

STRATEGIC PRIORITIES FOR  
**ENERGY  
MARKET  
DEVELOPMENT**

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#### ABOUT THIS REPORT

Every two years, the Australian Energy Market Commission considers strategic priorities for Australia's electricity and gas markets. The priorities provide context for our work program and enable us to frame key issues for consideration and dialogue among consumer groups, market participants and policy makers.

This is our third strategic priorities review to determine how the priorities for energy market development should evolve in line with technological and market changes.

These strategic priorities have been developed through extensive consultation with our stakeholders on what matters to them. Stakeholders also provided feedback on the Strategic Priorities Discussion Paper published in September 2015. Contributions from our stakeholders have been incorporated in this report.

#### CITATION

AEMC 2015, Strategic Priorities for Energy Market Development, Final Priorities, 26 November 2015, Sydney

John Pierce  
CHAIRMAN



## THE MAIN GAME: FLEXIBLE AND RESILIENT ENERGY MARKETS SERVING THE LONG-TERM INTERESTS OF CONSUMERS

### FOREWORD

All around us, we see evidence of accelerating change in energy sector dynamics. A sector made up of diverse organisations, often with different world views – from competitive retail services and energy generation, to the regulated networks, government-policy making and regulatory agencies, consumer and environmental organisations: Consumers, themselves, are increasingly at the heart of the system and driving change.

**It is the interconnectedness among all stakeholders that is remarkable.**

**What unites us is a shared stake in a resilient energy sector – one that is flexible and adaptable. One that is efficient, safe, secure and reliable and fundamentally, one which delivers outcomes that benefit consumers.**

In setting the Strategic Priorities for the development of the energy market, we are looking to the future to support an energy sector with the flexibility to respond effectively to changes in technology and business models, increasingly being driven by consumer choices.

These priorities help guide our program of work, particularly how we allocate resources, develop new work-streams and consult with stakeholders. The AEMC was pleased to receive 27 submissions to its discussion paper. There was strong participation across a series of public forums where many views on the opportunities, risks and challenges facing the energy sector were openly shared. There was general agreement that the priorities identified through this process of engagement, have the right focus.

In adopting these Strategic Priorities for Energy Market Development we remain focused on the main game: an efficient, safe, secure and reliable energy system that keeps prices as low as possible for consumers. The issues that need to be addressed, and therefore the

priorities for market development adapt however to new realities. These include developments in other policy areas such as climate change; changes in technology on both sides of the meter; the market itself through business models, based on offering energy services and not just selling kilowatt hours; and consumer preferences for how they source and use these services.

### Strategic Priorities

**Consumer Priority: Enabling consumers to make informed decisions**

At its most basic level, market development means enhancing consumers' ability to decide when the value of energy services to them is greater than the efficient costs of providing these services.

It is consumers themselves who are the best judges of what works for them – and much of our work over the past five years has been driving more opportunities for consumers to make informed choices about the way they use electricity based on the benefits that end-use services provide.

The AEMC foresaw this back in 2010 when it laid the foundations for the Power of Choice review presented to state, territory and federal ministers of COAG in November 2012. These reforms give consumers options in the way they use electricity and will support the market in meeting consumer needs over the next 15 to 20 years.

The Power of Choice reforms also lay the foundation for the energy sector to respond effectively to new technologies that are changing how consumers participate in energy markets, including through the use of battery storage, microgeneration, smart devices and connected home products and services. While these technological changes are a cause of fascination or sometimes fear, we need to look beyond them to focus

# NATIONAL MARKETS ARE EVOLVING

All around us we see the evidence of accelerating change in energy market dynamics

The Renewable Energy Target means

**23%**

of Australia's electricity generation will be from renewables by 2020

**11**

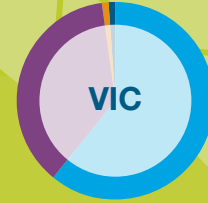
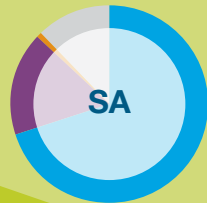
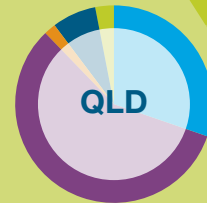
coal generators exit between 2011 and 2023 totalling 3500 MW\*

\*Company announcements of retirements, decommissioning or partial/full mothballing

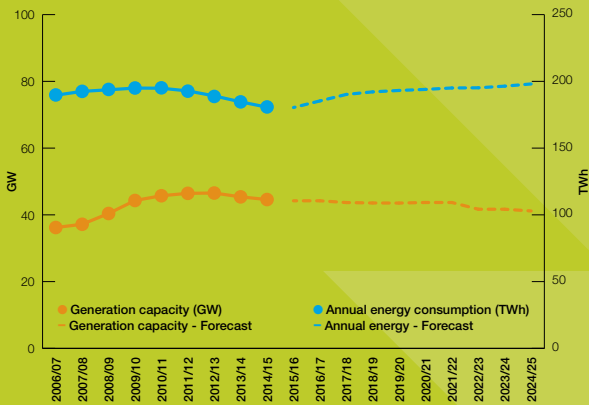
MIX OF PROPOSED ADDITIONAL GENERATION CAPACITY TO 2025

Source: AEMO 2015 Electricity Statement of Opportunities

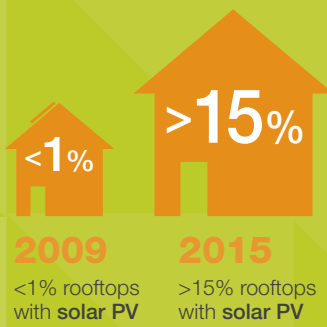
- Wind
- Gas
- Solar
- Water
- Biomass & Other
- Coal
- Geothermal



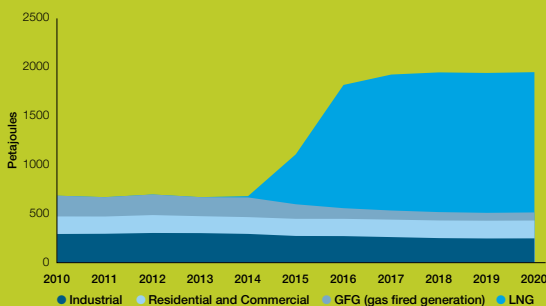
## DEMAND AND GENERATION FORECASTS



Source: AEMO NEFR 2015 Generation Information



## STRUCTURAL SHIFT IN GAS MARKET: FORECAST DEMAND FOR EAST COAST GAS



Source: AEMO Gas Statement of Opportunities 2014



The cost of energy storage technology is projected to decline by more than

**50%**

over the next 10 years

Source: CSIRO Future Energy Storage Trends Report, September 2015

**35%**

of South Australia's electricity generation was from wind in 2013-14 – the highest per capita wind capacity in the world

Source: AER State of Energy Market 2014

on the *function* they perform and adjust the regulatory and market processes to accommodate them. The functional performance of new technology brings the market much closer to, and within the control of consumers.

We call this the 'consumer-driven transformation' of the energy sector.

Recognising this, the Power of Choice has never been more important - we need to get the right price structures, and information on what these new technologies mean for consumers, so that different parts of the energy ecosystem know how to respond to others.

Over the next two years, the Consumer Priority will focus on protection, engagement and participation so that consumers can benefit from the innovations in energy markets and enhanced competition.

### **Gas Priority: Promoting the development of efficient gas markets**

Natural gas accounts for around a quarter of Australian energy consumption.<sup>1</sup> It plays a significant role in the Australian economy, particularly with the establishment of an east coast liquefied natural gas (LNG) export industry.

We saw the first LNG cargos exported from Gladstone in January this year - an historic moment for the east coast gas industry. The market has now entered a transitional period to a new supply and demand balance - by 2020, natural gas used for LNG production will account for over 70% of total east coast demand.

COAG's Energy Council asked the AEMC to consider the direction that east coast gas markets should take, given the new LNG industry market dynamic, and the Victorian government asked the Commission to look in detail at specific arrangements for Victoria. We are guided by the COAG Energy Council's Vision for Australia's future gas market which will, over time, provide market participants with a more flexible and transparent way of buying and selling gas.

We are looking at some important issues in developing recommendations for the Energy Council,<sup>2</sup> including the extent to which different gas market development pathways promote trading and risk management, preserve signals for investment in pipeline capacity, and deliver benefits to end-users. The focus over the next two years will be implementing the recommendations endorsed by the Energy Council.

### **Markets and Networks Priority: Encouraging efficient investment and flexibility**

We are at an inflection point in energy markets with changes in the costs, technology, consumer preferences, patterns of demand and environmental policy, creating opportunities for new business models to emerge. So it's critical that market and regulatory arrangements facilitate the right conditions for business evolution that promote the long-term interests of consumers.

Companies are now competing to offer energy services, not just energy. They will manage an individual consumer's energy needs – managing the risk of buying

energy in a more dynamically-priced environment, provide tools to respond to different pricing structures, optimise appliance settings, choose when to charge electric vehicles and when to sell stored energy back to the grid. We need to reduce inefficient barriers to entry or innovation, for new business models that offer better consumer and market outcomes.

Changes in consumer preferences for how they source and use energy, technology and models are driving a redefinition of where the lines are drawn between functions that are subject to economic regulation and those that can be provided through competition. They are also redefining the relationships between different parts of the sector, where they potentially compete, and the circumstances under which they co-operate.

This has important implications for how competition for retail energy services develop, how we think about the role of the retailer and the evolution of networks, in particular at the distribution level. Distribution businesses are evolving from 'one-way' energy delivery systems into multi-directional 'smart grids'. The regulatory frameworks must be supportive of these innovations in a manner that clearly distinguishes between those that relate to functions of the network and hence subject to regulation, and those that belong in a competitive energy services market.

One of the big themes coming out of our consultation with stakeholders has been the critical importance of policy integration.


Environmental and social policy, while external to the energy market, directly influence outcomes including movements in, and the relationship between, wholesale and retail prices, changes to investment incentives, the consistency of risk allocation as well as the level of consumer engagement.

Policies across different portfolios and with different objectives can be reconciled but consumers' interests would be better served if they are developed in an integrated way. For example, new technology is driving changes in the generation mix with increasing levels of large-scale intermittent generation. South Australia is leading this, with Australia's highest penetration of wind and solar comprising over 40% of the state's annual electricity consumption.<sup>3</sup> These have technical characteristics that differ from the plant they are replacing. The impact of renewables on how the system is maintained in a secure and reliable state, will be an important focus in the coming years.

Lastly, we remain committed to the main game – an efficient, safe, secure and reliable energy system that keeps prices as low as possible for consumers. How that game is played will of course be radically different over the coming years as consumers, through their decisions, drive the sector's transformation. I am pleased to present these Strategic Priorities for Energy Market Development and thank you for your interest and participation.

### **John Pierce**

CHAIRMAN  
AUSTRALIAN ENERGY MARKET COMMISSION



The main game is an efficient, safe, secure and reliable energy system that keeps prices as low as possible for consumers. How that game is played will be radically different over coming years as consumers' decisions drive the sector's transformation.

1 From 2013-14, Department of Industry and Science, 2015, 2015 Australian energy update, Table 3.1.

2 Report to be submitted to the COAG Energy Council in November, 2015.

3 AER State of the Energy Market 2014, pp27-28.

# OVERVIEW KEY ACTIONS

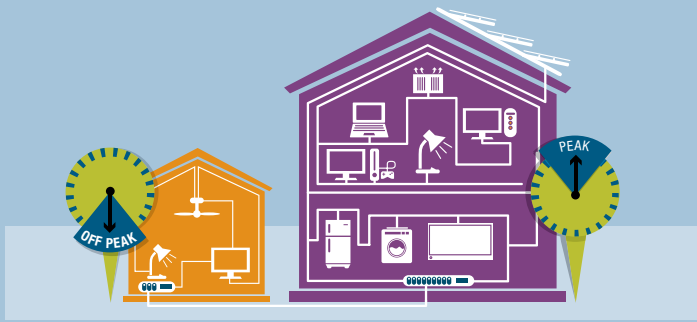
Here is a snapshot of the key recommended actions to be pursued under each of the three strategic priorities - Consumers; Gas; and Markets and Networks. These priorities guide our work program, approach to rule making and provision of advice. They were developed through extensive consultation with our stakeholders.

WE RECOMMEND THE ENERGY COUNCIL COMPLETE ITS REVIEWS OF THE CONSUMER PROTECTIONS FRAMEWORK, WITH ASSISTANCE FROM ENERGY CONSUMERS AUSTRALIA AND THE AEMC.



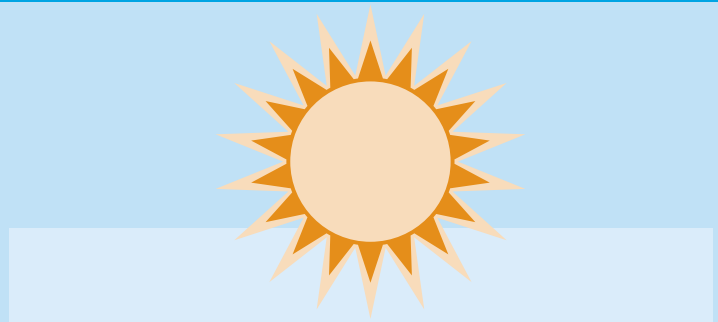
WE WILL MONITOR THE IMPLEMENTATION OF THE DISTRIBUTION PRICING RULE CHANGE SO THAT NEW NETWORK TARIFFS SUPPORT THE INTENT OF THE RULE.

WE WILL CONTINUE TO PROGRESS WORK ON A ROADMAP FOR THE CONTINUED DEVELOPMENT OF GAS MARKETS IN ORDER TO MEET THE COUNCIL'S GAS MARKET REFORM VISION.



THE AEMC'S RELIABILITY PANEL WILL CONTINUE WORKING WITH THE MARKET OPERATOR AEMO TO CONSIDER IMPLICATIONS OF A CHANGING GENERATION FLEET ON SYSTEM SECURITY AND RELIABILITY.

WE RECOMMEND THE ENERGY COUNCIL TASK US TO WORK ON WHETHER ADDITIONAL PRICING MECHANISMS ARE REQUIRED IN THE ENERGY-ONLY MARKET TO ACCOMMODATE MORE LARGE-SCALE INTERMITTENT GENERATION.



WE RECOMMEND THE ENERGY COUNCIL UNDERTAKE A REVIEW OF CONCESSION POLICIES TO ASSESS OPPORTUNITIES FOR APPROPRIATE TARGETING AND HARMONISATION OF THE STRUCTURE OF THESE POLICIES.

