

An Australian Energy Vision and Framework for Energy Policy Priorities

The Energy Policy Institute of Australia believes that Australia’s energy governance model is at risk of becoming obsolete. The Institute calls for a national energy vision to align energy and climate policy and provide a framework for Australia’s long-term energy policy priorities. For this, political leadership is required.

A national energy vision is needed to guide the nation toward a reliable and affordable energy system whilst maintaining the nation’s energy export trade and pursuing greenhouse gas emissions reduction – taking community and stakeholder concerns into account.

The Institute accepts that if the world is to achieve its stated climate objectives, it will need to achieve a net-zero emissions position at some time during the second half of the century. The Institute recommends that Australia should prepare itself sooner rather than later to play an optimal role in achieving this.

Energy systems and climate systems are inherently complex, are constantly changing, are of great scale and are of great significance to the entire economy. A national vision is urgently needed to clarify individual policy measures, to put them into an understood context, to allay the concerns of consumers and the community and to build the confidence of investors who are expected to invest in assets with lives of many decades.

Explaining policy imperatives to the electorate is difficult. A new approach to energy policy formulation is required, with a much higher level of industry and community consultation.

The Australian Government’s recent establishment of a Department of the Environment and Energy is a welcome first step towards the alignment of energy and climate policy.

At COP 21, Australia made a commitment to reduce its emissions by 26-28% below 2005 levels by 2030. Australia, as one of the 20 countries that account for 80% of global emissions, agreed in Paris to the Mission Innovation (MI) initiative to accelerate low-emissions energy innovation. Australia made a commitment to double its expenditure in this field over the following five years.

The 2016 South Australian power crisis provides a graphic example of misaligned policies - with a lack of alignment between climate and energy policy objectives – and misaligned Commonwealth and state policies. The supply and pricing outcome in South Australia was entirely predictable and avoidable and has undermined confidence in renewable electricity generation and the National Electricity Market.

With any electric power system, total electricity production must continuously match electricity demand, otherwise the system will collapse within seconds. Every system is different but, as a general rule, when intermittent power generation exceeds around 40% of total electricity usage,

system security requirements demand increased operational flexibility from the remaining conventional generation which can significantly increase electricity costs.

The Victorian State Government recently announced a renewable electricity target of 40% by 2025. It appears to have done so before fully considering the operational and system security constraints, capacity factors and the implications for electricity costs.

The Essential Elements of Sound Energy Policy

In the view of the Institute, sound energy policy must be underpinned by:

- **leadership** - at the highest political level
- an agreed **context**, which can be provided by a national vision
- an **economic rationale**, in the context of international commitments to emissions reduction
- clarity of the **key policy principles**, to guide future action
- **sound analysis and technical information**, including modeling of carbon reduction and economic outcomes of the main technology options
- clearly articulated **priorities**, requiring continuing attention to ensure timely and effective delivery of reliable, affordable and clean energy
- an **implementation mechanism with clear accountabilities**, with a duty to gather and factor in the views of all stakeholders, and
- a **transparent, well-resourced and accountable reporting and governance process** to monitor progress and ensure that timely corrective action is taken when required.

A National Energy Vision

Australia needs to formalise a strategic national energy vision to guide the integration of energy and climate policy over a 20-30 year time horizon. It could be concisely stated as:

Australia's energy vision is to maintain a reliable and affordable energy system and maintain its energy export trade, whilst pursuing greenhouse gas emissions reduction at the lowest possible social and economic cost.

More information is required before a firm time-frame can be provided for any such vision and it will need to be refined over time by continuing research and collaboration.

Australia's Four Key Energy Policy Priorities

In the view of the Institute, Australia has four key energy policy priorities:

Priority 1: Alignment of energy and climate policy in a technology-neutral framework

Australia's energy policy remains out of alignment with climate policy. Its current energy policy settings will not deliver the stated climate policy objectives.

Energy and climate policy need to be aligned so that they converge on satisfactory outcomes for each of the key criteria of reliability, affordability and emissions reduction.

It is vital to Australia's competitiveness that Australia should focus its efforts on those areas which can provide the lowest-cost abatement. All sectors of the economy must be included in this effort. The stationary energy sector is responsible for 50% of Australia's emissions and the transport sector 17%. These sectors are the logical priorities, but no sector can be ignored.

Continuing to improve energy productivity will not only reduce energy costs but also provide one of the most cost-effective means of reducing emissions.

Technology neutrality and diversity must be a fundamental principle of energy policy. In its 2015 Energy White Paper, the Commonwealth government said that it would 'increasingly' take a technology-neutral approach. This is insufficient. The principle needs to be adopted unequivocally and pursued immediately, whilst grandfathering existing investments.

Full transparency will be required to measure and report on progress.

Initiatives to align policy would include:

- promoting power system management and investments to reduce the risk of introducing high levels of intermittent renewables into power systems
- allowing ARENA and the CEFC to invest in all low-emissions technologies
- taking on board the recommendations of the SA Nuclear Fuel Cycle Royal Commission, including removing legislative prohibitions of nuclear power generation so it may be considered as a future generation option and
- repealing any other legislation that stands in the way of pursuing technology neutrality.

