

Energy Policy
INSTITUTE OF AUSTRALIA

Public Policy Paper
Paper 3/2016

THE NEED FOR AN ENERGY VISION IN NEW SOUTH WALES

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April 2016

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Key Points

- **The Government of New South Wales seems to have only recently realised the full significance of community engagement in relation to energy resource development**
- **The overhaul of the New South Wales resource exploration regime is a positive step in providing more control to Government over the development of the State's onshore natural gas resources**
- **An energy vision would provide a greater sense of legitimacy for resource development and contribute to policy certainty that highly capital - intensive investments in the energy sector require**
- **An energy vision should enable consideration and integration of multiple perspectives and objectives and ensure social values and environmental objectives are placed at the core of future energy policies**

Background

The Australian regulatory landscape for resource exploration and production has undergone significant changes in recent years. Significantly, the challenges that have accompanied coal seam gas (CSG) development on the East coast of Australia have led to the recent overhaul of the resource exploration regime in New South Wales as the Government has come to realise the need to legitimise in the eyes of the community the development of onshore natural gas resources and to bring more certainty to investors.

The development of unconventional gas resources – shale, tight and coal seam gas - has become a key agenda item for governments in Australia, North America and Europe which anticipate the energy potential as well as the economic benefits of developing the resource. The global shift towards cleaner sources of energy has created much of the impetus for the development of onshore gas as it is assumed that increased production of natural gas will help phase out coal and therefore help reduce global carbon emissions.¹ In the USA, a substantial increase in levels of shale gas production has indeed led to natural gas overtaking coal as the top source of electric power generation in 2015,² as well as to a significant decrease in net imports of energy.³

In Australia, the development of natural gas from coal seams has grown to become a significant supply source for domestic consumption and a main contributor to Queensland's expanding Liquefied Natural Gas (LNG) export industry.⁴ While playing an increasingly significant role in meeting Australia's overall energy requirements, the onshore gas industry has yet not received an overwhelming support from the community. As in other parts of the world where communities have witnessed a rapid expansion of the unconventional gas industry, local communities on the East Coast of Australia have become divided over the benefits and risks associated with coal seam gas (CSG). The dispersed geospatial footprint of CSG projects – due to the geology and wide distribution of the resource - has revealed to be a major issue where gas wells are adjacent or directly located on agricultural land - as referenced in the Australian Government's Review of the socioeconomic impacts of coal seam gas in Queensland.⁵ With a strong opposition to the gas industry developing in some segments of the community, CSG has turned into a political issue leading several local councils in New South Wales to withdraw their support to the industry for concerns about the impacts on the "social fabric" of the community.⁶

¹ Scientific research is underway to determine the actual level of emissions over the life cycle of unconventional gas projects, and whether the development of unconventional gas represents a positive scenario from a climate perspective.

² About 31% of electric power generation in April 2015 came from natural gas, (and 30 % from coal), according to a report released by SNL Energy, which used data from the U.S. Department of Energy.


³ According to the EIA, imports of energy in the USA declined from 30% of total energy consumption in 2005 to 13% in 2013, *EIA's Annual Energy Outlook 2015*, http://www.eia.gov/forecasts/aeo/section_energyprod.cfm

⁴ Following developments in North America where the extraction of coal bed methane became central to the booming gas industry, gas companies on the East coast of Australia have come to realise the potential to develop the methane contained in coal seams with exploration starting in the mid-1990s. A major driver for the growth of the coal seam gas industry was a decision in 2000 by the Queensland Government that required 13% of all power supplied to the state electricity grid to be generated by gas by 2005. That requirement has been increased to 15% by 2010 and 18% by 2020. CSG reserves have grown to such an extent that a number of LNG plants have been developed based on exports from Gladstone, Queensland. Australia's identified reserves of coal seam gas were estimated to be 33 trillion cubic feet (Tcf) (35 905 PJ) as at January 2012. 90% of Australia's reserves of CSG are found in the Surat Basin (69%) and Bowen Basin (27%). http://www.australianminesatlas.gov.au/education/fact_sheets/coal_seam_gas.html, https://www.eia.gov/beta/international/analysis_includes/countries_long/Australia/australia.pdf

⁵ *Review of the socioeconomic impacts of coal seam gas in Queensland*, Australian Department of Industry, Innovation and Science, October 2015

⁶ Gloucester council opposes AGL's Waukivory coal-seam gas venture, November 18, 2015,

<http://www.smh.com.au/environment/gloucester-council-opposes-agls-waukivory-coalseam-gas-venture-20151118-gl1z7g.html>



This shift in societal expectations with regard to the use of land and its resources is progressively acknowledged by Australian Governments. The Council of Australian Governments (COAG) former Standing Council on Energy and Resources did emphasise that the successful development of the CSG industry will depend on Australian governments, industry and communities working together to achieve balance in environmental, social and economic outcomes,⁷ with the ‘principle of co-existence’ to guide policy and regulatory developments. Two recent policy documents, the Domestic Gas Strategy released by the Commonwealth Government of Australia in April 2015 and the COAG Energy Council’s Gas Supply Strategy (December 2015) also stress the importance to *ensure the responsible development of coal seam, shale and tight gas resources for the benefit of Australians*⁸ and to ‘*maximise the benefit to the Australian community from the responsible development of gas resources*’.⁹