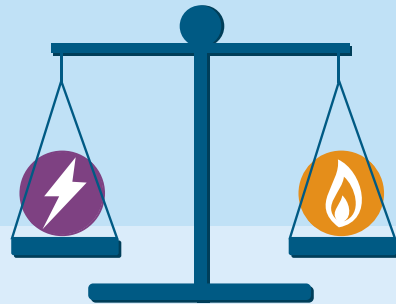


WE WILL USE OUR ANNUAL RETAIL COMPETITION REVIEWS TO BETTER UNDERSTAND WHAT INFORMATION CONSUMERS NEED TO MAKE INFORMED CHOICES ABOUT THEIR ENERGY USE. WE WILL HOLD AN ANNUAL ROUNDTABLE ON OUR FINDINGS.



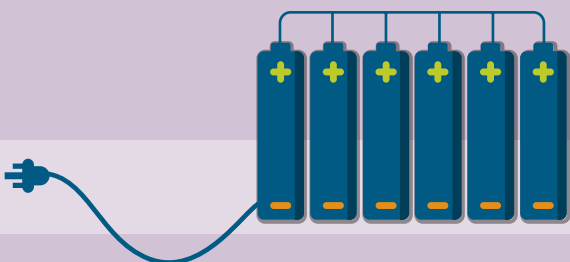
TOGETHER WITH OUR STAKEHOLDERS WE HAVE DEVELOPED THREE PRIORITIES FOR ENERGY MARKET DEVELOPMENT. ENABLING **CONSUMERS** TO MAKE INFORMED DECISIONS IN COMPETITIVE RETAIL MARKETS. PROMOTING THE DEVELOPMENT OF EFFICIENT **GAS** MARKETS. **MARKET AND NETWORK** ARRANGEMENTS THAT ENCOURAGE EFFICIENT INVESTMENT AND FLEXIBILITY.

WE RECOMMEND THE ENERGY COUNCIL CONSIDER TASKING JURISDICTIONS TO REVIEW POLICIES AND SUBSIDIES THAT MAY SUPPORT PARTICULAR ENERGY SOURCES OVER OTHERS.



WE WILL CONTINUE TO PROGRESS WORK ON NEW TECHNOLOGIES FOCUSING ON IMPLICATIONS FOR NETWORK BUSINESS DEVELOPMENT AND REGULATORY FRAMEWORKS.

WE WILL CONTINUE TO SUPPORT ENERGY COUNCIL WORK ON BETTER INTEGRATION OF CLIMATE CHANGE AND ENERGY POLICIES. WE WILL CONTINUE WORKING WITH OTHER AGENCIES IN RELATION TO POLICY INTEGRATION.



# 1.

## INTRODUCTION



Every two years, the AEMC undertakes a process to consider the strategic priorities for the development of Australia's energy markets. This is the third time the AEMC has undertaken a review of this kind.

The strategic priorities process has been designed to assist the AEMC to fulfil its role as the provider of advice to the COAG Energy Council (Energy Council) on market development, as well as guide the Commission's approach to rule making. To develop the priorities the AEMC undertakes consultation with a wide range of stakeholders and utilises a range of engagement techniques. This report reflects what the AEMC has heard during that consultation process and identifies the elements that the AEMC considers are priorities to be addressed by both policy makers and the market institutions over the next few years. The Commission also expects that the development of these priorities will lead other stakeholders to consider submitting rule change requests on the issues of most importance to them.

### Purpose of the Strategic Priorities

The purpose of the strategic priorities is threefold:

#### **Frame key issues for consideration in the market:**

Identifying the key issues that are likely to emerge in the energy market over the next two to three years and their impact on different stakeholder groups, will help our regulatory frameworks to adjust to market developments.

**Encourage dialogue amongst consumer groups, market participants and policy makers on key issues:** The Commission's rule change and review consultation typically concentrates on particular issues that are the subject of these processes. Having a specific review of the strategic priorities for the energy market allows greater engagement with stakeholders on broader matters.

**Guide the AEMC's work program:** Where the AEMC has a degree of discretion over its work program, the priorities assist with the prioritisation of resources, the development of new work streams, and directing stakeholder engagement priorities.

In assisting the members of the Energy Council with the development of priorities, the AEMC has regard to the objective of the Australian Energy Market Agreement (AEMA),<sup>4</sup> which states:

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<sup>4</sup> Recently, the Expert Panel reviewing governance arrangements in the NEM has recommended that the AEMC should be given an unambiguous obligation to prepare advice on strategic direction and a resulting work programme, including the status of Australian energy market development, emerging issues and developments, and recommendations on priority matters. The Panel also noted that some aspects of the National Electricity Law and the National Gas Law, could be construed to be broader than that contemplated by the AEMA. See: Dr Michael Vertigan AC, Professor George Yarrow,



“The objectives of this agreement are:

- (a) the promotion of the long term interests of consumers with regard to the price, quality and reliability of electricity and gas services; and
- (b) the establishment of a framework for further reform [...]”

Given the role of the AEMC specified within that agreement, the AEMC’s work, including the development of these strategic priorities, is guided by the National Electricity Objective (NEO), the National Gas Objective (NGO), and the National Energy Retail Objective (NERO). Each of these describes the objective of the relevant law to be the achievement of economic efficiency in the long-term interests of consumers specifically to promote efficient investment, and efficient operation and use of, energy services for the long term interests of consumers of energy with respect to - price, quality, safety, reliability and security of supply; and the reliability, safety and security of the national energy systems.

## 2013 Strategic Priorities

The last review of the strategic priorities was completed in October 2013, where the AEMC developed the following strategic priorities in consultation with consumer groups, government and the energy industry:<sup>5</sup>

- **Consumer priority:** Strengthening consumer participation and continuing to promote competitive retail markets.
- **Gas priority:** Promoting the development of efficient gas markets.
- **Market priority:** Market arrangements that encourage efficient investment and flexibility.

These priorities are referred to as the “2013 priorities” throughout this paper, and have helped guide the AEMC in the development of the Commission’s 2014 and 2015 work program.

## Approach to Strategic Priorities

A shared set of market development priorities held by the Energy Council and the AEMC, other market institutions, market participants, consumer bodies and other stakeholders will deliver future required reforms more quickly, without jeopardising analytical and consultation standards.

In this respect, the Commission has had early engagement with the Energy Council’s Senior Committee of Officials (SCO), a range of forums with consumer groups including Energy Consumers Australia (ECA), industry participants, the Australian Energy Regulator (AER) and Australian Energy Market

Operator (AEMO), as well as drawing on consumer research undertaken for the AEMC’s retail competition reviews, prior to launching this review. This consultation has been valuable in assisting the Commission to understand the views held by the institutions and other organisations on key strategic issues affecting the energy sector.

On 10 September 2015, the AEMC published a Discussion Paper, incorporating early feedback from stakeholders, and which set out the AEMC’s preliminary views on the priority areas for energy market development.<sup>6</sup>

The Discussion Paper formed the basis of a public forum on 30 September 2015, where stakeholders were able to share views on the opportunities, risks and challenges facing the energy sector as we work to develop regulatory frameworks that are fit for the future. A range of stakeholders presented at the forum, including consumer groups, industry participants and government officials.

Twenty seven submissions were received to the Discussion Paper and the public forum, which can be found on the AEMC website.<sup>7</sup>


This report sets out the 2015 strategic priorities, which have been refined following feedback from stakeholders at the public forums, through submissions to the Discussion Paper and during bilateral consultations. Chapters 3 to 5 set out why each priority is relevant for the energy market, before summarising stakeholder responses to the Discussion Paper. The areas of focus for each priority and the associated action items are then outlined.

## Structure of the paper

The remainder of this paper comprises five sections:

- chapter 2 discusses the external context for the strategic priorities;
- chapter 3 discusses the consumer priority;
- chapter 4 discusses the gas priority;
- chapter 5 discusses the markets and networks priority; and
- chapter 6 concludes.

Appendix A summarises stakeholder submissions and the Commission’s response to these submissions.



The strategic priorities frame key energy market issues and encourage dialogue amongst consumer groups, market participants and policy makers.

Mr Euan Morton, Review of Governance Arrangements for Australian Energy Markets, Final Report, October 2015, pp. 35, 81.

5 See: AEMC, Strategic Priorities for Energy Market Development, 2013.

6 AEMC, Strategic Priorities for Energy Market Development, Discussion Paper, 10 September 2015, Sydney.

7 See: [http://www.aemc.gov.au/Markets-Reviews-Advice/Strategic-Priorities-for-Energy-Market-Develop-\(2\)#](http://www.aemc.gov.au/Markets-Reviews-Advice/Strategic-Priorities-for-Energy-Market-Develop-(2)#).

# 2.

## CONTEXT FOR THE STRATEGIC PRIORITIES



The Commission's strategic priorities relate to energy market development. The AEMC's role is to promote the long-term interests of consumers with regard to the price, quality and reliability of electricity and gas services.

Energy prices and other outcomes that consumers face result from the rules applied to the energy sector, how these rules are applied and external influences and policies outside of these rules. This chapter explores the key external influences that impact on the outcomes observed in the energy sector, as these provide important context for the development of the AEMC's strategic priorities.

### Governance of the energy sector

A Panel, on behalf of the Energy Council, has recently reviewed the national energy market governance arrangements to assess the effectiveness of the current institutional arrangements and whether they remain fit for purpose.<sup>8</sup>

A final report for this review was presented to the Energy Council in October 2015. In the final report, the Panel conclude that the current arrangements are appropriate and, in general have served Australia, the energy market participants, and consumers well. Despite this, the Panel recognises that the energy markets are facing significant challenges and the

structures governing them must be flexible enough to adapt. The Panel presents recommendations and suggestions to the Energy Council, that will, in the Panel's view, enhance the processes of the institutions, the markets and of the Energy Council itself, improving outcomes for all parties and allowing adaption as required.

An Energy Council response to the Final Report is expected in December 2015.

Of particular relevance to the strategic priorities process, the Panel recognised that the AEMC's role as rule maker and advisor to the Council is increasingly important in the current environment where change is rapidly occurring. Therefore, one of the Panel's recommendations was that this role be reinforced through greater reliance on the AEMC for the development of strategic advice. Specifically, that the AEMC should be "given an unambiguous obligation to prepare advice on strategic direction and a resulting work programme, including the status of Australian energy market development, emerging

<sup>8</sup> See: <http://www.scer.gov.au/workstreams/energy-market-reform/review-of-governance-arrangements/>.

issues and developments, and recommendations on priority matters".<sup>9</sup>

The Panel's recommendation, if adopted, would require the Commission to extend and deepen the AEMC's current approach to engagement and consultation at all levels. One of the key challenges for future consultation processes is to involve, as actively as possible, the increasingly broad range of stakeholders interested in the energy sector. The changing nature of the sector, as the priorities in this document reflect, and which is being driven primarily by technological change, is broadening the range of stakeholders and perspectives that will need to be considered when undertaking a prioritisation process for development of the energy markets.

Importantly though, the Panel report confirmed the value of a unique aspect of the market and regulatory change process in Australia - that any party can submit a rule change to change these arrangements. Rules can be changed in response to requests submitted to the AEMC by individuals, community groups and industry as well as government. This means that those closest to changing market dynamics have the capability to change the market and regulatory frameworks in which they operate.

### Environmental and social policies

Addressing environmental and social issues requires value judgements using a wide range of information about the economy as a whole, and about the welfare of the population. These issues clearly rest with governments given their broad societal impact. Environmental and social policies can, however, directly influence outcomes in energy markets, including movements in and the relationship between wholesale and retail prices. They can also result in changes to investment incentives and risk allocation, as well as the level of consumer engagement with the market.

While energy market and social and environmental policies may have different objectives, they can be designed in such a way so that the objectives of both are met. Policies that continue to meet their objectives in the face of changing economic and market conditions, and minimise distortions to market mechanisms, will also have a better chance of being in place for the long term.

Fundamentally market and regulatory arrangements are mechanisms for allocating responsibilities and risks between the parties involved. For instance, in the competitive wholesale market, demand and investment risk rests with the generators that supply that market. If the policy instrument used to achieve an environmental or social objective reallocates these risks to consumers, the market cannot be expected to operate effectively. This is not an issue with the policy objectives themselves, but rather the instrument or means chosen to achieve them.<sup>10</sup>

Setting environmental and social objectives is unambiguously the role of governments. The AEMC's interest is in the mechanism for achieving the objective and in making sure this is done in a way that supports effective operation of the energy market mechanisms and the long-term interests of consumers. For example, in the context of an emissions reduction mechanism, the AEMC considers a policy to achieve this objective should:

- have the ability to meet the emissions reduction target whatever the future may bring in terms of demand growth, relative input prices and technological changes; and
- be compatible with the pricing mechanisms used to trade electricity and consistent with the allocation of risk between generation businesses and consumers that underpins the efficient operation of the electricity market.


Energy policy and environmental and social policies can co-exist but consumers' interests will be better served if they are explicitly developed in a complementary and mutually reinforcing way.

We consider policy integration is an important issue going forward, and so recognise this explicitly as one of the areas of focus in chapter 5.

### Public perceptions about market frameworks

Aspects of the energy market framework in Australia have received a lot of attention in recent years, particularly the impact of retail competition and the regulation of network businesses.

The effective operation of the energy sector in Australia depends on a number of elements, including



**Setting environmental and social objectives is unambiguously the role of governments. The AEMC's interest is in the mechanisms for achieving these objectives; and making sure that these are achieved in the long-term interests of energy consumers.**

<sup>9</sup> Dr Michael Vertigan AC, Professor George Yarrow, Mr Euan Morton, Review of Governance Arrangements for Australian Energy Markets, Final Report, October 2015, p. 35.

<sup>10</sup> Similar sentiments were expressed in the AEMC's submission to the RET Review. See: AEMC, Submission to the Review of the Renewable Energy Target, 29 May 2014.

the rules that govern how energy businesses and consumers participate in the sector, the application of those rules by the regulator and the corporate governance arrangements within the energy businesses.

An important aspect of the market governance arrangements is that, while the Commission makes the rules that govern the energy markets, the AEMC cannot initiate rule changes. Rules are changed in response to requests brought to us by individuals, community groups, government and industry. This underpins the Commission's independence and is a unique feature of the Australian market and regulatory arrangements.

Anyone can submit a rule change request to the AEMC to be considered against the criteria established by the governments. What this means is that, if a market participant, consumer group, government or any individual consumer forms a view that the rules need to evolve in line with say, advancements in technology, a rule change can be proposed to the AEMC. Where issues sit outside of the energy market rules, such as consumer protection and concession policies, governments have an important role in keeping these policies fit-for-purpose as energy markets evolve.

## Gas supply side issues

Upstream policies that impact on the supply of gas, including exploration and drilling moratoriums, are outside of the AEMC's remit. They do, however, influence market outcomes and provide important context for gas market development.

