

Objective	Metric	AGIG position
Outcome: affordable energy and satisfied consumers		
Energy is increasingly affordable for all consumers, supported by adequate consumer protections and access to dispute resolution	<ul style="list-style-type: none"> - Reduction in energy spend as a % of household disposable income - C&I customers' energy costs are competitive with international counterparts - X% consumer disputes/complaints resolved by retailers/ombudsman schemes 	The Australian Energy Regulator tracks performance in the energy retail market through the <i>Annual Report on Compliance and Performance of the Retail Energy Market</i> . We suggest metrics adopted for the strategic energy plan align with those included in this report.
Consumers are empowered to manage their demand and can access distributed energy and energy efficiency solutions	<ul style="list-style-type: none"> - Increase in consumers accessing data related to their energy usage - Increased participation in wholesale demand response or energy efficiency programs year on year 	<p>It is important to understand important differences between electricity and consumers and the availability of data.</p> <p>Gas meters and therefore consumption is only read every 2 to 3 months depending on the jurisdiction. There are also very few gas smart meters installed.</p> <p>At present, customers should have access to historical consumption data through their energy retailer and their online portal.</p> <p>For these reasons it is important to be clear about the distinct objectives, expectations and measurement of performance for retail gas and electricity.</p>
Consumers are able to easily identify and secure the best deal for their circumstances	<ul style="list-style-type: none"> - Increasing percentage of consumers on better/best contracts - Increasing number of consumers using energy data and analytic tools (EME, switching sites, flipper sites) to make energy decisions - Consumers can switch retailers in "five clicks" or less and will be changed to their new provider in less than 2 business days 	Not applicable.

<p>Vulnerable consumers are on suitable pricing plans, receiving concessions when needed, and can benefit from distributed energy and energy efficiency schemes</p>	<ul style="list-style-type: none"> - 100% of vulnerable consumers on better/best market contracts - Clear hierarchy of easily accessible support and concession measures available for vulnerable consumers - Energy efficiency, solar and/or storage programs implemented in public housing where cost efficient 	<p>As noted above, the AER collates retail market performance data in its annual reporting, including for vulnerable customers. This should form the basis of the strategic energy plan performance.</p> <p>Gas networks play an important role in supporting vulnerable customers, but have no ability to identify vulnerable customers, or their pricing plans.</p>
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Outcome: Secure electricity and gas system		
Markets operate safely, securely and efficiently, under full range of operating conditions, with minimal intervention	<ul style="list-style-type: none"> - Electricity market operates within power system security standards (frequency operating standard) and technical requirements (voltage, temperature, current limits) <ul style="list-style-type: none"> o Market operated in secure state for greater than X% of time each year o System wide outages (aggregation of network and any generation related) less than X% per year o System interventions < X per year - Gas system operates securely within technical operational parameters 	<p>Gas networks already report to regulators (often state based) on the safe, secure and efficient operation of networks. Suggested metrics include:</p> <ul style="list-style-type: none"> - number of customers having 5 or more interruptions in a year; - number of interruptions lasting greater than 12 hours; - number of outages affecting 5 or more customers in a year; and - percentage of leaks repaired within required timeframes.
System planning and development is informed by clear and transparent rules	<ul style="list-style-type: none"> - Measurable progress against a roadmap setting out development and implementation of solutions to identified system and market issues - Review of National Electricity Rules conducted by ESB by 1 July 2020 - Establishment of the Cyber-Security Framework and implementation for high and medium risk participants within established timeframes - Adaptation processes are in place to upgrade energy infrastructure to deal with increasingly severe weather events and cyber-security risks 	<p>The proposed metrics are focused on the electricity sector and are therefore not applicable.</p> <p>Potential areas of focus could include activities of the Critical Infrastructure Centre, and the Gas Statement of Opportunities (east and west coast).</p>

Outcome: Reliable and low emissions electricity and gas supply

Electricity and gas sectors efficiently deliver at least their share of emissions reduction target/s while ensuring reliable supply

- Electricity and gas sector emissions reduce in line with the sectors' share of national emission reduction target/s
- Reliability standard achieved
- Annual reduction in number of times RERT procured and activated
- Development of, and then maintenance of or improvement in, key metrics:
 - o Strategic reserves
 - o Flexibility and dispatchability

We note that the proposed metrics are almost entirely focused on electricity, and yet the objective suggests the gas sector will also deliver emissions reductions. Given the integrated nature of electricity and gas markets, it is important to integrate and reduce emissions for electricity and gas in aggregate, not individually. Making more use of gas within homes for space and water heating can reduce emissions today, and in the future the use of renewable will enable further reductions. For these reasons the measurement and targeting of reductions should be across both electricity and gas.

As noted above, with regards to reliability, there are a range of existing reporting requirements for gas networks. Potential metrics aligned with these existing requirements include:

- number of customers having 5 or more interruptions in a year;
- number of interruptions lasting greater than 12 hours;
- number of outages affecting 5 or more customers in a year; and
- percentage of leaks repaired within required timeframes.

These metrics reflect the exceptional reliability of gas networks, which should be reflected in reporting for the strategic energy plan.

