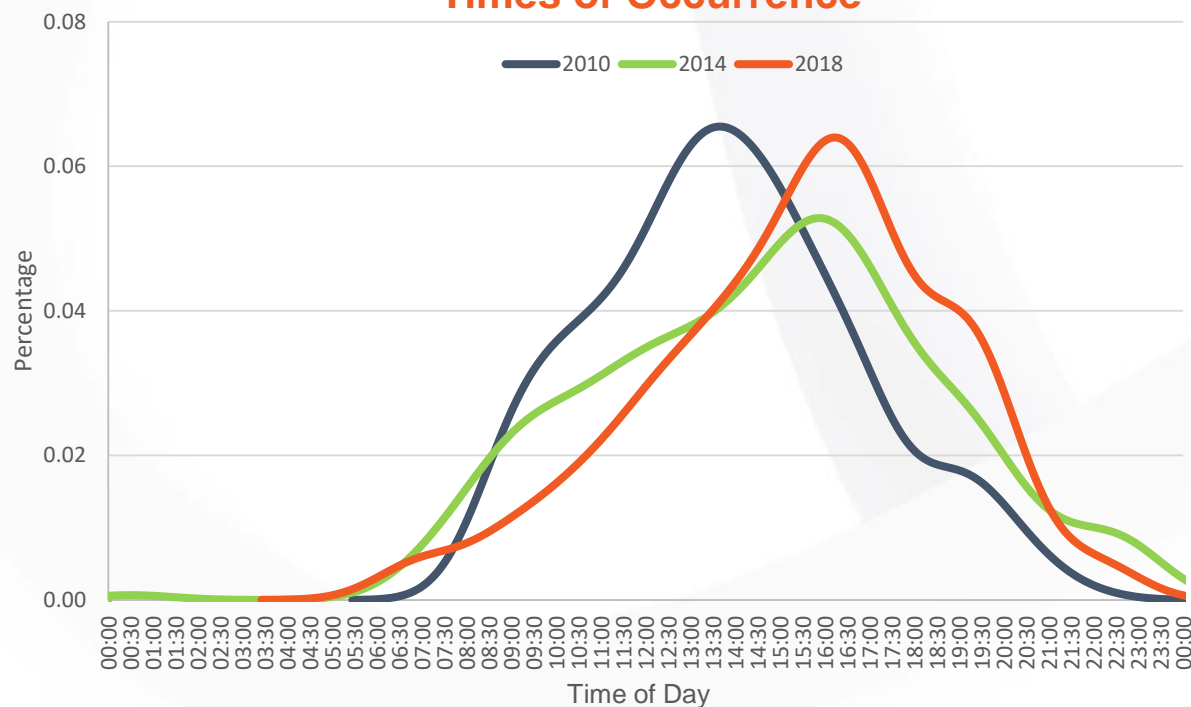


- Traditionally temperature has been the primary influence on day to day demand variability
- Solar irradiance has become a major factor
- Impacts both supply and demand
- Driver of increased costs that are not well understood by end users