Improving market and regulatory efficiency to promote the efficient allocation of gas will naturally be limited if the supply side of the market is not able to respond to the demands of gas users. When supply side imbalances persist, prices may rise and reductions in demand may occur as consumers substitute away from using gas.

In this context, the AEMC welcomes the Energy Council's broader Gas Market Development Plan<sup>11</sup> and the ACCC's East Coast Gas Inquiry,<sup>12</sup> as well as various other initiatives that will generally complement the work the AEMC is undertaking to develop the wholesale gas trading and pipeline access arrangements in the east coast gas market.

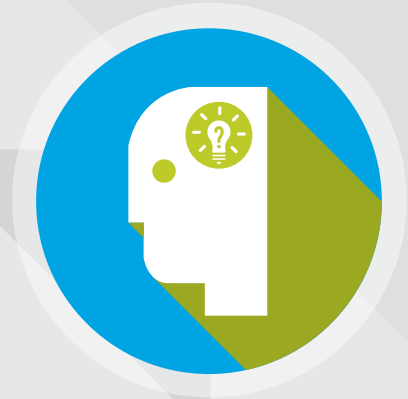
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11 See: <http://www.scer.gov.au/workstreams/energy-market-reform/gas-market-development/>

12 See: <https://www.accc.gov.au/regulated-infrastructure/energy/east-coast-gas-inquiry-2015>

# 3.

## CONSUMER PRIORITY



*Enabling consumers to make informed decisions in competitive retail markets is one of the strategic priorities for energy market development. The Commission has refined the wording of the consumer priority since the publication of the Discussion Paper in response to feedback from stakeholders to better reflect the proposed areas of focus.*

This priority can be expressed as allowing consumers to decide when the value of energy services to them is greater than the efficient cost of supplying these energy services.

Energy markets are changing. A range of new products and services are emerging that are redefining the way in which electricity is supplied to consumers, how consumers engage with the market and how and when electricity is used. Consumers can benefit from the evolving market arrangements and through their choices provide important signals to businesses across all aspects of the electricity supply chain.

Many organisations providing innovative energy services differ from traditional suppliers. These changes have implications for how consumers participate in the market, the information required to make informed choices and how they are protected. In this context, engaged consumer advocates have a vital role to play in contributing to the effective functioning of the energy sector through informed participation in the regulatory processes run by the Commission, AER and other organisations.

The three areas of focus - protection, engagement and participation - for the consumer priority aim to empower consumers to benefit from innovations in energy markets and enhanced competition.

### **Why are consumers a priority and how has this priority evolved?**

It is important that energy markets service consumer needs. Competitive retail markets promote choice and value for consumers, by providing incentives for energy service providers to minimise costs, and to offer products and services consumers value.

Consumer engagement in the energy markets takes a number of forms, including:

- shopping around for energy plans;
- installing distributed generation such as household solar PV;
- managing energy use, such as with supporting equipment, technology, third-party options or reducing consumption; and
- engaging with policy, regulatory and market processes.

Effective consumer participation, through both consumer engagement in the energy markets, as well as consumer advocacy in the regulatory process, can contribute to well-functioning markets and help consumers manage how much they spend on energy.

### **Competitive retail energy markets have continued to develop**

A key focus in 2013 was to continue to develop workably competitive retail energy markets with strong consumer protections as a basis for innovation, consumer choice and competitive prices. Workably competitive retail energy markets promote the supply of energy at least cost, responsive customer service and product innovation, ultimately to the benefit of all consumers.

Since 2013, retail energy markets have continued to evolve and mature, providing consumers with more opportunities to choose the combination of energy services, energy retailer and plan that best meets their needs. More jurisdictions have deregulated energy prices in the past few years, with the NSW Government removing price regulation from 1 July 2015, which was informed by AEMC reviews finding that competition was effective.<sup>13</sup>

As the retail markets continue to mature, customer engagement can be expected to change with a growing awareness of smaller new entrant energy service providers, comparator websites and available products and savings from shopping around. In this sense, competition is best described as an adaptive discovery process where firms and customers continually interact: energy service providers compete to attract customers and maximise profit, while customers seek out the best deals that meet their needs. This is an iterative process and one that does not always happen smoothly, but through the process of discovery and experimentation businesses adapt in order to meet the varying and increasingly diverse needs of consumers.

Consumer research undertaken as part of the Commission's annual Retail Competition Reviews<sup>14</sup> has found that most customers are satisfied with their retailer experience; however, the quality of interaction

may vary between retailers.<sup>15</sup> Customers that want to be shopping around to save money. The research also shows that consumers are seeking more transparent and meaningful information from retailers and governments to help them shop around with confidence. A number of customers surveyed were not aware of the government-run websites available to make comparisons easier.<sup>16</sup>

The National Energy Customer Framework (NECF)<sup>17</sup> has now been adopted in all jurisdictions aside from Victoria;<sup>18</sup> however, there are a number of jurisdictional differences in how the framework has been applied. These modifications have effectively resulted in there being different versions of the NECF that apply in each jurisdiction, making it more complex for consumers to understand how the NECF applies to them and more costly for energy service providers operating across multiple jurisdictions to apply. There are now also concerns that the NECF may not be fit-for-purpose in the changing world of new products and services as not all new entrants to the energy sector are brought within the existing obligations.

In December 2014, the COAG Energy Council committed to "undertake an assessment of the differences in how jurisdictions have applied the [NECF] and examine whether there is a need to enhance frameworks in light of the ongoing change taking place in competitive energy markets, particularly as it regards the introduction of new technologies, products and services".<sup>19</sup> Officials are expected to report back on the outcomes of this at the December 2015 Energy Council meeting.<sup>20</sup>

13 See: AEMC, 2015 Retail Competitive Review, Final Report, 30 June 2015.

14 See: <http://www.aemc.gov.au/getattachment/ba3a93ab-233b-4c2c-b436-a84e5351298b/Terms-of-Reference.aspx>

15 Other reports also support this. For example, EWOV's 2015 Annual Report sets out that the number of cases that they deal with fell 40% from 2013-14 to 2014-15. This is due to retailers implementing new and upgraded billing systems. It also comments that the fall is indicative of customer service and internal dispute resolution improvements by the companies. See: EWOV, Annual Report 2015, p. 6.

16 For example, Energy Made Easy, Your Choice and My PowerPlanner.

17 The NECF is the national customer protection framework for the retail sale of electricity and gas to residential and small business energy customers. The stated aim of the associated laws and rules is national consistency in the medium to long term for all stakeholders in the energy market.

18 Victoria has deferred its transition to the NECF in order to put in place arrangements so that there is no reduction in key protections for Victorian consumers. See: <http://www.esc.vic.gov.au/Energy/Harmonisation-of-Energy-Retail-Codes-and-Guideline>

19 COAG Energy Council Communique, 11 December 2014.

20 COAG Energy Council Communique, 23 July 2015.



Competitive retail markets promote choice and value for consumers by providing incentives for retailers to minimise costs and prices, and offer the products and services that people value.

### Power of choice reforms are being implemented

The AEMC's Power of Choice review, which concluded in November 2012, found that most consumers were not paying prices that reflect the underlying costs of electricity supply. This is due to the current structure of network tariffs and retail offers and the limited availability of real-time metering data. The review recommended a package of changes to provide households, businesses and industry with more opportunities to make informed choices about the way they use electricity and manage expenditure.<sup>21</sup> This review also provided the Energy Council with an implementation plan to gradually phase in efficient and flexible pricing options

Since 2013, a number of rule changes originating from the Power of Choice review have been implemented or are currently underway. These include changes to the principles for distribution pricing,<sup>22</sup> new metering frameworks,<sup>23</sup> measures to address access to consumers' data,<sup>24</sup> improvements in demand side participation information provided to AEMO,<sup>25</sup> demand management incentives<sup>26</sup> and enabling demand response.<sup>27</sup>

A key reform from this review is the implementation of the distribution pricing rule change. The rule requires network businesses to set prices that reflect the efficient cost of providing network services to individual consumers. This will allow consumers to make more informed decisions about their use of electricity. Signalling the real cost of consumption at peak times can encourage other ways of meeting demand, such as demand-side response, conserving energy and energy efficiency measures. New network pricing structures will come into effect for consumers from 2017.

Retailers have an important role in this process. A key role of retailers is to manage the risks associated with

the costs of various electricity supply inputs, including network charges, and to package these inputs into a range of retail offers for consumers. The distribution pricing rule change therefore provides retailers with additional tools to manage this risk. This allows consumers to select the retail tariff that best aligns with their preferences.

In combination, these reforms are intended to give consumers greater information and an improved ability to manage their energy usage. Consumers' choices can drive more efficient outcomes when the prices they pay for energy reflect the cost of supplying them, and the supply chain is flexible enough to respond to their choices.

### Consumers are more engaged in regulatory processes

Enabling consumers to participate in energy markets also involves engagement in policy and regulatory processes. The AEMC has been active in seeking to engage with consumer representative groups. Since 2013, we have held a number of Consumer Priorities Forums to understand key issues for consumer representative groups which have helped better understand consumer's experiences in energy markets. The AEMC also participates in the AER's Customer Consultative Group and is a regular invitee to the National Consumer Roundtable on Energy.

Further, a number of opportunities for consumer participation in policy and regulatory processes, which were identified in 2013, have now been implemented. For example, on 1 July 2013 the AER established the Consumer Challenge Panel to help incorporate the interests of consumers into decisions on network costs.

On 30 January 2015, Energy Consumers Australia (ECA) became operational. ECA's objective is to promote the long-term interests of consumers of energy with respect to the price, quality, safety, reliability and security of supply of energy services. This is to be achieved by providing and enabling strong, coordinated, collegiate evidence based consumer advocacy on national energy market matters of strategic importance or material consequence, in particular for residential and small business customers. ECA assumed the consumer advocacy grant functions previously conducted by the Consumer Advocacy Panel (CAP).

21 See: AEMC, Power of choice review - giving consumers options in the way they use electricity, Final Report, 30 November 2012.

22 See: <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>

23 See: <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

24 See: <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>

25 See: <http://www.aemc.gov.au/Rule-Changes/Improving-Demand-Side-Participation-information-pr>

26 See: <http://www.aemc.gov.au/Rule-Changes/Demand-Management-Embedded-Generation-Connection-I>

27 See: <http://www.aemc.gov.au/Rule-Changes/Demand-Response-Mechanism>

## What the AEMC proposed and what stakeholders said

In the Discussion Paper the AEMC proposed that the consumer priority should have the following three areas of focus:

- **Protection:** What consumer protections are required in response to technology and new business models? How should the NECF evolve?
- **Engagement:** Do consumers have enough useful information to shop around? How do consumers, with divergent interests, engage with the regulatory process?
- **Participation:** Do the prices consumers pay for energy reflect the costs of supplying them? Do consumers have the ability to respond to these price signals, particularly through access to new technologies? Are retail offers, products and services, responsive to changing consumer preferences and choices?

### Protection is a key area of focus as markets evolve

There was broad endorsement of this area of focus and its importance by stakeholders.<sup>28</sup> Stakeholders consider that the existing protections framework may not be fit for purpose following the emergence of new technologies and business models. A protections framework should be flexible and robust enough to deal with changing business models in the future.<sup>29</sup>

Given that concerns about the appropriateness of the protections framework are largely being driven by rapid innovation in energy markets, many stakeholders highlighted the strong links between this aspect of the consumer priority, and the *new technology and business models* area of focus of the markets and networks priority.

Some stakeholders also expressed concern that the protections framework is not nationally consistent, which has increased costs to consumers as a result

of retailers operating across jurisdictions with different arrangements.<sup>30</sup>

Stakeholders also noted that it is important that the AEMC and other organisations work closely with consumer groups in the assessment of energy-specific consumer protections and frameworks, which may be suitable for the evolving electricity markets.<sup>31</sup>

### Increasing diversity poses challenges for engagement

Stakeholders generally agreed with the Commission that effective consumer engagement remains a priority area for development in a changing market in order to promote the long-term interests of consumers. However, there was also recognition that not all consumers want to be actively engaged in the market.<sup>32</sup> Flexibility is required so that those who wish to participate have the information available to them to engage; and those that do not want to participate, do not have to.

Many stakeholders consider that further work is needed to define the appropriate level and type of information that is made available to consumers - particularly given the increased complexity of the market and offerings of new products and services, and the increased diversity of consumers. Different approaches may need to be taken for different types of consumers, with each approach needing to be carefully considered and tailored.<sup>33</sup> For example, EWOV considers that consideration needs to be given to the potential impact of the additional complexity on consumers' understanding of, and active participation in, the market.<sup>34</sup>

Stakeholders were supportive of more work being undertaken in this area to determine the appropriate level of information, and how this can be presented in a meaningful way to consumers.<sup>35</sup>

28 EnergyAustralia, Discussion Paper submission, p. 4; AusNet Services, Discussion Paper submission, p. 3; CALC, Discussion Paper submission, p. 2; Ethnic Communities Council of NSW, Discussion Paper submission, p. 2; Energex, Discussion Paper submission, p. 1; ENA, Discussion Paper submission, p. 4; AGL, Discussion Paper submission, p. 5; EWON, Discussion Paper submission, p. 3; and United Energy and Multinet Gas, Discussion Paper submission, p. 3; Ergon Energy, Discussion Paper submission, p. 2; and EWOV, Discussion Paper submission, p. 2.

29 EWON, Discussion Paper submission, p. 3; and United Energy and Multinet Gas, Discussion Paper submission, p. 3.

30 EnergyAustralia, Discussion Paper submission, p. 4; and Origin Energy, Discussion Paper submission, p. 1.

31 EnergyAustralia, Discussion Paper submission, p. 4; and EWON, Discussion Paper submission, p. 3.

32 Red Energy and Lumo Energy, Discussion Paper submission, p. 1; AusNet Services, Discussion Paper submission, p. 2; and Snowy Hydro, Discussion Paper submission, p. 1.

33 Ethnic Communities Council for NSW, Discussion Paper submission, p. 2; AGL, Discussion Paper submission, p. 2; EWON, Discussion Paper submission, p. 3; and AusNet Services, Discussion Paper submission, p. 2.

34 EWOV, Discussion Paper submission, p. 2.

35 EnergyAustralia, Discussion Paper submission, p. 2; and AGL, Discussion Paper submission, p. 4.



In terms of consumer engagement with the regulatory process, there appeared to be general recognition that, while there has been improvements in this space, further work may be required.<sup>36</sup> For example, given the evolving technology there is a need for advocates for consumers to deal with technically complex issues.<sup>37</sup> A key concern for some stakeholders was ensuring that there is a balance in the representatives of consumers with divergent interests in the regulatory process. It is important for all types of consumers to be represented in the regulatory process. Some stakeholders considered that ECA could play a key role in this regard.<sup>38</sup>

### Implementation of new distribution prices is a key enabler for participation

Stakeholders agree that the implementation of the distribution pricing principles rule change is a key enabler for a range of new products and services to be offered, allowing for more informed decisions to be made by consumers. For example, AGL noted that these reforms will enable an increase in the range of innovative products and services, increasing choice for consumers, as well as reducing cross-subsidies between consumers.<sup>39</sup>

However, numerous stakeholders across a range of stakeholder groups consider that there needs to be effective information campaigns to accompany the reforms.<sup>40</sup> Consumers need to have information on the reforms in simple, transparent and widely understood language so that they can be empowered by these reforms.