The NSW Gas Plan

At the state level, Governments have come a long way in improving the policy and regulatory frameworks for CSG development, conceding also the importance of the social dimension of resource extraction. In New South Wales, the Government commissioned a scientific inquiry into the CSG industry led by the NSW Chief Scientist and Engineer¹⁰ following a series of reforms since 2011 that seemingly have failed to convince the community that CSG development was a safe and sensible policy option. Based on the recommendations of the Chief Scientist that the risks associated with CSG development could be managed effectively with proper regulation, the Government released its Gas Plan in November 2014, announcing a new beginning for the development of the state’s onshore natural gas¹¹ to benefit the whole community.¹² The implementation of the Gas Plan has led to an overhaul of the resource exploration regime in New South Wales, and a package of legislative reforms passed through Parliament at the end 2015.

Re-establishing community trust is core to the NSW Gas Plan, and its implementing framework. With the aim to promote ‘a fair, transparent and balanced approach to land use’,¹³ the reforms establish a single and harmonised framework for the improved management of coal and petroleum resources that gives the Government more strategic control over the release of areas for exploration. Preliminary assessments of the economic, social and environmental issues within a region, and a

⁷ <http://scer.govspace.gov.au/files/2013/06/National-Harmonised-Regulatory-Framework-for-Natural-Gas-from-Coal-Seams.pdf>

⁸ <http://www.industry.gov.au/Energy/EnergyMarkets/Documents/Domestic-Gas-Strategy.pdf>


⁹ <https://scer.govspace.gov.au/files/2015/12/Gas-Supply-Strategy.pdf>

¹⁰ Final Report of the Independent Review of Coal Seam Gas Activities in NSW, New South Wales Government, September 2014.

¹¹ New South Wales’ coal seam gas reserves are estimated 511 billion cubic feet, located across the state in the Sydney, Gunnedah, Clarence-Moreton and Gloucester basins. Only gas projects in the Sydney basin are at production stage, with 0.13 BCM produced in 12 months to September 2014. In Queensland’s Bowen and Surat Basins, 7.8 BCM were produced in 12 months to September 2014 (Source: Australian Government’s Department of Industry and Science).

¹² http://www.resourcesandenergy.nsw.gov.au/_data/assets/pdf_file/0005/534830/NSW-Gas-Plan.pdf

¹³ The NSW Government has introduced its legislative reform package to Parliament in October 2015. The five Bills were passed, and received Royal Assent on 2 November 2015. The Mining and Petroleum Legislation Amendment (Grant of Coal and Petroleum Prospecting Titles) Bill 2015 (now passed) proposes a new system for the granting of various mining and petroleum prospecting titles. The Protection of the Environment Operations Amendment (Enforcement of Gas and Other Petroleum Legislation) Bill 2015 (now passed) grants the NSW Environmental Protection Agency (EPA) statutory responsibility for enforcement of the new regime under petroleum, planning and water legislation (in addition to the EPA’s existing responsibilities under NSW pollution control laws). The Work Health and Safety (Mines and Petroleum) Legislation Amendment (Harmonisation) Bill 2015 (now passed) aligns work health and safety laws at coal seam gas sites with existing laws for mine sites. The Mining and Petroleum Legislation Amendment (Land Access Arbitration) Bill 2015 (now passed) deals with land access issues and clarifies the rights of landholders with the aim to improve coexistence between titleholders and landholders. The Mining and Petroleum Legislation Amendment (Harmonisation) Bill 2015 (now passed) provides a move towards greater consistency between mining and petroleum legislation, particularly in the administration of titles and compliance and enforcement. A Gas Community Benefits Fund is established that will require contributions from title holders to the community in which they operate, an approach that provides for the financial benefits from gas exploration and production to be shared with landowners and communities.



consultation process with the community, will lead to the determination of areas to be released for exploration. This more strategic approach to resource development addresses some of the concerns raised by resource communities with regard the governance of extractive industries,¹⁴ and may assist the industry in gaining a social licence to operate. The implementation of the new regime will indicate how successful it is in building community trust around resource development.

An energy vision for New South Wales

What remains unclear – or at least understated – is to what extent community views will contribute to shape decisions with regard the release of areas for resource exploration and land use development. Further, one could argue that a broader perspective – clarifying the rationale for the use of specific resources in a low carbon future and that involves the community in the definition of an energy vision for the state – is missing.