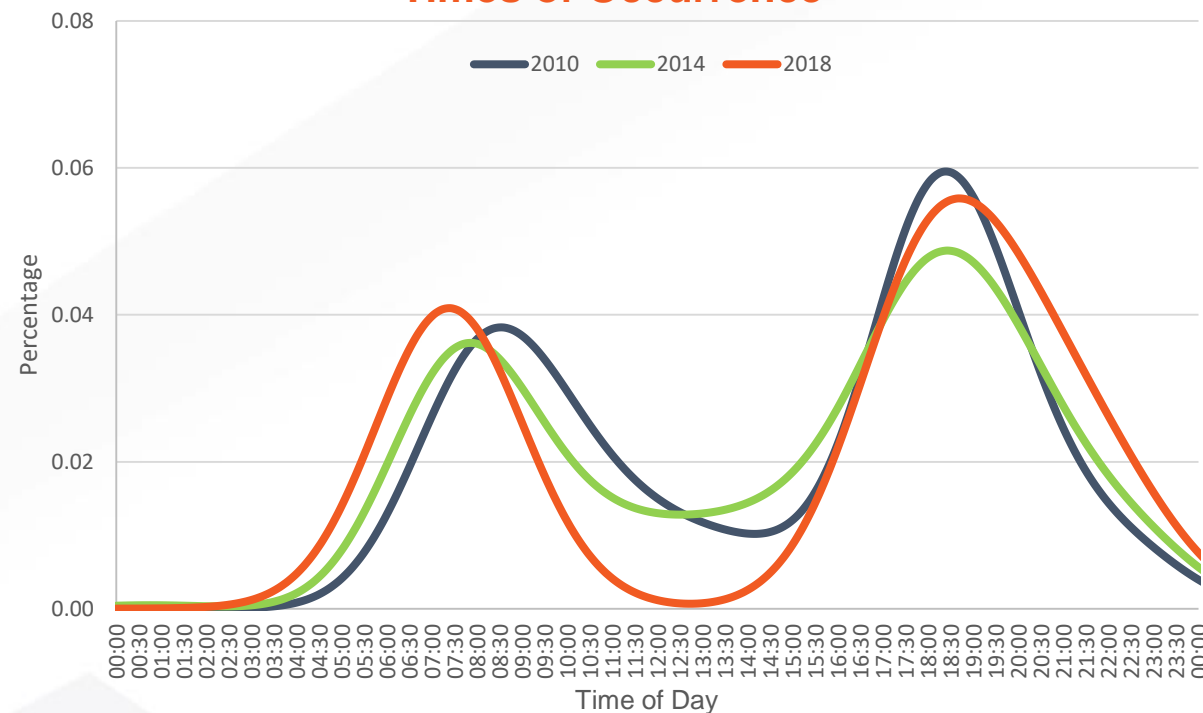
Impacts on price distributions

Queensland example

QLD Summer Top 20% of Prices
Times of Occurrence



QLD Winter Top 20% of Prices
Times of Occurrence



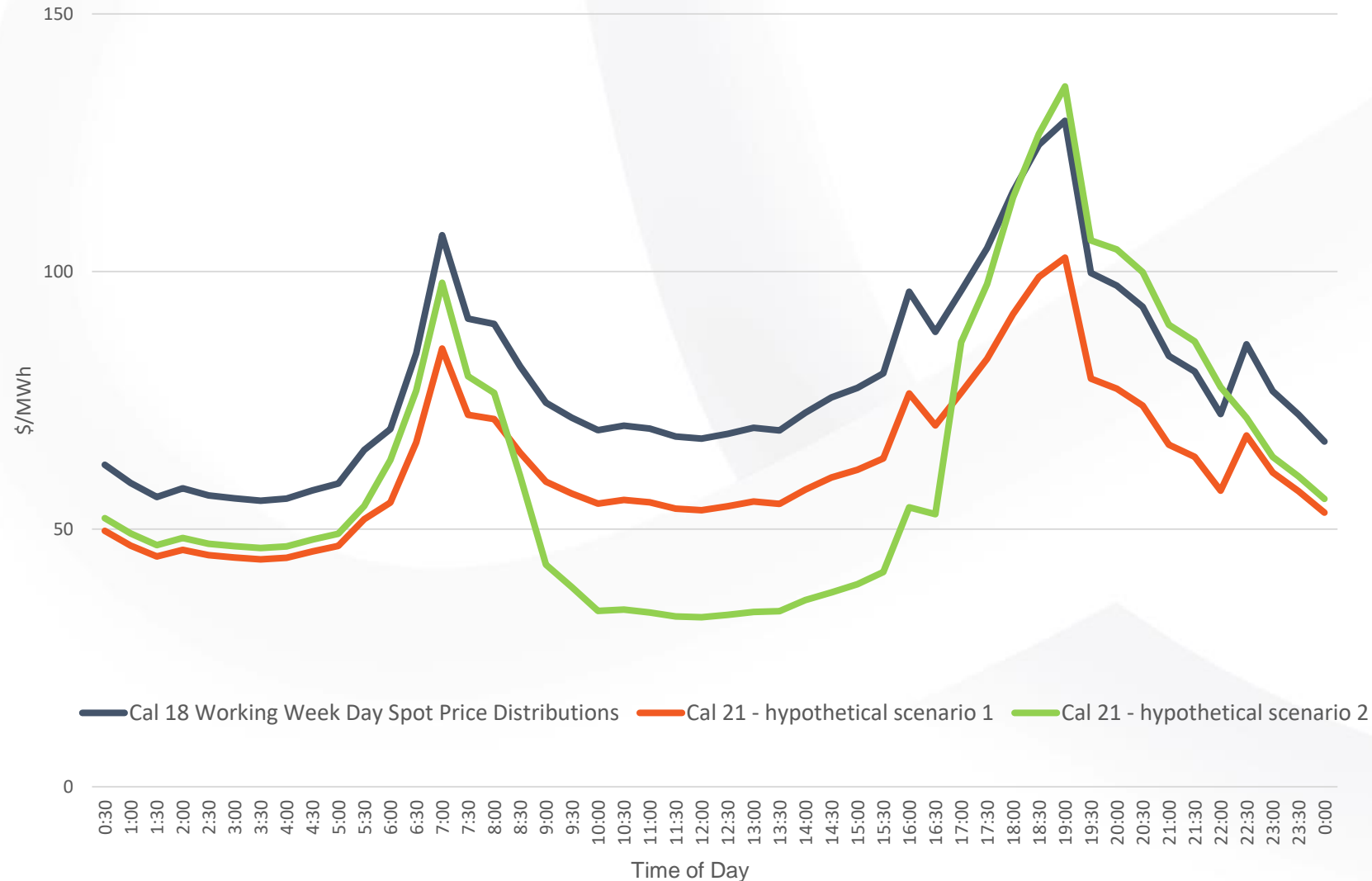
Highest price time periods shifting

- Summer:
 - Morning price peaks reducing
 - Evening price peaks occurring later (sundown)
- Winter:
 - Morning price peaks occurring earlier (before sunrise)
 - Middle of the day price peaks no longer apparent