Finally, affordability of electricity prices is still a key concern.<sup>41</sup> EWOV and EWON consider that energy affordability needs to be front and centre when considering consumer priorities.<sup>42</sup>



Existing consumer protections may not be fit for purpose following the emergence of new technologies and business models. A protections framework should be flexible enough to deal with the market's continuing evolution.

## Areas of focus for the consumer priority

Empowered consumers can benefit from, and contribute to, the effective functioning of the energy sector. For this reason, and based on the feedback from stakeholders, the AEMC considers *enabling consumers to make informed decisions in competitive retail markets* should be one of the strategic priorities for market development.

Over the coming years, the priority should have the following areas of focus:

- **Protection:** What consumer protections are required in response to technology and new business models? How should the NECF evolve?
- **Engagement:** Do consumers have enough useful information to shop around? What is “useful” information? How do consumers, with divergent interests, engage with the regulatory process?
- **Participation:** Do the prices consumers pay for energy reflect the costs of supplying them? Do consumers have the ability to respond to these price signals, particularly through access to new technologies? Are retail offers, products and services responsive to changing consumer preferences and choices?

### PROTECTION

Consumer protections are fragmented across jurisdictions, which has the effect of resulting in avoidable regulatory costs and potential barriers to entry/expansion for retailers. This may lead to increased costs, or decreased choice, for consumers. Further, there is a range of new products and services that are emerging that are changing consumers’ interactions with the energy markets. The implications for the regulatory framework of these new technologies and business models are discussed further in chapter 5. However, importantly, these changes also have implications for the regulations that have been designed to protect electricity consumers.

Consumer protections should be flexible enough to adapt to changing business models, but still protect consumers in the face of these developments. The AEMC has observed (with this supported by stakeholders) that there may be gaps in the protection framework emerging as a result of these new technologies and business models. The current arrangements may lack the flexibility to provide

<sup>36</sup> UnitingCare Australia propose that consumers and consumer groups need to be directly involved with deliberating and negotiating network pricing so that future network regulation is developed in direct consultation with and negotiation between network businesses and consumers. See: UnitingCare Australia, Discussion Paper submission, p. 7.

<sup>37</sup> AGN, Discussion Paper submission, p. 2.

<sup>38</sup> EnergyAustralia, Discussion Paper submission, p. 4.

<sup>39</sup> AGL, Discussion Paper submission, p. 4.

<sup>40</sup> Red Energy and Lumo Energy, Discussion Paper submission, p. 1; EWON, Discussion Paper submission, p. 3; EnergyAustralia, Discussion Paper submission, p. 2; EWOV, Discussion Paper submission, p. 2; and ENA, Discussion Paper submission, p. 4.

<sup>41</sup> EWOV, Discussion Paper submission, p. 2; EWON, Discussion Paper submission, p. 3; and UnitingCare Australia, Discussion Paper submission, p. 3; and CALC, Discussion Paper submission, p. 2.

<sup>42</sup> EWOV, Discussion Paper submission, p. 2; and EWON, Discussion Paper submission, p. 3.

appropriate consumer protections for evolving relationships between consumers and energy service providers.

In response to these changes, energy-specific consumer protections (ie, the NECF) above and beyond the protections provided by the *Australian Consumer Law*, require rethinking.<sup>43</sup> There should be a clear balance sought between ensuring positive consumer outcomes from new business models and technological change, with the desire to encourage innovation and a range of new products and services.

Analysis on the need to change energy-specific consumer protections will also likely require a rethink of the approach to energy regulation and its essential service characteristics. Considering this issue should be a priority in order to prevent detrimental consumer outcomes that could undermine confidence in the market.

The Energy Council is currently undertaking a review of the NECF to assess whether the framework requires enhancement in light of the ongoing change taking place in competitive energy markets, particularly in relation to the introduction of new technologies, products and services.<sup>44</sup> The Energy Council is also conducting a review of derogations and differences in the NECF.<sup>45</sup>

Appropriately scoped reviews of the protection framework are crucial to the development of an effective but proportionate response in the face of recent developments in the energy markets. These reviews need to be completed as a matter of priority, so that consumers can receive the full benefits of new products and services being offered, while being confident that appropriate protections are in place. The AEMC will continue to work with the Energy Council to determine whether the protections framework remains fit for purpose.

The AEMC also considers that ECA has an important role to play in this area of ensuring that the protections framework is robust. ECA provides and enables advocacy on national energy market matters

of strategic importance or material consequence for energy consumers. The need for an effective protections framework to support the evolving energy markets is one of these areas. By working together on this issue, the Energy Council and ECA will establish a strong base on which to progress this important policy issue.

#### ACTION ITEM 1 PROTECTION

AEMC and ECA to work alongside the Energy Council to determine how the energy consumer protections framework needs to evolve.

Energy Council to successfully complete its current review of the NECF in light of the changing business models facilitated by technological change and existing *Australian Consumer Law* protections.

#### ENGAGEMENT

New technologies and business models are also increasing choices for consumers. Without appropriate and accessible information, consumers who choose to shop around may not be able to make informed choices.

The Commission considers that engagement is not necessarily about consumers switching retailers, but rather *awareness*, so that consumers can be engaged *if they wish to be*. Consumer choices about how to participate in retail energy markets are influenced by a number of different factors, including the level and structure of retail prices, the means and timing of paying their bills, quality of supply, marketing activities by a company, trust or otherwise, and familiarity and past history. Consumers that do not switch retailers may still be engaged in the energy market, but value loyalty and trust above a discount price; and customers who do switch might not be highly engaged.

New challenges will arise for consumers engaging in the retail markets as the diversity of both products and services available to consumers, as well as of consumers themselves, increase. This diversity will further increase over time. Given this, governments and market bodies have a role in making sure that consumers have an appropriate level of relevant information available to them. A key question is *who* is best placed to communicate such information to consumers.

43 For example, to what extent the Australian Consumer Law covers such new products and services. ASIC also has a role in protecting consumers in relation to financial products and services. The generic consumer regulation contained in the Australian Securities and Investments Commission Act 2001 reflects the relevant provisions of the Australian Consumer Law.

44 See: <https://scer.govspace.gov.au/files/2015/07/Council-Implementation-Plan-July-20151.pdf>

45 See: <https://scer.govspace.gov.au/files/2015/07/Council-Implementation-Plan-July-20151.pdf>

A public information campaign could inform consumers of their choices on energy plans. However, it is important that the information being provided is from an independent source, such as governments, to promote the legitimacy of the information. The Commission's work on a consumer engagement blueprint to empower consumers and make it easier for them to compare offers provides a good starting point.<sup>46</sup>

As recognised by stakeholders, more work is needed in terms of understanding what information consumers need to meaningfully compare energy offers. Awareness also needs to be raised so that consumers understand that they can choose to "switch and save" if they want to. How consumers respond to this information is up to them, but the information available needs to be *meaningful*. Given the increasing diversity of consumers, this may mean that information needs to be available in several different forms, or targeted different ways.

Much of what consumers *want* in terms of information exists, such as independent government comparison websites, but the information may not always be presented in an easy to understand way. This should improve over time as providers of these websites get a better understanding of how consumers require information to be presented.

As part of the Commission's annual Retail Competition Review, a range of information sources are used to assess the competitive indicators in each market. Part of this includes quantitative customer research. The Commission plans to leverage this quantitative customer research in order to better understand the information consumers require and how this may be changing. Each year AEMC staff will hold an annual roundtable to discuss the findings from this research with the AER, ECA and consumer groups so that the information can be acted upon, such as through updates to the AER's Energy Made Easy price comparator website.

In relation to consumers being engaged in the regulatory process, we recognise that work is being done in this space (eg, the establishment of the AER's Consumer Challenge Panel). However, there is still a need to consider whether industry's consultation with consumers is appropriate. For example, network businesses must give interested parties enough time

to review the relevant material. There may also be a role for ECA in terms of communicating more complex technical matters as part of its work on building expertise, and educating consumers.

## ACTION ITEM 2 **ENGAGEMENT**

AEMC to leverage the quantitative customer research collected as part of the annual retail competition reviews to understand what information consumers require and how this may change.

AEMC to hold an annual roundtable with the AER, ECA and consumer groups to discuss the findings of this research so that lessons learnt can be implemented.

## **PARTICIPATION**

As recognised by many stakeholders, successful implementation of the distribution pricing rule change is a key enabler for energy service providers to package offers for consumers, which will allow consumers to make more informed decisions about their use of electricity. The prices will come into effect for consumers in 2017. Retailers will have more information on the costs of various electricity supply inputs, so they can package these inputs into a range of retail offers for consumers to choose from.

However, having these prices alone is not sufficient. It will be important that consumers have the ability, and the right information, in order to respond to these price signals. Complementary programs and measures need to be in place to support the reforms. A better understanding of the information that consumers will require, as discussed above, will help in this regard. Further, the AEMC will monitor the implementation of the distribution pricing rule change, so that the new network tariffs are supportive of the intent of the rule.

Finally, affordability issues are still a key issue for consumers. While the AEMC's work on price trends indicates that price growth may be moderating in the coming years, the affordability of energy will continue to be an important issue, particularly for vulnerable consumers.

The Commission has also observed, as discussed in chapter 2, that concession policies and mechanisms vary from jurisdiction to jurisdiction, reducing choices available for consumers by increasing the compliance



New technologies and business models are also increasing choices for consumers. Without appropriate and accessible information, consumers who want to shop around may not be able to make informed choices.

<sup>46</sup> See: <http://www.aemc.gov.au/Markets-Reviews-Advice/Review-of-Competition-in-the-Retail-Electricity-an#>

burden for retailers required to administer these programs across multiple jurisdictions. Often it is the smaller retailers without sophisticated systems and large compliance teams who are most affected, restricting their ability to compete. Greater consistency in the mechanisms for delivering concessions (as distinct from the level of concessions) across jurisdictions would reduce this burden. Given the importance of these matters to consumer groups, as well as the sector more generally, the AEMC recommends that the Energy Council consider reviewing the jurisdictional concession policies to assess opportunities for the appropriate targeting and harmonisation of the structure of these policies, where substantive differences exist.

#### **ACTION ITEM 3 PARTICIPATION**

AEMC to monitor implementation of the distribution pricing rule change so that the new network tariffs support intent of the rule.

Recommend the Energy Council consider undertaking a review of concession policies to assess opportunities for the appropriate targeting and harmonisation of the structure of these policies, where substantive differences exist.

# 4.

## GAS PRIORITY



Gas market development and the efficiency of the gas supply chain are a key area of focus for the COAG Energy Council, consumers of gas and industry participants. For this reason, gas will form part of the AEMC's strategic priorities for energy market development, specifically: *promoting the development of efficient gas markets*. The focus of the priority is consistent with the work the AEMC is currently undertaking on the East Coast and Victorian-specific Gas Reviews.

While the establishment of an east coast liquefied natural gas (LNG) export industry means that gas is growing in importance to the Australian economy, some users are reportedly facing difficulties negotiating contracts for gas and pipeline capacity. This highlights the importance of developing a liquid wholesale gas market that provides participants with greater flexibility outside of long-term contracts when buying and selling gas. Greater market-based trading will also produce a transparent and meaningful reference price, ensuring that gas and pipeline capacity is allocated to those who value it the most.

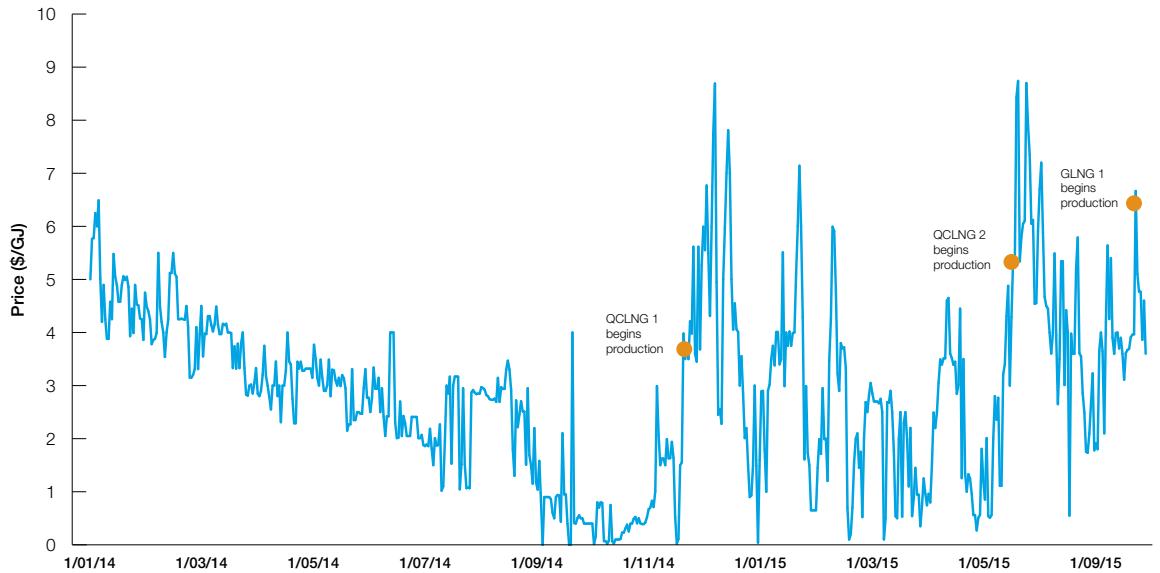
While the gas priority does not explicitly cover the arrangements for retail gas markets, the benefits of greater efficiency in the buying and selling of gas across the economy should be reflected in retail prices paid by consumers. Getting the wholesale market arrangements right through lower transaction costs and fewer barriers to entry will promote more competition in the wholesale trading of gas, with

consumers benefiting through retail prices that better reflect the costs of gas supply.