With regards to emissions, we are supportive of efforts to reduce emissions and believe the gas sector should play a role in reducing and eliminating emissions – for example through our investments in hydrogen and other renewable gas

		<p>technologies. However, at present there are limited policy measures to incentivise emissions reductions. As these policies are developed, existing reporting through the <i>National greenhouse and Energy Reporting Act</i>, should be used to help measure performance.</p>
<p>Investors efficiently manage risk to support investment, operation, retirement and innovation decisions</p>	<ul style="list-style-type: none"> - Accurate and transparent market information on forecast demand, generation investment and generation withdrawal to inform market participants (and potential participants) - Average forward swap and cap contract prices for electricity in line with the efficient levelised cost of energy - Cost of capital for new electricity and gas market investments are competitive with international standards - All market participants comply with any rules around notice of closure 	<p>The proposed metrics are very focused on electricity. Gas pipelines and networks disclose a wide range of data to the AER (or ERA in WA) on many of these issues which could form the basis of metrics for the strategic energy plan.</p>

Outcome: Effective development of open and competitive markets (where appropriate)		
Wholesale and retail markets are competitive and deliver efficient outcomes for consumers	<ul style="list-style-type: none"> - Retail and wholesale prices over time (contract and average spot) reflect the long run marginal cost of producing electricity and gas - Market concentration continues to decline across all regions - Reduction in # of customers on standing offers over time - Increase in new market participants year on year 	<p>We support efforts to bring greater transparency to wholesale and retail gas markets to help customers understand the availability and price of gas in the near and longer term.</p> <p>The Australian Competition and Consumer Commission have recently undertaken extensive and ongoing analysis of gas markets with a view to understanding the wholesale market, prices and liquidity. This should form the basis of any metric adopted for the Strategic Energy Plan.</p>
Deep, liquid and transparent financial markets for electricity and gas and related services	<ul style="list-style-type: none"> - Increase in transparency of contract markets (prices, duration) for products including swaps, caps, PPAs and demand response - Increase in the ratio of traded volumes to demand for the physical product for gas, power and coal over time (establish benchmarks based on other global markets) - Increase in gas secondary trading volumes, for commodity and transportation 	<p>Further to the ACCC's work noted above, it is important that the proposed metrics focus on forward prices rather than the spot market.</p> <p>We are of the view that the lack of liquidity in gas markets is a strong reason to consider a market making obligation in gas markets. This could be developed along the lines of similar schemes for electricity (for example in the UK). Such an obligation would require large gas seller to make available and publish forward offers to improve transparency and liquidity.</p>
Access to efficiently priced fuel and transport	<ul style="list-style-type: none"> - Increase transparency of metrics on fuel reserves and prices (coal, gas, hydro) - Commodity costs competitive with international spot price less liquefaction or shipping - Increased transparency in gas transport costs 	<p>As we move towards lower emissions solutions, transport energy requirements will need to become more closely integrated with electricity networks (for electric vehicles) and the emerging hydrogen network (for hydrogen vehicles). This includes for heavy vehicles as well as smaller passenger vehicles. The metrics adopted should enable the differing energy options to be compared in order to help customers make informed decisions based on emissions and costs.</p>

<p>Innovation is incentivised and enables value from new technologies</p>	<ul style="list-style-type: none"> - Creation of value streams for the efficient delivery of system security services (e.g. inertia, fast frequency response) - Increased uptake of service provision from DSR & DER (volume year on year) - Increased transparency of information and knowledge sharing from proof of concept trials 	<p>The proposed metrics are focused almost entirely on electricity sector innovation. Support for innovation in the gas industry is required as the industry will play a critical and ongoing role in the decarbonisation of the economy.</p> <p>Gas Vision 2050, outlines a long term strategy for the industry to decarbonise, with the use of innovative technologies focused on renewable gas – including hydrogen and biogas/biomethane. It will be important that we measure progress in these areas as well as the electricity sector.</p>
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Outcome: Efficient and Timely investment in Networks		
Investment solutions are optimal across all resources	<ul style="list-style-type: none"> - Congestion levels are not material or are being examined through RIT-T/Ds - Reduction in market impacts (costs) of inter- and intra-regional constraints - X% of smart meter customers on cost reflective network tariffs by jurisdiction - Reducing generation connections times from project commitment - ISP/RITs consider non-network solutions and investments are undertaken where in customer benefit 	The metrics proposed are almost entirely focused on electricity networks. We note that electricity and gas networks are closely intertwined. Therefore, in understanding whether investment is optimal across energy resources, careful consideration needs to be given, and information available, about the potential use of alternative sources of energy, including non-electrical sources of energy.
Efficient regulation of monopoly infrastructure	<ul style="list-style-type: none"> - Cost of capital for new network investments in line with international standards - Development of, and then maintenance or improvement in, performance and productivity metrics on regulated networks - e.g. network productivity, utilisation, affordability, reliability, customer engagement and/or connection 	<p>Metrics addressing the efficient regulation of monopoly infrastructure are closely related to the existing regulatory framework. For this reason, the metrics need to be carefully developed in consultation with the industry and the AER to ensure they reflect current regulatory practice and the outcomes of recent reviews including by the Australian Competition Tribunal.</p> <p>The measurement of the cost of capital needs to be carefully controlled for specific factors relevant to networks in Australia.</p> <p>In particular, country risk must be taken into account to reflect the differing risk profiles in different markets. Furthermore, any differences between electricity and gas sector risk profiles (which can be statistically significant) need to be considered.</p> <p>With regards to performance and productivity of networks, these issues have been the subject of recent reviews, including by the Australian Competition Tribunal. These reviews need to</p>

		carefully considered in developing any performance metric.
Networks incentivised to be efficient platforms for energy services	<ul style="list-style-type: none"> - Increased integration of distributed energy resources in distribution networks - Increased transparency in prices and obligations for distributed energy resources connecting and using the distribution network - Time taken to consider and process rule changes and regulatory approvals in line with best practice international regulatory processes 	<p>A number of the metrics proposed with regards to distributed energy resources imply a role only for electricity networks, however we note that gas networks play an important energy storage role.</p> <p>Measuring the performance of regulatory approvals, including the timeframes taken to review and complete Access Arrangements under the National Gas Rules is an important step.</p>