Consequences of changing demand and price outcomes

Understanding complexity presents opportunities

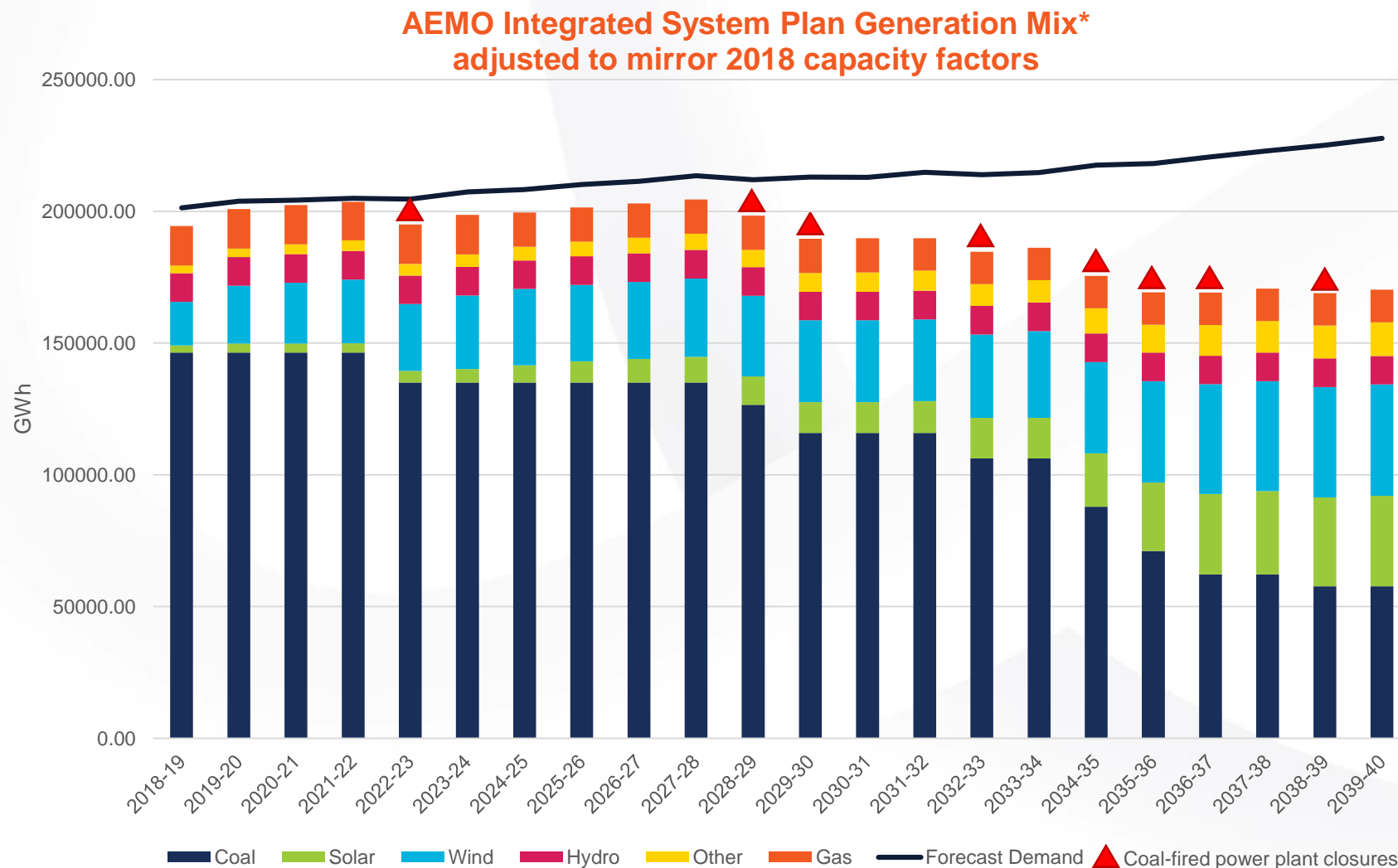
Forecast Future Price Profiles



- Contract prices in 2021 currently trading well below where 2018 spot prices landed
- Scenario 1 shows a pro rata view – unlikely given observations in changing demand profiles and time of day pricing
- Scenario 2 shows an example of how time of day pricing could plausibly out turn

Forecast energy demand outstrips supply

Opportunity for gas-fired power to help meet forecast supply shortfall



According to the Australian Energy Market Operator's Integrated System Plan ...

... the cheapest way to replace generation capacity will be a portfolio of solar, wind and power storage complemented by flexible gas-fired power plants and a beefed up transmission grid.

<https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/Integrated-System-Plan>

*Based on AEMO's 2018 Integrated System Plan, July 2018

Benefits of gas peakers

Opportunities for Neerabup and Oakey Power Stations

ERM Power's fast start peaking generation assets have strategic value for the following reasons:

- Benefit from changing market dynamics
- Potential for volatility leading to a potential upside for Oakey in the long term
- Provide useful tools to manage variability in an increasingly renewable world through firming capability and derivative sales
- Places our generation business in a good position as more solar energy enters the market
- Are highly available, have fast start times, fast ramping capability, low minimum operating levels, no minimum run time, and no limitations on the number of starts
- Provide a very flexible 'call option' on electricity prices every five minutes



Responding to changing market conditions

Bringing innovative products, instruments and services to market

- Market in transition
 - Less reliable baseload generation. More intermittent and peaking supply
 - Customer usage patterns less predictable
 - Ongoing regulatory complexity
 - Emissions and sustainability considerations
- Price volatility is driving customers to explore alternate procurement strategies and energy management solutions
 - Increased risk sharing
 - Behind the meter strategies
 - Energy efficiency
 - Generation
 - Time of use optimisation and/or storage
- Retailer of the Future
 - Providing more complex contractual solutions for customers e.g. embedding renewable strategies into procurement
 - Hedging strategies adapting to greater variable demand and supply environment e.g. Solar Shapes
 - Sophisticated suite of risk management services e.g. Corporate PPAs
 - Comprehensive range of energy solutions





Customer Experience

Gareth Finnie, GM Energy Retail

The customer experience

The compelling reason for change

- Electricity has very rapidly become complex, volatile and expensive
- Concurrent social pressures for businesses to strive to lower emissions (or negate them completely)
- Customers are at vastly different levels of maturity in dealing with these changes
- The market is at a tipping point and the days of a one size fits all retail offering are diminishing