We recognise that work undertaken by the Commission on gas market development will not address upstream supply-side issues that are the result of jurisdictional government policies. Restrictions on gas supply or inquiries into gas field development currently exist in New South Wales, Victoria, South Australia and Tasmania. Nonetheless, we acknowledge the importance of trading markets and pipeline regulation to the efficiency of the gas supply chain, and as the market evolves it is important to consider whether these arrangements will continue to promote the National Gas Objective (NGO).<sup>47</sup>

<sup>47</sup> The National Gas Objective is to promote the efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

**FIGURE 4.1 BRISBANE EX ANTE STTM PRICES HAVE BEEN VOLATILE AS FIRST LNG CARGOS WERE SHIPPED**



Source: AEMC analysis; AEMO. Note: 17 October 2014 price of \$29.90 is removed so that the trend can more easily be identified.

### Why is gas market development a priority and how has it evolved?

Natural gas is a prominent fuel source in the Australian economy, with around 24 per cent of Australian energy consumption sourced from gas in 2013-14.<sup>48</sup> In the east coast domestic market, gas is primarily used for industrial processes (40 per cent) and electricity generation (30 per cent), with residential and commercial consumption also material (25 per cent).<sup>49</sup> Given the role gas plays in the Australian economy, promoting the development of effective market and regulatory arrangements is likely to have positive benefits for the broader economy.

In January 2015, first LNG cargos were exported from Gladstone, with large volumes of coal seam gas (CSG) coming online to meet the new demand from LNG. First exports represented a historic moment for the east coast gas industry and the market has now entered a transitional period to a new supply/demand balance. Demand for east coast gas will increase substantially as the three LNG export projects ramp

up to full production. By 2020, natural gas used for LNG production will make up over 70 per cent of total east coast demand.<sup>50</sup>

### LNG export operations are creating trading opportunities

Figure 4.1 shows the Brisbane STTM ex ante price decreasing through 2014 until 27 December, when loading of the first LNG export cargo took place. The decrease in prices at the Brisbane STTM hub reflected a short term oversupply driven by the need to bring around 2,000 CSG wells progressively online ahead of production commencing at the QCLNG plant.

As the liquefaction of natural gas and loading of the first cargo took place, Brisbane STTM prices increased and exhibited greater volatility as excess gas in the market was used by the LNG plant. Market conditions remained volatile proceeding the start-up of QCLNG train 1 as a further two LNG trains were brought online, and in response to variable LNG production during the commissioning phase of all three plants.

48 Department of Industry and Science 2015, 2015 Australian energy update, Table 3.1.

49 AEMO 2014, National Gas Forecasting Report.


50 AEMO 2014, National Gas Forecasting Report.

Once all six of the LNG trains are fully operational they will consume around 4,400 TJ of natural gas on average per day to meet their contractual obligations, and more if the trains are run at maximum nameplate capacity. This compares to average daily consumption on the east coast of 1,665 TJ per day and winter peak demand of 2,560 TJ per day.<sup>51</sup>

The large amount of gas required for LNG operations compared to domestic consumption, combined with the inherent variability in supply from CSG, is likely to drive the need for greater trading flexibility to take advantage of price arbitrage opportunities and to optimise participants' gas portfolios. A number of scenarios can be envisaged where the supply/demand balance on the east coast could shift quickly in response to LNG export operations, including:

- during commissioning of the LNG trains;
- when the LNG trains start up and shut down for maintenance;
- if an LNG train trips unexpectedly;
- if the capacity of the LNG export pipeline is reduced for unplanned maintenance; and/or
- if the productive capacity of the gas fields is reduced for unplanned maintenance.

Under these scenarios, having the flexibility to trade gas and pipeline capacity at short notice, and access gas storage, will provide greater scope for reliably and securely managing the gas system, as well as maximising efficiency in the allocation of gas to end use consumers. This will promote the long-term interests of consumers by making sure that gas is available to those users who value it the most, based on price, on any given day.



Trading gas in a transparent manner through well-functioning markets is fundamental to consumers knowing whether gas prices reflect underlying demand and supply conditions.

Pipeline utilisation and flow direction is also being impacted by the changing market dynamics. As production from the Cooper and Surat basins begins to be diverted to LNG operations, additional gas will be supplied from Victoria into the northern states. The Northern Territory Government has recently announced that Jemena has been selected to construct and operate the North East Gas Interconnector Pipeline, which will connect Northern Territory gas to eastern gas markets.<sup>52</sup> Once built, this will likely contribute to changing utilisation and flows on existing east coast pipelines.

### Flexible trading arrangements support gas market efficiency

Buying and selling gas on a trading market on an equal basis to other players, and being able to effectively hedge price risk, lowers barriers to entry and promotes competition. Competition allows gas to be allocated to those users who value it the most, promoting efficient outcomes with the consequential benefits being felt by consumers through retail prices. Trading in a transparent manner through well-functioning markets is also fundamental to consumers knowing whether the gas price reflects underlying demand and supply conditions.

Recognising the structural changes underway in the east coast market, and the importance of gas to the Australian economy, the Commonwealth and Victorian Governments undertook reviews of the gas sector in 2013.<sup>53</sup> At the same time, the AEMC completed the 2013 strategic priorities review and the self-initiated gas market scoping study, with both reports highlighting the need for a strategic plan to facilitate further development of the gas market in this new era of LNG exports.<sup>54</sup>

51 EnergyQuest, EnergyQuarterly March 2015 Report, p. 69-75; AER Industry Statistics.

52 See <http://www.nt.gov.au>.

53 Victorian Government 2013, Gas Market Taskforce - Final Report and Recommendations, October 2013; Commonwealth Government 2014, Eastern Australian Domestic Gas Market Study, January 2014.

54 AEMC 2013, Strategic Priorities for Energy Market Development, Discussion Paper, October 2013, Sydney; K Lowe Consulting, Gas Market Scoping Study, a report for the AEMC, July 2013.

Following these reviews, the COAG Energy Council tasked the AEMC with considering the direction that gas market development on the east coast should take, given the new market dynamic presented by the LNG industry. Alongside this review, the Victorian Government has also asked the AEMC to look in detail at the specific arrangements in Victoria.<sup>55</sup> In undertaking these reviews, the AEMC is guided by the NGO and the Energy Council's Vision for Australia's future gas market, which is as follows:<sup>56</sup>

"The Council's vision is for the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focussed at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities."

Achieving the Vision will not necessarily be an easy or quick process, but doing so will provide participants with a more flexible and transparent way of buying and selling gas. This should in turn promote greater efficiency in the allocation of gas, with the consequential benefits flowing through to retail prices faced by consumers.

The AEMC is considering a number of important trade-offs in developing its recommendations for the Energy Council. These include the extent to which different gas market development pathways promote trading and risk management, preserve signals for investment in pipeline capacity, add new levels of complexity and the significance of the change from the status quo.

## What the AEMC proposed and what stakeholders said

The Discussion Paper proposed that *promoting the development of efficient gas markets* remain as one of the AEMC's three strategic priorities for energy market development. It was proposed that the gas priority would complement the work the AEMC is

currently undertaking through the East Coast and the Victorian-specific Gas Reviews.

The following three areas of focus for the gas priority were proposed in line with the AEMC's broad interpretation of the Energy Council's Vision for Australia's future gas market:

- **Wholesale gas trading markets:** How should the gas trading markets be structured to maximise efficiency of trade and minimise transaction costs?
- **Pipeline capacity trading:** How should the transmission pipeline framework promote efficient investment and allocation of capacity, while supporting trade in wholesale gas markets?
- **Information:** What information does a liquid wholesale gas market require to function effectively?

### Stakeholders were supportive of the alignment with the Victorian and east coast gas reviews

Most stakeholders agree that gas should remain as a strategic priority, with the focus aligned with the Victorian and East Coast Gas Reviews. Stakeholders also considered that gas should continue as a priority while the implementation work for these reviews is carried out.

In contrast, Hydro Tasmania suggested that the timeframe for finalisation of the gas review work was too short for it to remain a strategic priority, although it is important to complete existing workstreams and incorporate ACCC wholesale gas market competition review findings.<sup>57</sup>

A number of submissions made specific comments with respect to issues being considered through the wholesale gas markets, pipelines and information workstreams as part of the East Coast and Victorian Gas Reviews. The AEMC appreciates these comments and will be responding to them as part of the East Coast Gas Review Stage 2 draft report, and the Victorian Gas Review draft report, which will be provided to the Energy Council ahead of its December 2015 meeting.

In addition to the proposed focus of the gas priority, the ENA and AGN consider the AEMC should consider the causes of limited retail gas competition in smaller regional areas and whether there needs to be increased information around the key drivers of retail gas prices for consumers.

<sup>55</sup> For the terms of references see the AEMC website.

<sup>56</sup> COAG Energy Council, Australian Gas Market Vision, December 2014, p. 1.

<sup>57</sup> Hydro Tasmania, Discussion Paper submission, p. 1.



The ENA and a number of the gas network businesses also note that subsidies for specific electrical appliances put gas appliances at a relative disadvantage.<sup>58</sup> For instance, heat pump electric hot water systems are eligible to receive small-scale technology certificates.<sup>59</sup>

### Integration between the NEM and wholesale gas markets is not a priority

The Discussion Paper set out whether there was a need for greater integration between the NEM and wholesale gas markets. Integration is interpreted as the need for systems that allow trading across both markets, consistency in the provision of information, financial risk management products that provide for effective hedging of both gas and electricity prices and more flexible gas pipeline services.

Only a few years ago gas-fired generation was expected to materially increase in response to demand growth and climate change policies, driving the need for greater integration between the electricity and gas markets. AEMO's latest forecasts show that gas used for gas-fired generation will decline at an annual average rate of 16.8 per cent between 2014 and 2019 due to low demand growth and rising gas prices.<sup>60</sup>

Notwithstanding this, there may be growing opportunities for businesses to arbitrage wholesale gas spot prices and NEM spot prices, as has occurred with the start-up of the LNG plants, and which may drive convergence between the NEM and east coast gas market.<sup>61</sup> Further, growth in the penetration of renewable energy capacity, and how quickly this occurs, is likely to stimulate investment in gas-fired peaking plant to offset the intermittent nature of wind and solar. Analysis by AEMO shows that 25 per cent of proposed generation projects in the NEM is open-cycle gas turbine peaking plant.<sup>62</sup>

While the future is inherently uncertain, a step change in convergence between the electricity and gas markets is unlikely to take place in the short to medium term. Because of this, the AEMC did not see integration as a key area of focus for the strategic priorities. The ESAA agrees that this should not be a

focus area for the priority. However, the ESAA notes that the AEMC should be mindful of increasing interactions on this issue going forward.<sup>63</sup>

The AEMC therefore does not propose this as an area of development for the gas priority. However, to the extent there is scope for incremental development based on current levels of gas-fired generation, this should be explored if it leads to increased efficiencies for participants.

### Areas of focus for the gas priority

Gas market development and the efficiency of the gas supply chain are key areas of focus for governments, consumers and energy market participants. As a result of this, the AEMC is currently undertaking two major reviews into the east coast gas market. For this reason, and based on the feedback from stakeholders, *promoting the development of efficient gas markets* should continue to remain one of the AEMC's strategic priorities for market development.

The gas priority will complement the East Coast and the Victorian-specific Gas Reviews. On this basis, the three areas of focus for the priority reflect the AEMC's broad interpretation of the Energy Council's Vision for Australia's future gas market and are as follows:<sup>64</sup>

- **Wholesale gas trading markets:** How should the gas trading markets be structured to maximise efficiency of trade and minimise transaction costs?
- **Pipeline capacity trading:** How should the transmission pipeline framework promote efficient investment and allocation of capacity, while supporting trade in wholesale gas markets?
- **Information:** What information does a liquid wholesale gas market require to function effectively?

While these three aspects of the gas priority are focussed on wholesale markets and trading, getting these right will promote the NGO and result in greater efficiency in terms of gas being allocated to those users who value it the most. The benefits of a more efficient wholesale market should be reflected in the retail prices paid by consumers of gas as transaction costs are lowered and barriers to entry for new participants reduced.



While the establishment of an east coast LNG export industry means that gas is growing in importance to the Australian economy, some users are reportedly facing difficulties negotiating new gas contracts highlighting the importance of developing a liquid wholesale gas market.

<sup>58</sup> ENA, Discussion Paper submission, p. 4

<sup>59</sup> See: <http://yourenergysavings.gov.au/energy/hot-water/about-hot-water>

<sup>60</sup> AEMO, National Gas Forecasting Report, 17 December 2014.

<sup>61</sup> EnergyQuest, EnergyQuarterly March 2015, p. 25.

<sup>62</sup> AEMO, 2015 Electricity Statement of Opportunities, Infographic.

<sup>63</sup> ESAA, Discussion Paper submission, p. 2.

<sup>64</sup> COAG Energy Council Australian Gas Market Vision, December 2014.

The gas reviews are being conducted over two stages. Stage 1 of the review is now complete with the stage 1 final report provided to Ministers at the Energy Council's July 2015 meeting, and published on the AEMC website. At the July 2015 meeting the Energy Council agreed to four intermediate actions to enhance the transparency and efficiency of the market, which were to:

- improve price transparency through an Australian Bureau of Statistics wholesale gas price index;
- identify additional information gaps that can be addressed to enhance pipeline capacity trading;
- submit a rule change request to harmonise the start time of the "gas day"; and
- remove the limitation in the National Gas Law (NGL) on who can submit Victorian DWGM rule changes.

Stage 2 of the East Coast Gas Review will develop more options to promote long-term gas market development and enable the rules governing the markets and pipelines to be fit for purpose in the new gas environment. This includes developing recommendations to improve the efficiency of the wholesale gas markets, maximising pipeline trading capacity, and establish information provision to support a liquid wholesale gas market.

Stage 2 of the Victorian Gas Review will consider whether objectives for the Victorian market should change in light of the broader east coast environment, and whether the current market design is achieving its objectives. It will also consider the Victorian market's potential role in providing an efficient reference price for all east coast gas markets, and the capacity for inter-regional trade.

The draft reports for both reviews will be provided to the Energy Council ahead of its December 2015 meeting, with final reports expected in May 2016.

The Commission considers that the focus of the gas priority over the next two years should be to continue to progress gas market developments in line with the Energy Council's Vision. The AEMC's recommendations from the gas reviews will set out how gas markets need to develop to support this, along with an implementation plan for the development of the market.

The Commission therefore recommends that the Energy Council continue to pursue gas market developments in line with its Vision and that the AEMC's recommended roadmap for reform as set out in the final reports for the gas reviews, is progressed quickly.

The Commission notes the ENA's concerns regarding jurisdictional policies that support fuel substitution. Similar to integration between energy and environmental and social policies, electricity and gas retail policies should be well integrated so as to not distort consumer choices. In light of this, the Energy Council may wish to review any jurisdictional policies that may have this effect.

#### **ACTION ITEM 4 GAS PRIORITY**

Energy Council to continue to pursue its Vision for gas markets and the AEMC's recommended roadmap for gas market developments, as set out in the AEMC's final reports for the Victorian and East Coast Gas Reviews.