Priority 2: Fostering Energy Innovation, Collaboration and Investment

There is no single roadmap to a low-emissions economy - there are scores of routes that can and should be taken. Fostering innovation in all low-emissions technologies across all sectors, domestically and internationally, is a fundamental principle to be adhered to, enabling investments to deliver maximum benefit at the lowest overall system cost.

Australia must be a fast adopter of all new technologies that are developed in other countries where research budgets are by comparison immense. Australia needs to improve its skills in doing this, managing intellectual property considerations in the process.

The Energy Policy Institute of Australia proposes the development of an Energy Collaboration Scheme, referenced to the Paris MI initiative, to identify and drive collaboration on the low-emissions energy innovations and investments that will be critical for Australia's energy future. This will require a greater level of collaboration amongst the Australian, state, territory and local governments, their respective state-owned institutions, the private sector and international

counterparts.

Finally in this particular context, the need to attract investment remains central to whatever is done in pursuing innovative technologies. Without adequate investment, the nation will never be able to progress towards a low-emissions economy. It is as straightforward as that.

Priority 3: Promote Competitive Energy Markets and Energy Export Growth

Assuring open and efficient energy markets without unnecessary governmental or regulatory intervention is of fundamental importance to minimise investment risk. Successful implementation largely depends on cooperative action amongst the Commonwealth, the states and territories, and is challenged if state-owned electricity assets remain under public ownership. Apart from the risk to market participants of governments having the dual role of investors and policymakers, governments themselves need to carefully manage their own market exposure. With climate policy in mind, all market activities will need to be more closely co-ordinated as part of a well resourced long-term plan which can pursue the Australian emissions reduction objective in an appropriate time-frame.

Export growth remains fundamental to improving Australia's economic position and should remain a key element of energy policy. Unless effective emissions reduction technologies and strategies are deployed in Australia and internationally, Australia's energy exports will not be as valuable in terms of volume delivered nor the price received. Australia's key trading partners look to Australia to provide them with the energy security they need but, unless the threats to energy exports can be addressed, our trading partners will look to other sources.

Most of Australia's energy resources require transportation over long distances to centres of domestic demand or to ports for export, requiring well-planned enabling infrastructure, most notably gas pipelines and electricity grids. Energy and transport policies need to more closely complement each other.

Priority 4: The Need for Political Leadership, for Reform of the Energy Policy Development Process and for Strengthening of Institutional Capacity

At the heart of Australia's energy policy problem is the structure of Australia's federal system of government and the process of policy formulation itself. The Institute considers that this process has become outmoded: it is far too slow, it is insufficiently proactive and it has been largely overtaken by events.

The COAG Energy Council ('the Council') meets too infrequently and its membership is vulnerable to constant political turnover by the nine participating governments.

It can be argued that reform of the policy development process is not an issue of policy as such. However, in the view of the Institute, the policy development process has been overtaken by events and has become a policy issue of itself. Reform of the process requires political leadership. The Institute believes that reform in four essential respects deserves consideration:

- (i) Widening the Council's Mandate:* The Institute believes that the Council should not have any limitations on its mandate; it should have responsibility for pursuing the agreed national energy vision and all agreed policy priorities.
- (ii) Stakeholder Engagement:* Wide and deep stakeholder engagement is vital for sound energy policy formulation and governance. Stakeholder engagement should include public

authorities, industry itself, industry associations, NGOs, consumer groups and the community at large.

The Institute believes that the modus operandi of stakeholder engagement needs to be the subject of early consultation and testing. Customer participation in this process is particularly important.

(iii) Accountability: Federal and state activity policy development needs a higher level of complementarity and needs to much more closely coordinated.

Clear accountability is required on what steps are taken, and on what corrective or adaptive measures will need to be taken in the light of new information as it comes to light. Policy development also needs to be conducted in a more transparent manner.

(iv) Strengthened Institutional Capacity: It is a matter of the utmost national importance to beef up the Council's institutional capacity with additional financial, human, organisational and IT resources. The Institute believes the Council's present institutional capacity is wholly inadequate for the tasks, being spread amongst jurisdictions and across multiple organisations, with resources spread very thinly and lacking coordination.

The private sector should be called on to contribute and collaborate.

Ultimately, the Council might establish an independent, commercially and technologically-literate National Energy Commission that reports annually to the nine participating governments. That will be for the Council itself to weigh up and decide.

Institutional reform will require all governments to cede some responsibility in favour of a new collaborative institution, but Council oversight will ensure that each government has a proper voice. The Institute believes that immediate action to combine public and private resources and harness them into more effective institutional arrangements under Council oversight is the important first step.

Conclusion

A truly national approach to energy policy settings is critical to maintain a reliable, affordable and clean energy system.

Formulating a national energy vision and agreeing on Australia's energy policy priorities does not require the Commonwealth to prepare another Energy White Paper. The task is too urgent and cannot wait.

About the Energy Policy Institute

The Energy Policy Institute of Australia is an independent, apolitical, technology-neutral policy body whose members comprise a cross-section of investors, financial institutions, service providers, industry associations and universities. The Institute is dedicated to the formulation of sound energy policy — policy that transcends political cycles, respects global trends and is in tune with community concerns.