Retailer of the future

Delivering a seamless integrated energy experience

Customer



Improving energy productivity through the ERM One Customer experience

Supply Side through Retail

Information & Advice

Ease of access to relevant information
Advice on tariffs, wholesale markets and operational matters
(e.g. adding new connections)

Account Management

Single point of contact
Customer relationship focus and customer advocacy

Flexible Risk Management

Flexibility to adapt contracting arrangements
Strategic procurement (STEP) giving customers the freedom to choose how they manage their exposure

Ease of Doing Business:

Billing excellence
Operational excellence



Retail, Wholesale
Markets, Generation,
Energy Solutions



Consistent service
model

Integrated billing and
on-bill financing

Trading providing
wholesale market
expertise



E.g. Demand
Response, STEP,
Corporate PPAs, Risk
Management Tools,
Solar Shapes, Network
Tariff Optimisation

Demand Side through Energy Solutions

Advise

Data-driven professional services provide integrated technical and commercial solutions to drive energy productivity

Deliver

Delivery of technical and commercial solutions with quality assurance, ease of implementation and financing arrangements to suit the customer's objectives

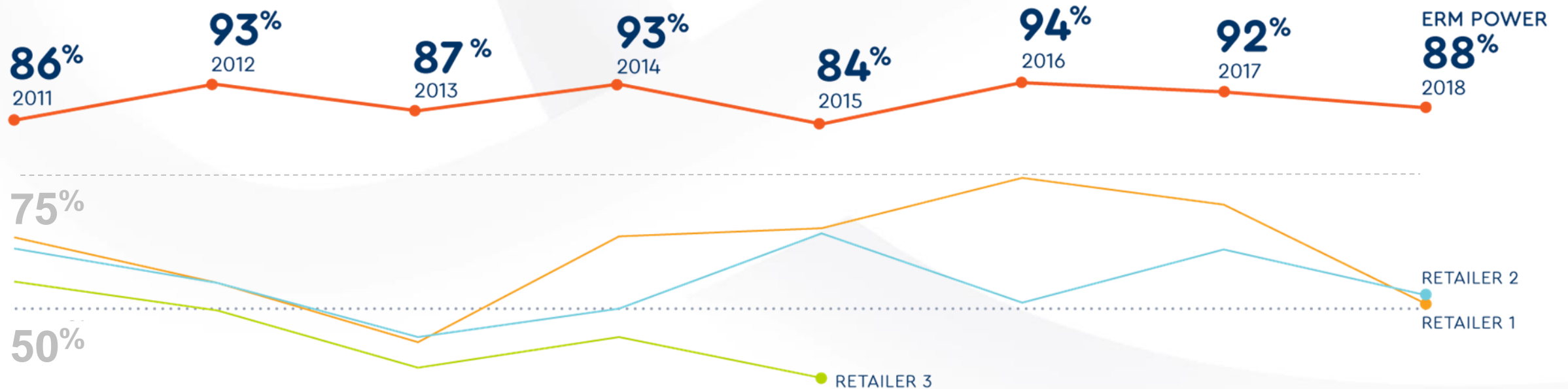
Track

Understand and optimise performance of assets and energy usage including reporting and verification on initiative outcomes relative to the objectives

Consistent and leading customer satisfaction

8 years of outstanding customer satisfaction highlights strength of customer proposition

30 Percentage points
HIGHER SATISFACTION RATING
Over next best performing retailer in 2018



Utility Market Intelligence (UMI) Survey, 2018



Energy Solutions

Megan Houghton, EGM Energy Solutions

Meeting the supply and demand challenges

One customer integrated energy solutions



Supply Side Challenges

ERM Power is...

Mitigating the long-term risk of price volatility for business customers

Providing visibility of long-term wholesale electricity market

Aligning to customer's environmental, cost and energy profile objectives



Business Customer

The customer experience is...

Volatility and uncertainty around energy prices

Security of supply issues

Growing need for support on energy consumption and cost efficiency and productivity

An increasing need for transparency in their energy use and costs



Demand Side Opportunities

ERM Power is...

Improving the efficiency and productivity of business customers' energy consumption

Driving energy productivity through digital platforms

Helping customers save money, reduce consumption, secure supply, improve sustainability and generate revenue from existing assets

Drawing on our supply and demand-side capability

Products and services delivering tangible results to customers



Supply Side Insights

Retail Contract

- Fixed price for volatile product
- Supply secured
- Customer's risk managed

Network Tariff Optimisation

- Analytical engine
- Determines optimal network tariff for each customer
- Available to large C&I and SME multi-site customers
- Total customer save >\$3m

Markets and Analysis

- Online digital platform
- Provides customers with access to the wholesale market
- Customers actively manage timing and volume risks associated with electricity contracting

Digital products



**The Energy Solutions
unique client value
proposition is built on
ERM's depth of market
insights**



Demand Side Solutions

Advise

Combined technical, commercial and strategic advisory delivered with data science, advanced analytics and digital tools

- Data science based advice
- Strategies and roadmaps
- Engineering design
- Tailored integrated solutions, technical and commercial

Deliver

Project and program management across range of solutions

- Demand Response
- Solar (traditional and Solpod)
- Batteries
- LED lighting
- Power Factor Correction