Recommend the members of the Energy Council consider reviewing any jurisdictional policies that support a particular energy source (eg, gas) over another type of energy source (eg, electricity).

# 5.

## MARKETS AND NETWORKS PRIORITY



The AEMC considers that *market and network arrangements that encourage efficient investment and flexibility* should be one of the three strategic priorities for energy market development. This priority reflects the importance of market and regulatory arrangements that promote efficient investment decisions in the long-term interest of consumers.

### Why is the development of markets and networks a priority and how has it evolved?

We are in a period of significant change in energy markets. Changes in the costs of supplying energy, technological advances, consumer preferences, patterns of demand and environmental policy requirements are all creating opportunities for new business models to develop. Products and services are emerging that are giving consumers greater information and choice about how they use energy. Policy developments external to energy market regulation – such as those discussed in section 2.2 – are also having a significant influence on how energy is bought and sold.

In such a complex and multi-faceted environment, regulatory frameworks need to be resilient and flexible. The proposed areas of focus for this priority reflect these developments.

#### Technological changes are occurring

Changes in technology, and the pace of those

changes, have the potential to fundamentally alter Australia's energy markets - creating both opportunities for value creation, as well as potential challenges for the regulatory frameworks. Some examples of these developments are discussed below.

#### Energy storage

Storage devices, including batteries and pumped hydro units, are not new technologies and some have been used in Australia's energy markets for decades. What is new is that technological advances, particularly in battery storage, are making the functions they perform cheaper and more accessible to a wider range of users. As a result, the potential range of storage applications is increasing and greater penetration, including at the residential level, has led to questions about whether the existing regulatory frameworks are sufficiently flexible to support the integration of storage technologies.

Storage has the potential to impact on many elements of the electricity supply chain, and so impact outcomes for consumers:

- storage systems connected to generation sources could allow generators to better manage variations in wholesale prices between times of high and low demand, or better integrate variable generation resources like large-scale wind through the provision of ancillary services;
- large-scale storage systems may be used by network businesses to reduce congestion, smooth network peaks, mitigate outages or provide network support - all of which potentially reduce the need for spending on traditional network infrastructure, thereby reducing the cost of network services for consumers; while
- distributed storage systems may offer significant benefits to consumers with intermittent energy sources, such as the 1.4 million Australian households with rooftop solar PV, by allowing them to better match their generation to their usage needs.

Which applications will prove the most valuable, and the point at which they do so, is uncertain at this time.

The Commission currently has a project, in collaboration with the CSIRO, to better understand the future regulatory impact of the integration of storage technologies in the NEM.<sup>65</sup> Storage is being used as an example technology to help identify specific opportunities and potential challenges in the existing market frameworks as a way of assessing how the market can accommodate a range of technological advances.

#### *“Big data” and digital enablement*

As consumers integrate more connected devices into their homes and install smarter meters, more and more data will flow back to energy businesses. Consumers are also generating exponentially more data in other parts of their lives, as they use the internet, mobile devices, make purchases online or in stores and through social media. The raw information generated by these interactions is called “big data”. Big data enables new ways of segmenting and targeting consumers. It allows businesses to obtain an incredibly rich picture of consumer behaviour and motivations, trending towards creating the consumer segment of one individual.

Big data and digital enablement offers consumers the potential for far greater information and control of a range of devices, including their energy-using appliances. Companies other than energy retailers

<sup>65</sup> See: <http://www.aemc.gov.au/Major-Pages/Technology-impacts>

are also seeing opportunities to bundle energy services with other product offerings, as in integrated smart homes. Who will win the consumer in this space is highly uncertain at this time.

#### **Nature of wholesale market is changing**

Historically, the wholesale electricity market has delivered a high level of reliable supply as a result of timely investments in new capacity and reliably operated plant. It has also delivered good customer outcomes, with average wholesale prices close to the long-run costs of generation.<sup>66,67</sup>

Over the last few years the market has been faced with a paradox: wholesale energy prices and energy demand were falling, while retail prices were increasing. In part, this was seen as the result of the RET pushing additional generation capacity into the wholesale market at a time that demand was falling, as well as the significant network investment being undertaken to meet expected peak demand that increased network tariffs.

In the Commission’s 2014 submission to the Renewable Energy Target (RET) review, the AEMC highlighted that the wedge between retail and wholesale prices is problematic, representing a disconnect between the price faced by consumers on the one hand, generation sources on the other, and the underlying demand and supply.<sup>68</sup> Over time, a properly functioning market is unlikely to be sustainable when wholesale prices are not informing consumer choices in the retail market. Through this submission, the Commission called for better integration of environmental policies with energy markets.

More recently there have been concerns about an excess of capacity in the wholesale electricity markets, and some stakeholders called for an overhaul of the wholesale market’s energy-only design, such as through a payment for keeping thermal capacity in the market in case they are needed or for assistance for generators to exit the market.<sup>69</sup> Recently, the Energy Council has commented that the energy-only design of the wholesale market has proven to be robust and

<sup>66</sup> AEMC, *Potential Generator Market Power in the NEM*, Final determination, AEMC, April 2013.

<sup>67</sup> The exception to this trend in South Australia in the years 2007-08 to 2009-10 was noted.

<sup>68</sup> AEMC, 2014 submission to the RET review.

<sup>69</sup> See, for example, AGL Applied Economic and Social Research, *Energy-only markets and renewable energy targets: complementary policy or policy collision?*, August 2014 (AGL Working Paper No. 43).

efficient, and that it does not support radical change to the market's design, or assistance to generators to exit the market.<sup>70</sup>

The AEMC also maintains that the market is providing efficient signals for generator exit, as evidenced by the mothballing or permanent closure of plant in South Australia, Victoria, NSW and Queensland in recent years, and supported by our recent work for the Energy Council on these matters.<sup>71</sup> AEMO's 2014 Electricity Statement of Opportunities (ESOO) reported surplus generation capacity of 7,400 MW in the NEM by 2023-24; while the 2015 ESOO noted that the market has responded in the past year by notifying its intent to withdraw approximately 4,550 MW of capacity (about half the surplus) by 2022.<sup>72</sup>

Notwithstanding this, the NEM is currently in a disinvestment phase, with multiple thermal generators having been temporarily or permanently withdrawn from the market. With intermittent capacity in wind and solar making up a larger proportion of the energy mix, this may present a number of technical challenges going forward around managing power system security and reliability.<sup>73</sup>

### What the AEMC proposed and what stakeholders said

In the Discussion Paper the AEMC set out that we are in a period of significant change in energy markets, and so regulatory frameworks need to be at once resilient and flexible. The AEMC proposed revising the priority to include specific reference to "networks" and proposed the following areas of focus:

- **Technology and new business models:** How does regulation need to evolve to accommodate innovation in new products and services to the benefit of consumers, without eroding the customer outcomes that regulation intends?
- **Network evolution:** What will be the effect of technology on network investment and operation over the medium term? Will current regulation be appropriate for the business model evolution that may be required?

70 COAG Energy Council, December 2014 Communique, 11 December 2014.

71 AEMC, Barriers to efficient exit decisions by generators, Advice to the COAG Energy Council, 16 June 2015.

72 AEMO, Electricity Statement of Opportunities 2015, p. 3.

73 See for instance the recent announcement made by AEMO regarding blackouts in South Australia: <http://www.aemo.com.au/News-and-Events/News/News/AEMO-statement-South-Australia>

- **Wholesale markets:** How can policies in other portfolios be integrated with energy markets?

### Technology and new business models is a key focus area

This focus area attracted a significant amount of comment and feedback from stakeholders. There was broad agreement that this is an important area of focus. Numerous stakeholders consider that the future regulatory frameworks need to be flexible to support the development of innovative products and services, while promoting competitively neutral frameworks.<sup>74,75</sup>

For example, the ENA notes that future regulatory frameworks need to support the development of innovative products and services at the same time as achieving the NEO, NGO and NERO. Ergon Energy noted that the regulations also need to be flexible enough to allow regional market incumbents to provide these "market" products and services - technologies should not just be enjoyed by those in the more densely populated areas.

Both the ENA and CALC note the interaction of this area of focus, with the consumer priority. Specifically, the ENA considers that the scale of change to customer energy services requires consideration of changes to the policy and regulatory environment, particularly for energy supply operations and consumer protections.


### Stakeholders had mixed views on the network evolution area of focus

Stakeholders had mixed views as to whether or not networks should be specifically recognised in this priority or not. Networks typically welcomed the inclusion, and considered that this was an important area of focus;<sup>76</sup> while the ERAA and Red Energy and

74 Ergon Energy, Discussion Paper submission, p. 2; ERAA, Discussion Paper submission, p. 2; Origin Energy, Discussion Paper submission, p. 2; AusNet Services, Discussion Paper submission, p. 3; AGL, Discussion Paper submission, p. 4; Ethnic Communities Council of NSW, Discussion Paper submission, p. 2; Red Energy and Lumo Energy, Discussion Paper submission, p. 2; Ergon Energy, Discussion Paper submission, p. 2; Snowy Hydro, Discussion Paper submission, p. 2; TransGrid, Discussion Paper submission, p. 2; United Energy and Multinet Gas, Discussion Paper submission, p. 3; Energex, Discussion Paper submission, p. 2; APA Group, Discussion Paper submission, p. 1.

75 The ACT Minister for the Environment considers that both governments and energy market bodies should be actively working towards supporting the uptake of storage technologies. See: ACT Minister for the Environment, Discussion Paper submission, p. 2.

76 AGN, Discussion Paper submission, p. 5; ENA, Discussion Paper submission, p. 6; AusNet Services, Discussion Paper submission, p. 3; TransGrid, Discussion Paper submission, p. 2.



The National Electricity Market is in a disinvestment phase, with thermal generators being temporarily or permanently exiting the market. With intermittent generation making up a larger share of the energy mix this may present technical challenges for managing system security and reliability.

Lumo Energy question whether it should be specifically included. The parties that were against it being specifically recognised considered that where network businesses seek to offer products and services that are, or could be, in competition with other providers, that this should fall under the “markets” element.

The ESAA also consider that the AEMC should monitor other ongoing processes and outcomes (eg, the Energy Council’s work on new products and services) before considering a major work stream of its own.

A key question that many stakeholders commented on was, in the changing energy markets, where to draw the line between what is regulated, and what is not regulated.<sup>77</sup> While stakeholders had different views about the answer to this question, all agreed that it is an important issue to consider.

### Policy integration is important

Stakeholders endorsed the importance of effective policy integration.<sup>78</sup> The ENA and ESAA consider that the AEMC has an important role in influencing the effective integration of environmental and energy policies.

Stakeholders also raise that policy integration is not just about environmental policies, but also about integration of electricity policies with gas policies, as well as consumer policies.

A number of stakeholders (mainly generators) consider that the AEMC needs to consider the effects of the higher level of intermittent generation in the NEM, and the implications this has for the regulatory frameworks.<sup>79</sup> Stakeholders recognise that AEMO is currently undertaking studies on how the increasing level of renewable technologies in the

generation market affects wholesale market operations. However, stakeholders consider that the AEMC should work with AEMO in order to investigate whether any *regulatory responses* may be required to address these market changes.

Hydro Tasmania consider that the Commission should specifically consider whether there are any implications for wholesale market design, when the majority of the future generation supply has a zero marginal cost.<sup>80</sup> ENA also consider that there may be implications for potential new ancillary service requirements.<sup>81</sup>

## Areas of focus for the markets and network priority

Existing functions and roles in energy markets will be performed by new and different technologies in the coming years. Given these new developments, it is important that market and regulatory arrangements contribute to the right environment for business evolution, while still promoting the consumer outcomes that are the objective of regulation. For this reason, and based on feedback from stakeholders, the Commission considers *market and network arrangements that encourage efficient investment and flexibility* should be one of the three strategic priorities for energy market development.

The AEMC considers that the following should be the areas of focus for this priority:

- **Technology and new business models:** How does regulation need to evolve to permit innovation in new products and services to the benefit of consumers, without eroding the customer outcomes that regulation intends? How do regulatory arrangements need to evolve to accommodate the increasing intermittence of large-scale generation in the wholesale market?
- **Network evolution:** What will be the effect of technology on network investment and operation over the medium term? Will current regulation be appropriate for the business model evolution that may be required?
- **Policy integration:** How can policies in other portfolios be integrated with energy markets?

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77 Hydro Tasmania, Discussion Paper submission, p. 3; Snowy Hydro, Discussion Paper submission, p. 2; Red Energy and Lumo Energy, Discussion Paper submission, p. 2; ERAA, Discussion Paper submission, p. 2; EnergyAustralia, Discussion Paper submission, p. 2; Ergon Energy, Discussion Paper submission, p. 2; United Energy and Multinet Gas, Discussion Paper submission, p. 4.

78 ENA, Discussion Paper submission, p. 7; ESAA, Discussion Paper submission, p. 2; EnergyAustralia, Discussion Paper submission, p. 8; AGL, Discussion Paper submission, p. 7; AGN, Discussion Paper submission, p. 7; Hydro Tasmania, Discussion Paper submission, p. 4; Origin Energy, Discussion Paper submission, p. 3; and APA Group, Discussion Paper submission, p. 6; and ACT Minister for the Environment, Discussion Paper submission, p. 2.

79 AGL, Discussion Paper submission, p. 7; ESAA, Discussion Paper submission, p. 2; ENA, Discussion Paper submission, p. 7; Origin Energy, Discussion Paper submission, p. 3; and Hydro Tasmania, Discussion Paper submission, p. 4; Silgar and Associates, Discussion Paper submission, p. 1.

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80 Hydro Tasmania, Discussion Paper submission, p. 4.

81 ENA, Discussion Paper submission, p. 7.

## TECHNOLOGY AND NEW BUSINESS MODELS

Given the changes in technology, and the emergence of new business models, energy market arrangements need to be flexible and resilient enough to respond to this change. New products and services have the potential to benefit consumers, but the regulatory frameworks need to evolve to allow consumer preferences to be accommodated.

We are already seeing the evolution of a very different market. Companies are competing to offer energy services, not just the energy itself. They will increasingly manage the consumer's energy needs, managing the risk of procuring energy in a more dynamically priced environment, providing tools to respond to time-of-use pricing, optimising appliance settings, choosing when to charge electrical vehicles and when to sell stored energy back to the grid. Multiple companies may provide these and other services to the same consumer, rather than there being one point of contact with a traditional retailer.

New products and services have the potential to benefit consumers, but they also raise challenging issues for the AEMC as rule-maker. Consumer protection issues were discussed in chapter 2 of this paper. A related issue is competitive neutrality. The regulatory frameworks need to find some balance between:

- limiting barriers to entry or innovation for these new business models; and
- bringing the new business models within the regulatory framework where that is important to consumer outcomes or to outcomes on the power system as a whole.