The Commonwealth Government’s Domestic Gas Strategy and the Energy White Paper released in April 2015 both acknowledged that primary responsibility for gas development resides with the states. Given the momentum building around climate and environmental issues and in light of the new requirement to develop ‘intended nationally determined contributions’ to the global reduction of greenhouse gas emissions every 5 years, under the Paris Agreement reached on 12 December 2015, it would be timely to engage in an open and constructive dialogue with the Australian community in the interests of shaping the nation’s future energy portfolio – and to ensure that Australia’s resources are ‘better utilised to meet community expectations’.¹⁵ While such an exercise might be a tall order on a national scale, it could be possible under the auspices of the COAG Energy Council. Individual states like New South Wales, where the debate around resource extraction has become so violently polarised, would critically benefit from the development of a comprehensive energy strategy with a focus on technological and institutional innovation to develop a low-carbon energy system.


As the eastern Australian gas market continues to tighten with the majority of current gas reserves committed for export, impacts on domestic consumers – and the local economy - need to be considered. Notwithstanding uncertainties with the future of the Asia-Pacific LNG market, Australian LNG exports are expected to rise significantly with an anticipation of new sources of demand in the Asian region. Recent decisions by gas companies Metgasco and AGL to abandon their CSG assets in New South Wales - although welcome by the communities that have been campaigning for years to stop the expansion of the CSG industry¹⁶- also raise questions with regard the future availability and cost of gas in the state. With a high proportion of coal presently fuelling the state’s electricity production,¹⁷ New South Wales is facing an urgent need to reassess its energy options in the context of these new market dynamics and with the view to facilitate a transition towards decarbonisation.

¹⁴ http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=2476&context=esm_pubs

¹⁵ <https://scer.govspace.gov.au/files/2015/12/Gas-Supply-Strategy.pdf>

¹⁶ AGL pulls out of CSG plan in Gloucester as NSW and Queensland projects are abandoned, February 4, 2016, <http://www.abc.net.au/news/2016-02-04/gas-giant-agl-pulls-out-of-gloucester-csg-project/7138784>; Metgasco accepts \$25m compensation to end CSG at Bentley in NSW Northern Rivers, December 16, 2015, <http://www.smh.com.au/nsw/metgasco-accepts-25m-compensation-to-end-csg-at-bentley-in-nsw-northern-rivers-20151215-gloipi.html>

¹⁷ Coal supplied by coal mines within the state remains highly affordable, with 84 per cent of the State's electricity being generated from coal.



An enhanced dialogue with the community is required for a better understanding of the potential roles of natural gas in enhancing energy diversity, economic prosperity, and climate change mitigation – as well as the risks involved. Much of the current discourse has narrowly focused on either renewable energy or natural gas as distinctly separate components of energy systems. While focusing on the competitive impacts of one over the other, the policy debate has missed the opportunity to concentrate on the potential synergies between the different sources of energy in ways to optimise complementarities.

Defining priorities in terms of energy sources for domestic use - and the associated land use policies for regions – in consultation with stakeholders would help generate trust in the policies that underpin the development of natural resources. This would require a coordinated multilevel scheme of consultation -and genuine engagement- involving state and local governance actors including the scientific community, industry and community stakeholders.¹⁸

A comprehensive NSW energy vision would need to:


- present the rationale for the use of specific resources in a low carbon future;
- outline what reliable, affordable and clean energy options are available to achieve climate targets;
- articulate the objective of improving energy affordability and security and provide mechanisms to incentivise investment by the private sector in the NSW energy sector; and
- support the development of policy frameworks to achieve a balance in environmental, social and economic outcomes for land use and energy resource development that would integrate the current values and concerns of the public in relation to land, energy and the environment while allowing for adaptation to future conditions.

Conclusion

The overhaul of the resource exploration regime in New South Wales echoes a worldwide trend of regulatory reforms that seek to provide for a more strategic and sustainable approach to natural resource development. It is a step forward towards addressing public concerns. However rallying the community around resource projects might require going a step further.

A vision for the state's energy future is needed. Not only would an energy vision contribute to policy certainty that highly capital - intensive investments in the energy sector require, but it would also provide a greater sense of legitimacy for the development of natural resources. It needs to be supported by relevant institutions and levels of government through a coordinated, strategic and holistic approach that enable consideration and integration of multiple perspectives and objectives, and ensure social and environmental values are placed at the core of energy and resource development policies. It also involves re-thinking the conventional practice of public engagement, which has often failed to

¹⁸ Other public policy papers have previously emphasised the significance of community engagement for the development of energy policy. E.g. <http://www.energypolicyinstitute.com.au/index.php/publications/public-policy-papers/148-public-policy-paper-trust-and-energy-governance-in-australia-may-2013>; http://www.energypolicyinstitute.com.au/images/Ashworth_Peta_Public_Policy_Paper_7.pdf.



achieve its purpose, in order to engage the community more meaningfully. Several international examples can be drawn upon, such as the British Columbia's experiment by the National Democratic Party Government in the 1990s to move beyond the resolution of resource conflicts valley by valley to a strategic, integrated and collaborative land-use planning system. At a time when the debate around resource development becomes so acutely polarised, New South Wales has the opportunity to provide leadership in devising a new governance model that would support venues for conversation and a more rational debate with regard the future of the state's energy and natural resources.

ABOUT THE AUTHOR

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