Track

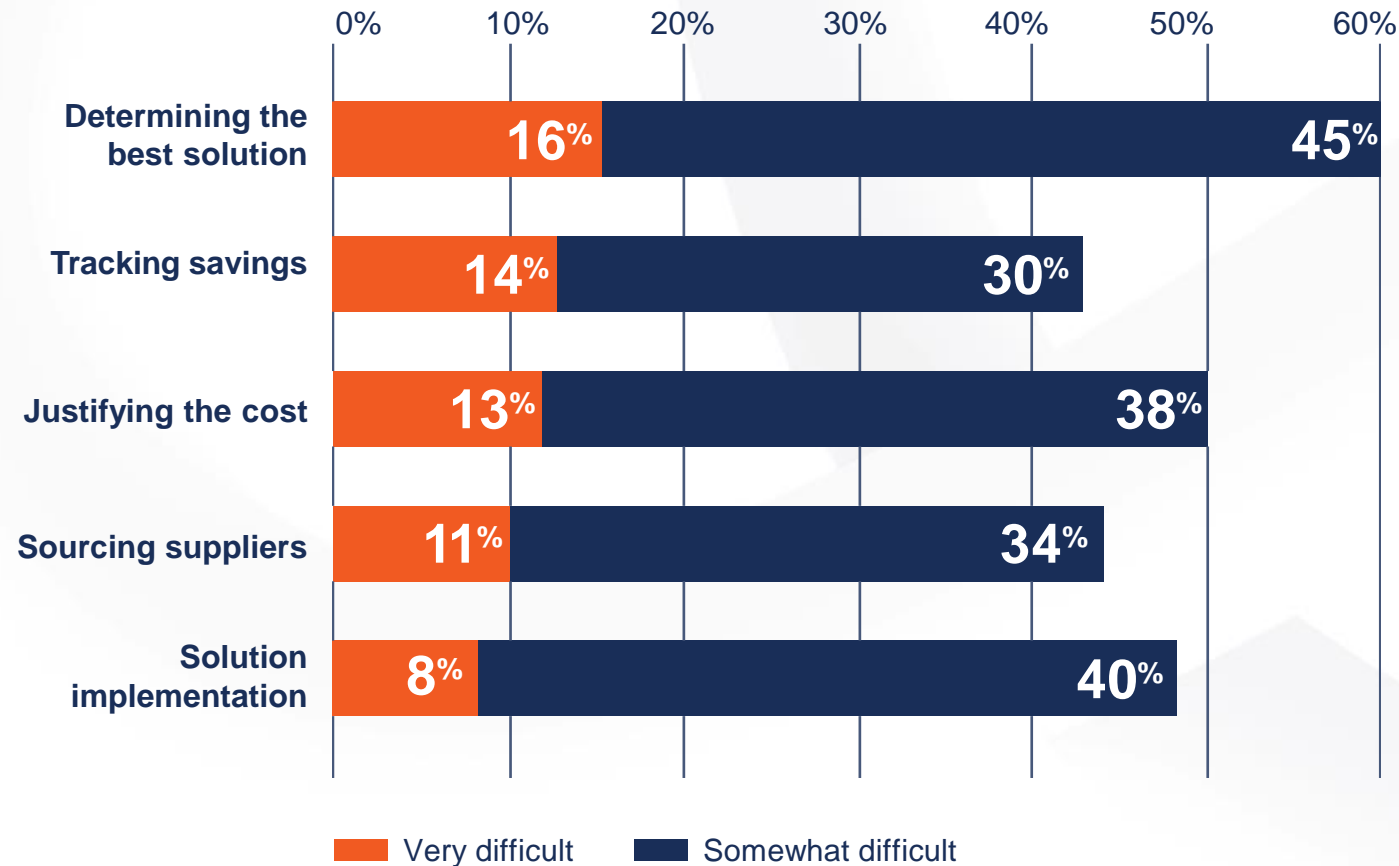
Digital platforms and tools measuring and validating performance, providing insight and alerts for customers to take control

- Performance tracking dashboards and tools (Tracker App, Greensense View, Energy Management Centre)
- Metering
- Certificate Creation
- Measurement and Verification

Our model is well positioned to address key client barriers

A clear approach to demonstrating the value of energy productivity

Top 5 energy solutions barriers customers cite



Growth Areas:

- Greensense and the Energy Management Centre
- Accredited Measurement and Verification capability



Growth Areas:

- Digital products leveraging data science
- Expanded Advisory services
- Gas efficiency
- Complex process engineering capability

Growth Areas:

- Unique product offers (e.g. Solpod)
- Large scale program management
- Quality product and installation