It is also important that consumer preferences, rather than inconsistencies in the application of regulation, drive emerging business models. The regulatory arrangements should support innovation, and so allow for evolving consumer preferences to be accommodated.

For the AEMC to assist governments with policy development, and in anticipation of receiving rule change requests on these matters, the AEMC needs to have an understanding of how the market is changing and the type of new business models that are emerging. Therefore, the Commission proposes to continue to progress its technology-focused work program, which includes identifying:

- barriers to deployment of new technologies by new or existing market players;

- whether the consumer protection framework remains fit for purpose; and
- incentives or disincentives for business model evolution.

The Commission notes that in undertaking any assessment of whether the regulatory framework remains fit for purpose in the face of dynamic market forces, it is important to understand the original purpose of that framework. An underlying principle of energy market regulation in Australia has been technology neutrality. That is, the rules are not designed to bias the deployment of any particular technology.

Rather, the rules have been designed to encourage efficient, market-based outcomes and so not act as a barrier to the use of whatever technology delivers the most cost-effective service. In sectors that are not subject to competition – network businesses – the regulatory framework has again been technology neutral, seeking to mimic to the greatest extent possible those cost-effective market outcomes.

### ACTION ITEM 5 TECHNOLOGY AND NEW BUSINESS MODELS

AEMC to continue to progress its technology-focused work program and provide recommendations to the Energy Council, part of which is to consider whether changes are required to the regulatory frameworks.

The generation mix is also changing as a result of changing technology as well. Over the past few years, we have been observing an increasing level of large-scale intermittent generation, particularly in South Australia. This has the potential implications for the efficient operation of the wholesale market. While to date, generation patterns in the NEM have been relatively stable and predictable and so the existing arrangements have from an overall perspective, been proved to generally work well, this could change going forward.

AEMO already have an existing work program to investigate how the growing contribution of renewable technologies to Australia's energy supply mix is likely to affect wholesale market operations. The Reliability Panel has been working with AEMO to assess the implications of a changing generation fleet on system security and reliability, and will continue to do so.



New products and services have the potential to benefit consumers, but the regulatory frameworks need to evolve to allow consumer preferences to be accommodated.

Similar to new business models, the Commission needs to have a strong understanding of new wholesale market dynamics. It is important that the Commission is able to assess the adequacy of the existing regulatory arrangements so that they are fit for purpose to deal with this changing generation mix. This would require assessing the design of the wholesale market itself, as well as the implications for ancillary services that support the wholesale market. This assessment would need to be considered on a forward looking basis. The Commission recommends that the Energy Council should task the AEMC with undertaking a piece of work on these issues.

#### **ACTION ITEM 6 TECHNOLOGY AND NEW BUSINESS MODELS**

Recommend that the Energy Council consider tasking the AEMC to undertake work on assessing whether additional pricing mechanisms are required within the energy-only wholesale market to accommodate an increasing level of large-scale intermittent generation.

Reliability Panel to continue to work with AEMO in order to consider the implications of a changing generation fleet on system security and reliability.

#### **NETWORK EVOLUTION**

While some stakeholders consider that network evolution is not a priority, the AEMC considers that widespread deployment of storage and other distributed energy resources (distributed generation, demand management schemes) could significantly alter the future for distribution networks. Networks are evolving from one-way energy delivery systems in a growth environment, into multi-directional 'smart grids' with an increasing focus on efficient utilisation and maintenance. The overall level of network investment and the type of assets that should be invested in is subject to uncertainty.

Network evolution should therefore be maintained as an area of focus.

In particular, as set out in the AEMC's Integration of Storage report, there are some aspects related to network optimisation and control that need to be worked through. For example, the technical requirements that apply to storage behind a

customer's meter should be investigated to assess their appropriateness and whether there is potential for standardisations. For example, to consider whether the technical requirements, including AS4777, give network businesses too much control over what is connected to their networks, both in terms of: specification of the equipment and technical performance; and remote control.<sup>82</sup> There may be other changes that are required in the medium-term to assist network evolution, and the Commission continue to investigate these through its technology-based work program.

The Commission also considers that, as recognised by stakeholders, a key question to consider is where to draw the line between what is regulated, and what is not regulated. The ring-fencing provisions that help define how regulated and contestable services are provided by network businesses are due to be revised by the AER in 2016. These will need to be developed with very clear requirements for arms-length transactions and be accompanied by rigorous compliance and enforcement activities. This will enable networks to compete with other service providers on an equal basis.

The Commission considers that the AER's review of these ring-fencing guidelines is a key component of this priority over the next few years.

#### **ACTION ITEM 7 NETWORK EVOLUTION**

AER to complete its review of the ring-fencing guidelines in 2016 so that they are fit for purpose in a changing environment.

AEMC to continue to progress its technology-focused work program and provide recommendations to the Energy Council, part of which is to consider the implications for network business development and effective competition for retail energy services.

#### **POLICY INTEGRATION**

Given the importance that the Commission considers this priority needs to hold, and the feedback from stakeholders, this area has been refocused solely on policy integration of *all* external policies that impact

<sup>82</sup> AEMC, Integration of Storage: Regulatory Implications, Draft Report, 9 October 2015, Sydney, p. 20.



on the energy market. Policies that are appropriately designed and integrated with the energy market, can minimise the costs faced by consumers.

While environmental and social policies may have different objectives to energy policy, they can be designed in such a way that the objectives of both are met, while the costs faced by consumers are minimised. Environmental policy that continues to meet its objective in the facing of changing economic conditions, and minimises distortions on energy markets, will also have a better chance of being in place for the long term.

For these policies to be mutually reinforcing, it is important that they are designed and implemented with regard to one another. Integrated policy outcomes are more likely to occur when decisions are taken in a transparent manner and after full consultation with all interested parties. External policies can create distortions in energy markets that end up changing the risk allocation in those markets.

Well-designed markets help to facilitate that the risks associated with market investment are borne by businesses that make the investment decisions. When a policy external to the energy sector places investment risk onto consumers, this reduces the incentives for businesses to manage this prudently and exposes consumers to the costs of inefficient investment.

A greater focus on policy integration will become increasingly important as new market participants, possibly regulated through other sectors of the economy, or from different international markets, enter the energy space. Understanding the impact that decisions in other portfolios will have in the energy sector and proactively engaging on those issues will help progress the Energy Council's reform agenda more effectively.

Given the impact that policy decisions in other portfolios can have on the outcomes in the NEM, the integration of these policies with energy market development remains a key element of this priority. Earlier this year the Energy Council discussed the interaction of climate change and energy policies. It noted that the Council, as the peak forum for the development of national energy policy, would have a central role in ensuring that policies to reduce emissions in the energy and resources sectors are efficient and effective.<sup>83</sup>

The Commission welcomes this, and considers that the Energy Council should continue to promote better integration of policies. The AEMC will continue to work with both the Energy Council, as well as other energy agencies, to achieve this outcome.

#### **ACTION ITEM 8 POLICY INTEGRATION**

Energy Council to continue to promote better integration of energy and climate change policy, as recognised in July 2015 communique.

AEMC to continue to work with other agencies to achieve the effective integration of policy objectives in other portfolios with the competitive energy sector.

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<sup>83</sup> COAG Energy Council Communique, 23 July 2015.

# 6.

## CONCLUSION



In the two years since the Commission last developed the strategic priorities for energy market development, there have been considerable developments in the sector - with evolving technology, new market entrants and structural changes underway in both the gas and electricity markets.

Despite these developments, the Commission still consider that the 2013 strategic priorities are broadly appropriate. However, the priorities require a new focus in order to remain relevant for the future evolution of this dynamic sector. This view was broadly endorsed by the 27 submissions to the Discussion Paper and public forum.

Following feedback from stakeholders at the public forum, submissions to the Discussion Paper, and bilateral consultation, the Commission has updated the three strategic priorities for energy market development, as set out below. This year, the Commission has also articulated a number of actions, both for the AEMC to undertake, but also some recommendations for other energy market institutions to undertake. These are summarised in Table 6.1 below.

### **Consumer priority: Enabling consumers to make informed decisions in competitive retail markets**

Energy markets are changing, with a range of new products and services emerging that change the way electricity is supplied to consumers, how

consumers engage with the market, and their consumption and costs.

The three areas of focus for the consumer priority - protection, engagement and participation - aim to empower consumers to benefit from innovations in energy markets and enhanced competition.

### **Gas priority: Promoting the development of efficient gas markets**

Gas market development is a key area of focus for the Energy Council, consumers of gas and industry participants.

The focus areas for this priority - wholesale gas trading markets, pipeline capacity trading and information - are consistent with the work the AEMC is undertaking on the Victorian and East Coast Gas Reviews which seek to articulate a recommended roadmap for gas market reform, in line with the Energy Council's Vision. More effective wholesale gas markets, along with a more efficient pipeline framework for transporting gas, should reduce the retail prices paid by consumers. The AEMC's final reports for these reviews are due in May 2016.

### Markets and networks priority: Market and network arrangements that encourage efficient investment and flexibility

Energy markets are in a period of significant change. Changes in the costs of supplying energy, technological advances, changes in consumer preferences, changing patterns of demand and environmental policy requirements are all creating opportunities for new business models to develop.

Regulatory frameworks need to be at once resilient and flexible. A greater focus on policy integration will also become increasingly important as new market participants enter the energy space.

The areas of focus for this priority - new technology and business models, network evolution, policy integration - reflect these developments, and aim to produce regulatory frameworks that are fit for the future.

TABLE 6.1 SUMMARY OF ACTION ITEMS

	ACTION ITEM	
	For the AEMC	For Other Energy Market Institutions
<b>Consumer priority</b>		
<b>Protection</b>	AEMC and ECA to work alongside the Energy Council to determine how the energy consumer protections framework needs to evolve.	Energy Council to successfully complete its current review of the NECF in light of the changing business models facilitated by technological change and existing <i>Australian Consumer Law</i> protections.
<b>Engagement</b>	<p>AEMC to leverage the quantitative consumer research collected as part of the annual retail competition reviews to understand what information consumers require and how this may change.</p> <p>AEMC to hold an annual roundtable with the AER, ECA and consumer groups to discuss the findings of this research so that lessons learnt can be implemented.</p>	
<b>Participation</b>	AEMC to monitor implementation of the distribution pricing rule change so that the new network tariffs support intent of the rule.	Recommend the Energy Council consider undertaking a review of concession policies to assess opportunities for the appropriate targeting and harmonisation of the structure of these policies, where substantive differences exist.
<b>Gas priority</b>		
<b>Wholesale gas trading markets</b>	AEMC to continue to progress its East Coast and Victorian DWGM reviews to set out a road map for the continued development of the markets in order to meet the Council's Vision.	Energy Council to continue to pursue its Vision for gas markets and the AEMC's recommended roadmap for gas market developments, as set out in the AEMC's final reports for the Victorian and east coast gas reviews.
<b>Pipeline capacity trading</b>		Recommend the members of the Energy Council consider reviewing any jurisdictional policies that support a particular energy source (eg, gas) over another type of energy source (eg, electricity).
<b>Information</b>		
<b>Markets and networks priority</b>		
<b>New technology and business models</b>	AEMC to continue to progress its technology-focussed work program and provide recommendations to the Energy Council, part of which is to consider whether changes are required to the regulatory frameworks.	Recommend that the Energy Council consider tasking the AEMC to undertake work on assessing whether additional pricing mechanisms are required within the energy-only wholesale market to accommodate an increasing level of large scale intermittent generation.
<b>Network evolution</b>	AEMC to continue to progress its technology-focussed work program and provide recommendations to the Energy Council, part of which is to consider the implications for network business development and effective competition for retail energy services.	AER to complete its review of the ring-fencing guidelines in 2016 so that they are fit for purpose in a changing environment
<b>Policy integration</b>	AEMC to continue to work with other agencies to achieve the effective integration of policy objectives in other portfolios with the competitive energy sector.	Energy Council to continue to promote better integration of energy and climate change policy, as recognised in July 2015 communique.

# A

# SUMMARY OF SUBMISSIONS

The table below summarising substantive points made in submissions to the discussion paper which are not directly referenced in the main body of this final report.

We received submissions from the following stakeholders:

**ACT Minister for the Environment**

**AGL**

**APA Group**

**AusNet Services**

**Australian Gas Networks**

**Consumer Action Law Centre (CALC)**

**Energy Networks Association (ENA)**

**Energex**

**Energy Retailers Association of Australia (ERAA)**

**Energy Supply Association of Australia (ESAA)**

**EnergyAustralia**

**Ergon Energy**

**Ethnic Communities Council of NSW**

**Energy and Water Ombudsman NSW (EWON)**

**Energy and Water Ombudsman Victoria (EWOV)**

**Far North Queensland Electricity Users Network**

**Hydro Tasmania**

**In Tempore Advisory**

**Origin Energy**

**Public Interest and Advocacy Centre (PIAC)**

**Red Energy and Lumo Energy**

**Santos**

**Silgar and Associates**

**Snowy Hydro**

**TransGrid**

**United Energy and Multinet Gas**

**Vector**

TABLE A.1 SUMMARY OF SUBMISSIONS

Issue raised	Stakeholder	AEMC response
<b>General</b>		
<p>Rising electricity prices is causing widespread energy stress to both households and businesses in the NEM. The current National Electricity Rules are not planning a “smooth” transition to a renewable energy future.</p>	<p>Far North Queensland Electricity Users, Discussion Paper submission, pp. 1, 6.</p>	<p>An important part of the market governance arrangements is that the AEMC cannot initiate rule changes. Rules are changed in response to requests brought to us by individuals, community groups, government and industry. However, we are undertaking work in order to assess whether the existing regulatory frameworks are fit for purpose in a changing world. See chapters 4 and 5.</p>
<p>Australia now has some of the highest electricity prices globally by some measures. A significant increase in inefficient network investment in recent years contributed towards this trend. A market that ultimately fails to deliver good price outcomes to end users cannot be said to be performing effectively.</p> <p>The Commission should consider whether energy market processes continue to support market developments and delivery of strategic priorities in a timely manner</p>	<p>ACT Minister for the Environment, Discussion Paper submission, p. 1.</p>	
<p>Despite tough economic times throughout Australia, current National Electricity Rules allow excessive remuneration packages to be paid to executive staff in electricity entities.</p>	<p>Far North Queensland Electricity Users, Discussion Paper submission, pp. 1, 6.</p>	<p>In regards to executive remuneration, the AEMC considers that this is a matter for electricity businesses themselves.</p>
<p>The priorities should include a focus on regulatory burden in the energy sector. Ineffective, duplicative and inefficient obligations and rules should be identified as a means of making the energy sector more productive.</p>	<p>EnergyAustralia, Discussion Paper submission, pp. 8-9.</p>	<p>The Commission considers that there are a number of processes under way, which are focussed on reviewing some aspects of the regulatory frameworks (eg, the review of enforcement regimes). Therefore, the Commission does not consider that this should be identified as an explicit priority.</p>
<p>The ideal regulatory framework would be industry-led with the upsides of the pre-National Competition Policy period (greater trust, co-operation and emphasis on informal processes), but without giving up the competitive gains of initial electricity businesses were removed from government control).</p>	<p>In Tempore Advisory, Discussion Paper submission, pp. 1-10.</p>	<p>The Australian Energy Market Agreement (AEMA) sets out the legislative and regulatory framework for Australia’s energy markets. It provides for national legislation that is implemented in each participating state and territory. The proposed regulatory frameworks by In Tempore Advisory would be inconsistent with this framework.</p>
<p>The current priorities appear to prioritise almost everything. One potential solution would be to identify the issues and to nominate one single issue for immediate action, based on its level of development and potential impact.</p>	<p>Hydro Tasmania, Discussion Paper submission, p. 1.</p>	<p>The Commission has notes this concern, and has articulated specific action items for the priorities, in order to bring some structure to the priorities.</p>
<p>Support the draft recommendations of the Expert Panel for the AEMC to take a stronger policy and strategic role than exists under the current arrangements.</p>	<p>AusNet Services, Discussion Paper submission, p. 4; United Energy and Multinet Gas, Discussion Paper submission, p. 1; ENA, Discussion Paper submission, p. 1</p>	<p>See section 2.1 for a discussion of the Expert Panel’s review of the national energy market governance arrangements.</p>
<p>There would be merit in reviewing restrictions on the development of onshore gas reserves in eastern Australia given increasing demand and tight supply/demand balance.</p>	<p>AGL, Discussion Paper submission, p. 6.</p>	<p>See section 2.4 for a discussion of gas supply side issues.</p>

