



Towards the next generation: Delivering affordable, secure and lower emissions power

FACT SHEET

The Australian Energy Market Commission (AEMC) and the Climate Change Authority have prepared a joint report, ***Towards the next generation: delivering affordable, secure and lower emissions power***, to provide advice on policies to enhance power system security and to reduce electricity prices, consistent with achieving Australia's emissions reduction targets in the Paris Agreement.

The issue

Electricity is a fundamental part of Australia's society and economy, used by households to power and heat homes and by businesses to produce goods and services. Australia's energy sector is undergoing significant transformation. Greater volumes of electricity generation from intermittent renewable sources, elevated domestic gas prices and reducing emissions from energy to help meet Australia's Paris Agreement emissions reduction targets all feature as challenges in the energy market.

So what does the report say?

The AEMC and Authority's report outlines measures to support the better integration of energy and emissions reduction policies, to provide greater investment certainty and in doing so, help keep electricity prices as low as possible while enhancing power system security.

The policies address both the supply side (the generation of electricity) and the demand side (use of electricity) of the electricity market. In addition, the report discusses some important ongoing work led by the AEMC to help maintain and improve system security in the National Electricity Market (NEM).

The price of uncertainty

Emissions reduction policy in Australia has been marked by frequent changes of direction and uncertainty in recent years. This has led to a high degree of policy uncertainty in the energy sector resulting in delays in investment, consequent increases in electricity prices and increasing risks to the reliability of the power system.

Uncertainty can have an impact on electricity prices. New analysis done for this report by the Centre for International Economics found that current wholesale electricity prices are above long-run costs by around \$27 to \$40 per megawatt hour. Electricity prices could be lower than they would be otherwise if credible and durable policy is put in place to reduce emissions in the electricity sector.

Supply side

The AEMC and the Authority recommend an Emissions Intensity Scheme (EIS) be implemented in the electricity sector, consistent with analyses and findings in their previous reports. Previous analyses by the AEMC and the Authority found that an EIS was a cost effective way to reduce

emissions, while also having lower impacts on power system security than other measures. That analysis showed that an EIS is better able to respond to changes in energy market conditions and is therefore expected to be more durable than other measures.

As the Commonwealth Government has ruled out an EIS, the Authority recommends that the Government consider implementing a Low Emissions Target (LET) in the electricity sector.

Many different policies or policy sets can help to reduce emissions although their impacts on electricity prices and power security will vary depending on their nature and design features. The Authority considers that good design and implementation are as important as policy choice if measures are to meet the three objectives of affordability, security and emissions reductions.

The Authority's modelling indicates that a LET can achieve deep emissions reductions and if designed well, may have lower impacts on retail electricity prices than an EIS. It can also be designed to enhance power system security by encouraging investment in low emissions gas-fired generation, and carbon capture and storage.

The AEMC has not conducted any quantitative analysis of a LET-type emissions reduction policy mechanism. Without such analysis it is not possible for the Commission to assess the impact of such a policy mechanism on the electricity market, and specifically its impact on prices and system security.

Demand side

The Authority and the AEMC both support the continued development of a competitive energy services market as an important element of delivering affordable, secure and lower emissions energy.

Improving access to information about electricity use and prices and providing consumers with greater choice as to when they use electricity and the prices they pay, will help to lower electricity bills, reduce electricity use and improve the security of the power system. The Authority recommends that work already underway to deliver these outcomes be continued, and new initiatives be introduced.

Recommended policies on the demand side already in train include:

- implementation of recent electricity market rule changes to allow for competitive metering and cost reflective pricing to give customers greater control over electricity use
- improvements to access arrangements for consumer electricity data to increase information available to consumers and service providers
- implementation of a demand management incentive that enables customers to be paid incentives in return for allowing distributors direct control over appliances such as air conditioners and pool pumps.

The Authority thinks that the Productivity Commission should review the above initiatives after a reasonable period of time to test if they are meeting their objectives.

The Authority also believes the needs of electricity consumers could be better represented in energy market governance. Individuals with commercial/retail expertise (beyond the electricity sector) should be appointed to AEMC and Australian Energy Market Operator (AEMO) boards following a merit based process.

The Authority also considers that a National Energy Savings Scheme (NESS) should be implemented to increase the uptake of energy efficient technologies and practices. Sometimes known as white



certificate schemes, such an initiative would create incentives for more retailers to offer energy savings appliances and practices to their customers. The Authority is of the view that the Commonwealth Government should also consider allowing retailers or generators with obligations under an EIS or LET to meet their obligations with NESS certificates to further lower compliance costs and reduce electricity prices.

The Authority thinks supporting battery storage technologies is important for power security. Sub-regional power sharing arrangements whereby local governments, households and businesses band together to share PVs and storage could help. Once proved up, power sharing could assist with demand management and grid congestion in peak periods.

The Authority supports the AEMC's work on a change in the time interval for settlement in the wholesale electricity market from 5 minutes to 30 minutes. This could also encourage uptake of batteries.

Measures to address power system security

The Authority supports other important rule changes being developed by AEMC and work undertaken by AEMO to provide a range of future system security services to increase system strength and help with the integration of renewable generation into the NEM.

The Authority recommends that low cost ICT be required on all new wind farms to enhance system security. Where technology is low cost and available, it should be considered for other renewable generators.

Reforming the gas market

It is important that the gas market becomes more transparent and competitive to assist with power security and to put downward pressure on energy prices.

The Authority and AEMC support the ongoing reforms of the east coast gas markets, agreed by the COAG Energy Council, and the development of a consistent national framework for the gas market.

The Authority thinks that the Commonwealth Government should continue efforts to work with states to remove restrictions on gas exploration and development with a view to increasing supply.

The Authority thinks that COAG Energy Ministers should consider an obligation on large companies to publish gas prices (and offer contracts at the published price) on a market-based trading platform to deliver the equivalent of a national, domestic spot market for gas.