Source: Survey of 200 ERM C&I customers

Tailored solutions meeting customer objectives

Delivering on bottom line and sustainability business agendas

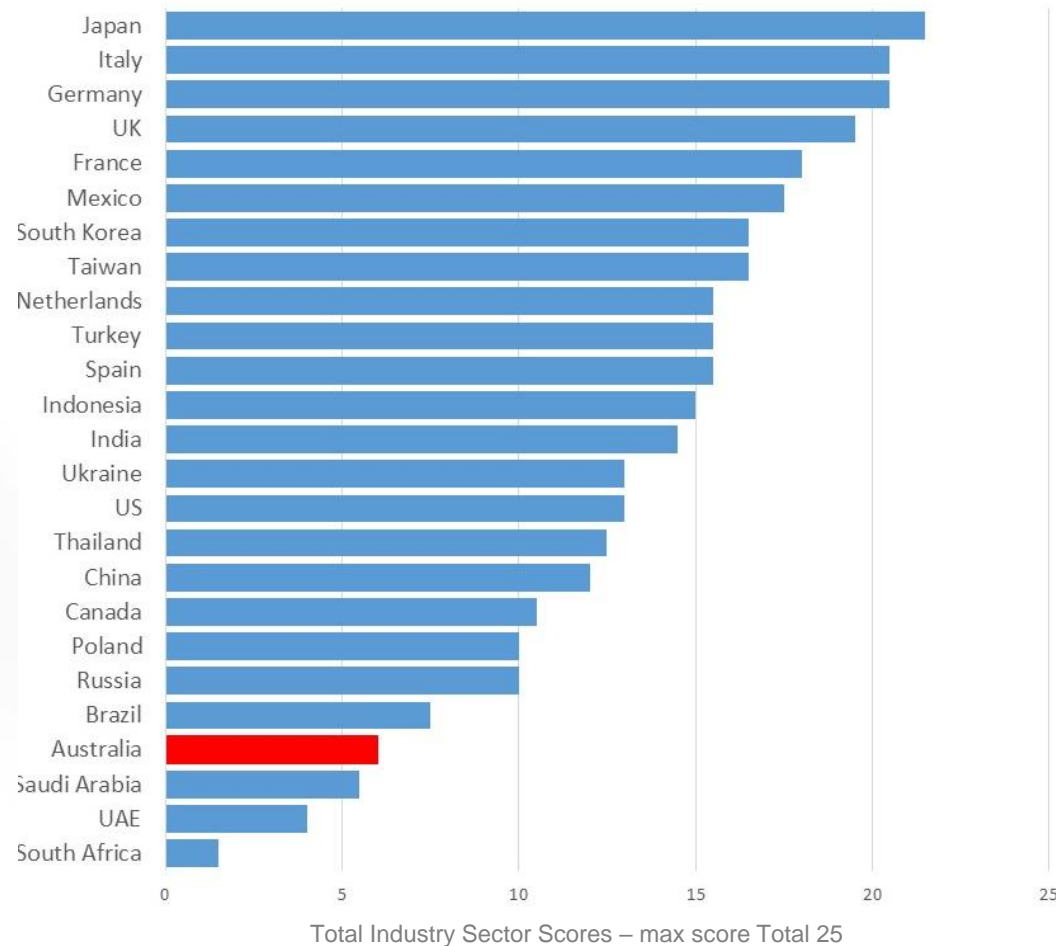
Priority / Motivation	Description
Sustainability	Part of a larger corporate commitment to reduce their carbon footprint
Cost Reduction	Need for more cost control in an environment of rising and volatile energy prices
Technological	To move towards greater technological advancements – Increasing business productivity, innovation and growth
Compliance	Pre-empt carbon emission regulations
Energy Security	Risk management to ensure energy supply reliability
Revenue	Leverage assets to generate revenue, becoming a “prosumer” – monetise underutilised assets
Reputation	To gain sector leadership or improve market positioning
Employee / Customer Attraction	Alignment of corporate values

- 48% (95 companies) in the ASX 200 now have a climate change policy statement
- 21% of companies (42 companies) have established GHG emission reduction targets

Australia is lagging in energy efficiency spend, policy & performance

This presents significant scope for change

ACEEE's International Energy Efficiency Scorecard - Industry



- The ACEEE's *International Energy Efficiency Scorecard 2018*
- Examines the energy efficiency spend, policies and performance of 25 of the world's top energy-consuming countries
- Australia ranks 18th out of 25 countries on overall performance and 22nd in the industry category

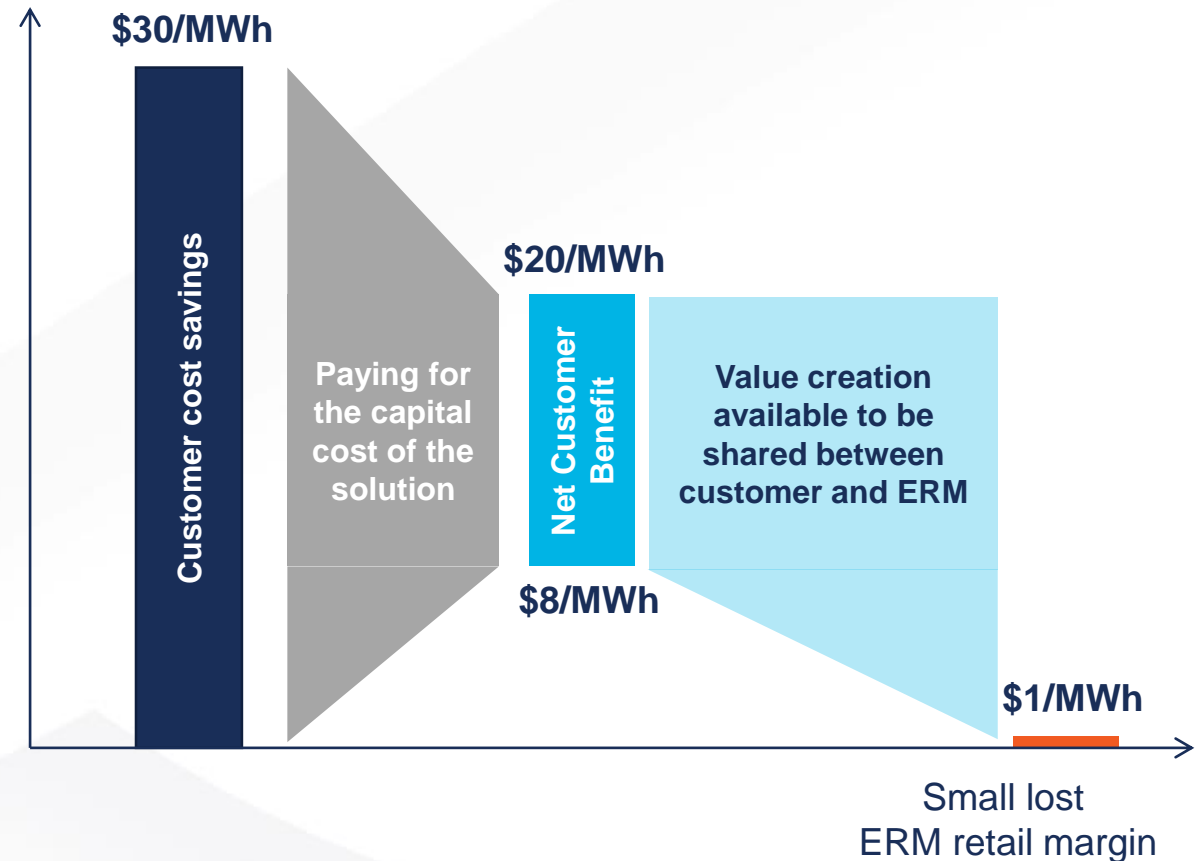
Take up of energy efficiency solutions
has been slow