Issue raised	Stakeholder	AEMC response
<b>Consumer priority</b>		
<p>Encourage AEMC to perform research based on behavioural economics into appropriate information provision. Encourage engagement with market participants and stakeholders to investigate necessary changes to protect vulnerable consumers which are specific to the electricity market.</p>	<p>CALC, Discussion paper submission, pp. 1-2</p>	<p>As set out in the Approach Paper to the AEMC's 2016 Retail Competition Review, this year the AEMC is intending to consider the two areas of "vulnerable customers" and "new products and services", in relation to competition in retail energy markets. For further information on this proposed approach, please see this Approach Paper.</p>
<p>The single largest issue with Australian energy markets is the question of trust. A majority of the energy customers that UnitingCare Australia deals with do not trust energy market providers and the energy market itself. Consideration of trust should be a high priority. UnitingCare Australia propose some specific tasks that the AEMC could do to facilitate trust.</p>	<p>UnitingCare Australia, Discussion Paper submission, p. 3.</p>	<p>The Commission agrees that a key aspect that reflects consumer engagement in energy markets is trust. We consider that work in this priority will go towards improving trust. For example, the AEMC considers that the idea to include a standard question about trust in energy markets in the retail competition review quantitative analysis may have merit, and is consistent with the action to consider engagement through these surveys. See section 3.3</p>
<p>Some successful approaches to information provision for a diverse consumers are detailed in the publication: Cultural Connections: Engaging CALD energy consumers.</p>	<p>Ethnic Communities Council of NSW, Discussion Paper submission, pp. 1-2</p>	<p>Noted. The Commission considers that this is a good resource for energy companies on how to engage with culturally and linguistically diverse communities.</p>
<p>ENA suggests that the AEMC monitor the extent of retailer pass-through of network tariffs as part of the retail competition review.</p>	<p>ENA, Discussion Paper submission, p. 3</p>	<p>See section 3.3. One of the AEMC's action items for the next period is to monitor implementation of the distribution pricing rule change to ensure the new network tariffs support intent of the rule.</p>
<p>One potential issue is the intersection between tariff reform and embedded generation as tariff reform will significantly impact the economics for future installations. Tariff reform will provide more cost-reflective price signals, but may put governments under pressure to delay reforms (due to the impacts reforms may have on investments consumers have made).</p>	<p>Hydro Tasmania, Discussion Paper submission, p. 3.</p>	
<p>Industry and government should encourage and incentivise the wider use of in-home display units, and electricity consumption portals with real-time data. These technologies, with the consideration of subsidies and programs for low-income and vulnerable groups, may increase customer access and uptake of these potentially bill-reducing technologies.</p>	<p>EWOV, Discussion Paper submission, p. 6.</p>	<p>The Commission considers that competitive retail energy markets provide the most effective mechanism for retailers to discover what consumers want and for consumers to discover the service and price combinations that retailers are offering.</p>
<p>Support mechanisms, processes and procedures which streamline transfers and assist customers and industry with switching,</p>	<p>EWOV, Discussion Paper submission, p. 8.</p>	<p>In 2014, the AEMC published a review into electricity consumer switching timeframes. The review made several recommendations to the COAG Energy Council on how the consumer transfer process can be made more timely and accurate. COAG Energy Council have advised in their July 2015 implementation plan, that the rule change requests to give effect to these recommendations would be provided in September 2015.</p>
<p>The AEMC could help to explore the issue of lack of engagement and interest in shopping around, and the perception on the part of some customers of significant transaction costs.</p>	<p>EnergyAustralia, Discussion Paper submission, p. 2.</p>	<p>Some of these issues will be considered in the AEMC's annual review of retail competition.</p>

Issue raised	Stakeholder	AEMC response
<b>Consumer priority</b>		
The demand response mechanism (DRM), and associated rule change, should not remain a strategic priority. DRM would impose real costs on registered participants, distort functions of secondary markets and have negligible benefits for some consumers at the expense of others.	Snowy Hydro, Discussion Paper submission, p. 1.	The AEMC published a Consultation Paper on the Demand Response Mechanism on 5 November 2015 to facilitate stakeholder consultation. Stakeholders are welcome to express their views on this rule change through this process.
A key theme is the growing wedge between the actual costs of supplying electricity and the retail price, which is caused by policy costs.	ESAA, Discussion Paper submission, p. 1	Noted. See section 2.2.
Some challenges faced by those businesses trying to engage with stakeholders include: lack of understanding of regulatory system and energy industry; engagement fatigue; and technically complex issues.	Australian Gas Networks, Discussion Paper submission, p. 1.	The Commission agrees that while there have been developments in terms of businesses trying to engage with stakeholders, some further work is required in terms of making sure this consultation is appropriate. This may involve addressing some of these concerns raised here
Continuing the program of work initiated under the Power of choice review should be the key mechanism supporting the consumer priority.	ERAA, Discussion Paper submission, p. 1.	See section 3.1.2. This section discusses that a number of rule change stemming from the Power of Choice review have been implemented or are currently underway.
Energy organisations should publish a master list of all consumer engagement opportunities, which influence electricity prices and supply, which should be the responsibility of the AEMC.	Far North Queensland Electricity Users, Discussion Paper submission, p. 5.	The AEMC is committed to improving consumer engagement in regulatory processes, and will continue to work with ECA, and other consumer groups in order to improve in this area, including taking on board some of the Far North Queensland Electricity Users suggestions.
AEMC should investigate methods to build and maintain knowledge within consumer organisations. Consumer organisations need to develop a local “go to” person that can cut through the complicated industry jargon.	Far North Queensland Electricity Users, Discussion Paper submission, p. 5.	For example, the AEMC will offer video conference and webinars, where possible as we did for the strategic priorities forum this year, which was streamed online.
AEMC should adopt the same transparency standards as the AER if consumer participation is to be considered a strategic priority.	Far North Queensland Electricity Users, Discussion Paper submission, p. 6.	
AEMC should audit its current list of consumers to ensure that all consumer groups are fairly and equitably represented particularly regional, agricultural and mining interests. The audit should include a measure which rates the degree with which the consumer group actively participates in any AEMC initiated consumer consultation.	Far North Queensland Electricity Users, Discussion Paper submission, p. 6.	
AEMC should ensure funds are available for regional consumers to connect through video conferencing and webinars.	Far North Queensland Electricity Users, Discussion Paper submission, p. 6.	

Issue raised	Stakeholder	AEMC response
<b>Gas priority</b>		
Support a hybrid approach to pipeline frameworks, similar to current arrangements. Long-haul pipelines should remain contract carriage with virtual hubs at Wallumbilla and Victoria where pipeline utilisation and liquidity are key. Standardisation of contracts for facilitating trade is the best way forward.	EnergyAustralia, Discussion Paper submission, p. 6.	As discussed in chapter 4 the Commission is currently undertaking major reviews into the east coast gas market. The draft reports for both reviews will be submitted to the Energy Council ahead of its December 2015 meeting.
Information needs to provide the following to market participants to function effectively: a level playing field, increased efficiency, information symmetry.	EnergyAustralia, Discussion Paper submission, p. 6.	Feedback from stakeholders, including those made by submissions to this process relating to the subject of these reviews, will inform the Commission's recommendations in the Stage 2 Draft Reports.
Supports incremental improvements to price transparency, harmonisation of gas days and pipeline trading improvements. Detailed cost benefit analysis will be needed before any major changes to wholesale gas markets.	Snowy Hydro, Discussion Paper submission, p. 2.	
Supports incremental improvements to price transparency, harmonisation of gas days and pipeline trading improvements. Detailed cost benefit analysis will be needed before any major changes to wholesale gas markets.	Snowy Hydro, Discussion Paper submission, p. 2.	
Access to economic tradeable transmission capacity is fundamental to an efficient gas market.	AGL, Discussion Paper submission, p. 7.	
Changes to the gas arrangements should be made only when there are demonstrated net benefits that go beyond conceptual considerations.	Origin Energy, Discussion Paper submission, p. 2.	
Provision of greater flexibility in pipeline transportation should continue to be driven by market participants rather than by policy interventions.	APA Group, Discussion Paper submission, p. 3.	
In favour of an incremental approach to gas market reform that has due regard for existing property rights.	ESAA, Discussion Paper submission, p. 3.	
Important to recognise the importance of the downstream gas network and the issues faced.	United Energy and Multinet Gas, Discussion Paper submission, p. 3.	As noted above, the AEMC undertakes NEM-wide competition reviews of electricity and natural gas retail markets on an annual basis for the COAG Energy Council. The AEMC has recently published an Approach Paper for this review.
Focus should be to understand why retail competition is smaller in regional markets.	Australian Gas Networks, Discussion Paper submission, p. 2.	Amongst other things, this paper notes that the AEMC will analyse regional areas separately in each state to determine whether there are any material differences from urban areas.
Gas priority should include an focus area of having a level playing field in downstream gas markets.	ENA, Discussion Paper submission, p. 4.	
The Commission should have a role in providing stakeholders with clear and accurate information about gas prices.	Australian Gas Networks, Discussion Paper submission, p. 2.	The Commission agrees that it increasing transparency on the factors that drive gas price movements would be a useful piece of work to undertake.
Gas is being widely promoted as a cheap fuel source, with this being an increasingly inaccurate assertion. There is a strong likelihood that gas prices will increase for domestic customers as LNG exports increases and residential gas users and small business gas users in Australia are more tied to world parity pricing for gas.	UnitingCare Australia, Discussion Paper submission, p. 9.	



Issue raised	Stakeholder	AEMC response
<b>Markets and networks priority</b>		
<p>An immediate concern is the geographical extent of the high voltage network and its stability. The AEMC has powers with respect to the transmission network. This ability could be used by the AEMC to allow government to guide generation development by extending transmission network facilities in desired directions.</p>	<p>Silgar and Associates, Discussion Paper submission, p. 2.</p>	<p>The AEMC has the Last Resort Planning Power (LRPP), which allows the Commission to direct registered participants to apply the RIT-T to potential transmission projects if they are likely to relieve projected constraints in respect of national transmission flowpaths connecting NEM regions. Being a last resort mechanism, it is designed to be utilised only where there is a clear indication that regular planning processes have resulted in a gap in the planning of inter-regional transmission infrastructure. Therefore, the Commission does not consider it could be used in the manner referenced in the submission.</p>
<p>A national approach to emerging safety issues would be beneficial in the context of the transition to competitive metering arrangements. Suggest that the AEMC or another appropriate agency consider facilitating a national process for the “safe” operation of the NEM.</p>	<p>Vector, Discussion Paper submission, p. 2.</p>	<p>Energy specific technical and safety regulations are the responsibility of each state and territory government and are implemented through different legislative instruments in each jurisdiction.</p> <p>In January 2012, the Commonwealth and State and Territory governments entered an Intergovernmental Agreement on Energy Supply Industry Safety. Under this agreement, the governments committed to work with the energy sector to improve the consistency of state based regulations – such as occupational health and safety requirements – that apply to the energy sector.</p>
<p>The growth of energy services into the market means that access to good reliable information and a much better understanding of transaction costs is critical for the market, and in particular for consumers.</p>	<p>UnitingCare Australia, Discussion Paper submission, p. 9.</p>	<p>The Commission agrees that an understanding of transaction costs is important when considering any changes to the regulatory frameworks.</p>
<p>There are several ongoing processes that relate to network evolution, for example, CSIRO/ENA's Network Transformation Roadmap, CEC/ARENA's Future Proofing in Australia's Electricity Distribution Industry and COAG Strategic Assessment of Network Regulation. These initiatives should be monitored and outcomes of these should be considered before starting a major AEMC work stream.</p>	<p>ESAA, Discussion Paper submission, p. 3.</p>	<p>The Commission is aware of these other processes that are being undertaken. In particular, the AEMC's technology-based work program is intended to complement the COAG Energy Council's work in this area.</p>
<p>The Network Transformation Roadmap being undertaken by the ENA and CSIRO could be a useful information source for the AEMC's consideration.</p>	<p>ENA, Discussion Paper submission, p. 1.</p>	
<p>An area to focus on is the introduction of strengthened incentives for regulated businesses (eg, similar to the UK) as well as the financeability of regulated businesses (ensuring that a regulated business is financially viable).</p>	<p>Australian Gas Networks, Discussion Paper submission, pp. 3-6.</p>	<p>To the extent that stakeholders consider that they have identified a concern with the existing Rules arrangements, stakeholders should submit a rule change request to the AEMC in order for this to be reviewed.</p>
<p>Greater use could be made of incentives in regulation, including an innovation allowance.</p>	<p>ENA, Discussion Paper submission, p. 6.</p>	
<p>Access arrangement timelines are too short for distribution businesses to respond to AER draft determinations. AEMC should review these timelines to ensure that the NGO can be appropriately met.</p>	<p>ENA, Discussion Paper submission, p. 5; Australian Gas Networks, Discussion Paper submission, p. 7.</p>	

**Notes:**

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## ABOUT THE AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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