This presents significant opportunity for
Energy Solutions to drive improvements
across Australian business

Improving energy productivity is good for business

Creating a win-win opportunity for ERM and our customers

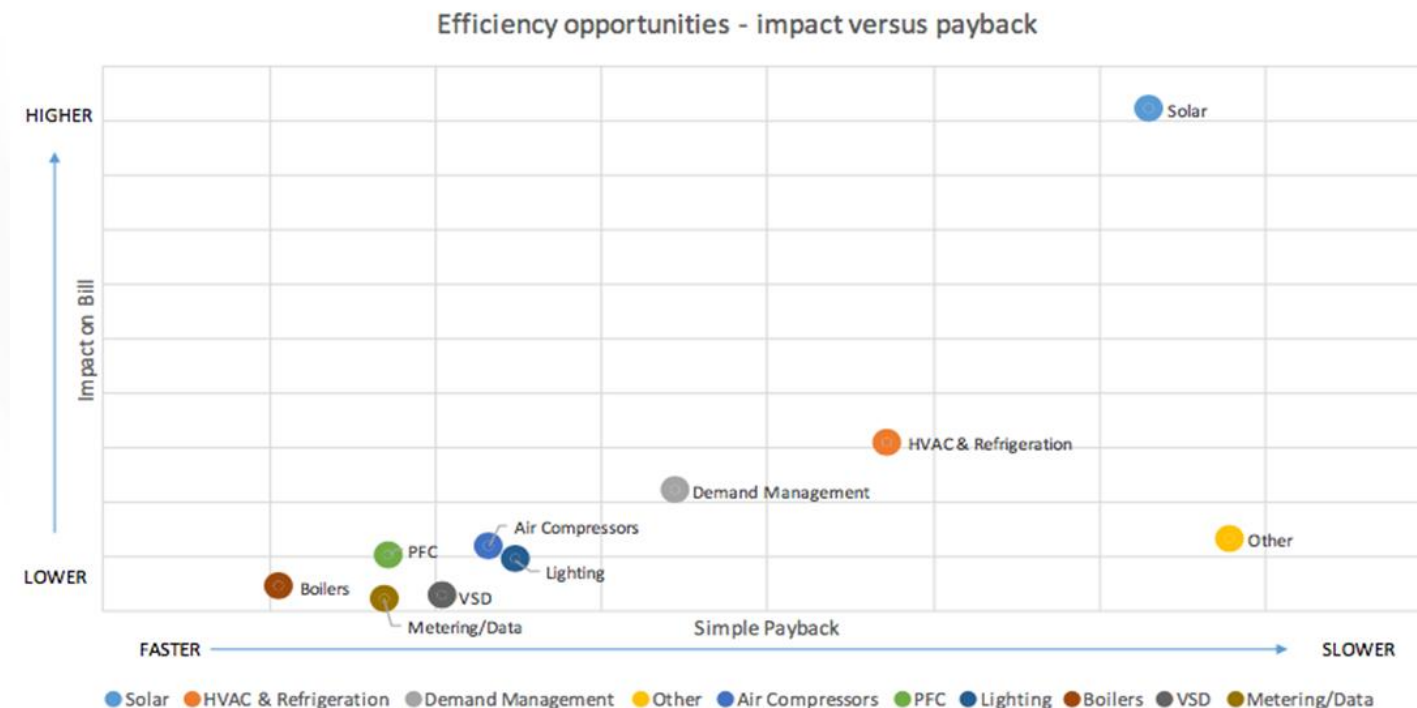
- Customers spend c. \$150/MWh on electricity
- Energy Solutions value creation:
 - Targets to create value for customers by reducing customer costs by 20% creating a customer saving of \$30/MWh
 - Many solutions require some capital spend to achieve the \$30/MWh saving so the net value to the customer is \$30/MWh less the cost of capital associated with the solution
 - Solutions with a payback of 2-5 years (typically where we focus) translate to customers getting a net benefit of \$8–\$20 per MWh
- Retail Margin Loss: By contrast retail loses 20% of its \$5/MWh written (at risk) margin, or \$1/MWh, as a result of the reduced usage
- How ERM makes money solving the problem varies from fees for advisory, fees for tracking solution results, and margin received for delivering physical solutions
- ERM Power forgoes \$1/MWh in electricity sales but shares in the customer saving of \$8–\$20 per MWh



Delivering tangible savings across a mix of technologies

Queensland manufacturing sector study

- Trial commissioned by the Queensland Government with collaboration from the AI Group
- Businesses selected representing the most common sub-sectors of manufacturing in QLD where each site underwent a complete energy review (electricity/gas/coal) using data modelling and onsite engineering assessments
- Businesses were presented with a comprehensive energy management plan identifying key energy productivity opportunities



Trial savings

**Up to
28%**



Reduction in energy costs were identified

**Simple payback
achievable**

**<3
years**



Depending on technology, greater quantum of savings available with longer term payback (i.e. 6 years solar)

Solpod - unlocking value in new markets

Leveraging business model with a range of new products

- ERM and Solpod partnership
- Launched April 2019
- World-first mobile method of deploying and installing large-scale rooftop commercial solar energy installations
- Opens up new markets for rooftop solar installation
- Significant interest in Solpod with property giants such as GPT Group and Property NSW signed up for an Australian Renewable Energy Agency (ARENA) co-funded pilot program
- Solpod could double the scale of 100kW-5MW commercial solar installations in Australia from 113MW in 2018 to closer to 250MW by 2021



Video: <https://youtube/abStRTclGrw>



NSW Schools Energy Productivity Program

Working closely with the education sector to improve energy productivity

- As part of the national schools' program ERM established in 2017, ERM completed energy assessments at 100 schools nationally with the majority of those being undertaken in QLD and NSW
- The success of the 20 energy assessments at NSW schools conducted by ERM Power led to Schools Infrastructure NSW running a procurement process to go to market for 1.2MW of solar and 17,000 energy efficient LED light fittings
- ERM Power is awaiting the results on a share of \$97m of impending opportunities from Qld Government programs



Annual emissions avoided:
2,704 CO₂ emissions (t) which is the equivalent to planting **16,224** trees and growing them for **25 years**

\$6.1M

The program's advisory services will lead to projects of approximately **\$6.1M** total value



Install **1,200kW** solar panels across **20** schools



Upgrade to **17,372** LED lights



There was an increase of over **200%** in participants' electricity invoice literacy

SAVINGS OF \$502K

The expected annual energy saving across the **20** schools is **3,328MWh** with an expected annual savings from electricity bills of **\$502,000**



The number of participants who understand the concept of electricity demand and how they can control it has doubled from **36%** pre-program to **72%** post project.

Out Performers is yielding benefits

Acquisitions providing additional scope and scale

- Out Performers is leveraging the ERM retail book with an initial focus on a core group of very large energy users across manufacturing
- Out Performers creating synergies and performing to expectations
- Growth in our Engineering, EMC and Project Services business units, consistent with our objective of diversifying the business away from certificates
- Certificate revenue remains steady
- Demand for gas services increasing supported by continued high gas prices



Strong growth pathway

Energy Solutions rationale more powerful than ever



Advisory capability

with both strategic consulting and engineering design



Investment in digital capability

to provide greater insights and deeper analysis of highest return solutions



Solpod

differentiated product enhancing the Customer Value Proposition



Schools programs of work

sector speciality driving growth opportunities



Increasing Powermetric scale

metering business growth



Strategic client focus

providing end to end higher value projects



Acquisitions

that complement model and sector focus – driving scope and scale



New solutions

(e.g. battery/DR) that capitalise on market volatility and firming up renewable generation

Disclaimer

This presentation contains certain forward-looking statements with respect to the financial condition, results of operations and business of ERM Power Limited ABN 28 122 259 223 (ERM Power) and certain plans and objectives of the management of ERM Power.

Such forward-looking statements involve both known and unknown risks, uncertainties, assumptions and other important factors which are beyond the control of ERM Power and could cause the actual outcomes to be materially different from the events or results expressed or implied by such statements.

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Non-IFRS information

This document may contain certain non-IFRS financial measures and other defined financial terms.

The directors believe the presentation of certain non-IFRS financial measures is useful for the users of this document as they reflect the underlying financial performance of the business.

The non-IFRS financial profit measures are used by the managing director to review operations of the Group and include but are not limited to:

1. EBITDAF - Earnings before interest, tax, depreciation, amortisation, impairment and net fair value gains / losses on financial instruments designated at fair value through profit and loss. EBITDAF excludes any profit or loss from associates.
2. Underlying EBITDAF - EBITDAF excluding significant items.
3. Underlying NPAT - Statutory net profit after tax attributable to equity holders of the Company after excluding the after tax effect of unrealised marked to market changes in the fair value of financial instruments, impairment and gains / losses on onerous contracts and other significant items. Underlying NPAT excludes any profit or loss from associates.
4. All profit measures refer to continuing operations of the Group unless otherwise noted.

A reconciliation of underlying NPAT and underlying EBITDAF is supplied in the Operating and financial review (OFR). The above non-IFRS financial measures have not been subject to review or audit. These non-IFRS financial measures form part of the financial measures disclosed in the books and records of the Consolidated Entity, which have been reviewed by the Group's auditor.

All reference to \$ is a reference to Australian dollars unless otherwise stated. Individual items, totals and percentages are rounded to the nearest appropriate number or decimal. Some totals may not add down the page due to rounding of individual components.

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