



**UNITED STATES
STUDIES CENTRE**

Submission to the Senate
Economics References
Committee on Australia's oil
and gas reserves

About this submission

The United States Studies Centre at the University of Sydney welcomes the opportunity to provide a submission to the Senate Economics References Committee inquiry into Australia's oil and gas reserves.

The undisputed leader of Australian and Indo-Pacific insight into the United States, the United States Studies Centre (USSC) deepens Australia's understanding on a range of issues through research, teaching and public engagement.

This submission focuses on two of the Terms of Reference for the inquiry, being

- arrangements used by other countries to maximise the benefit to the public of national oil and gas reserves
- arrangement that could be considered to maximise benefit to the public of Australia's national oil and gas resources, cognisant of:
 - i. sovereign risk,
 - ii. existing property rights, and
 - iii. federal and state jurisdictions

and draws from a research publication *It doesn't have to be this way: Australia's energy crisis, America's energy surplus*¹ released by the USSC, included as an attachment to this submission.

Context in which this submission is made

Like Australia, the United States has an abundance of energy resources, with gas fuelling 33 per cent of electricity generation needs for households and businesses. In both countries, state and federal governments share responsibility for administering these resources and striking a balance between affordability, reliability and emissions reduction.

Yet unlike Australia, the last decade has seen US energy input costs flatten or come down, which has ushered in a renaissance in US manufacturing. It is no accident that this has coincided with the large increase in US gas reserves that have come online in the past decade, almost all of which have been channelled into US domestic consumption. Estimates suggest the short run economic effects of US shale gas development (relative to a constrained shale gas development scenario) include a 1.1 per cent increase in GDP, a 3 per cent increase in industrial production, one million more US jobs and an increase in average household disposable incomes of US\$926 per year. Indeed, Australian manufacturers – particularly those using gas as feedstock – have thrived by shifting their operations to the United States. At the same time, US carbon emissions have declined by more than twice the rate of Australia's emissions decline.²

USSC analysis reveals that Queensland households pay more for gas than any US state, while households in South Australia, Tasmania, New South Wales and Victoria pay more for gas than 48 US states. It is a similar story for industrial users of gas in Australia: natural gas is now more than twice as expensive for Australian manufacturers as it is for their counterparts in the US state of Louisiana, where listed Australian fertiliser and explosives manufacturer Incitec Pivot Ltd made a A\$1 billion investment in 2013. Compared to Australia, the United States is now enjoying cheaper energy, more reliable electricity, and a more rapid rate of decline in carbon emissions.

With abundant physical reserves, Australia needs to consider policies that will unlock its gas resources, producing similar outcomes to those seen in the United States that will maximise benefit to the public: cheaper energy, a manufacturing and industrial revival, job creation and economic growth, with a smaller emissions footprint.

Key recommendations

Reform property rights regimes to allow landowners a share in gas income

In contrast to Australia and most other jurisdictions around the world in which the state retains subsurface mineral rights, as a general rule in the United States, property owners have the right to extract natural gas that lies under the surface of their property. Of course, this also means that owners also have the right to reject proposals from developers. But this is exactly the point of well-defined, enforceable property rights to subsurface minerals and other resources: they reduce transaction costs³ and the possibility of the tragedy of the anticommons.⁴ This increases the likelihood that resources can flow to their most valuable uses (whether that means resource extraction or leaving resources in the ground). Where it is efficient for resource extraction to take place, the US property rights system increases incentives for development and resource exploitation, in the form of leasing and royalty arrangements and outright sales.

While it may be ambitious, reforming Australia's private property rights regime to allow scope for incentives and royalties could maximise the available supply from known onshore gas reserves and ensure the benefits flow to the public.

Domestic reservation on appropriate future contracts

The gas revolution in US energy markets reveals the significant influence that increased overall supply – combined with appropriate mechanisms to ensure affordability, reliability and security – has on driving down prices for domestic consumers.

A version of domestic reservation exists in the US, where a public interest test for LNG exports not covered by a free trade agreement (FTA) was legislated in the US *Natural Gas Act* (1938) and falls under the federal Department of Energy's purview. While modelling by the US Energy Information Administration (EIA) suggests⁵ this legislative framework will not entirely offset increased gas prices for domestic consumers once LNG exports increase, the USSC's findings indicate that – unlike Australia – even as US gas production has increased the proportion going to exports and domestic consumption has been largely constant, and in fact wholesale prices for American households and businesses have fallen in the past decade.

USSC qualitative research with both major gas producers and industrial consumers revealed that an important element of any new policy concerning Australia's east coast gas market must be certainty and continuity. To provide certainty to the market, Australia should consider grandfathering existing LNG export contracts and implementing a national interest test similar to that of the US on appropriate future projects to ensure a minimum viable domestic gas reserve is maintained. In addition, noting that Western Australia and Queensland currently have domestic gas reservation plans in place, Australia would benefit from harmonising any reservation policy across state jurisdictions.

Adopt 'use it or lose it' provisions on retention lease arrangements for gas producers

In the US context, 'use it or lose it' policies were introduced under the Obama Administration to boost oil and gas production by those holding exploration and production leases on public lands. The *Responsible Federal Oil and Gas Lease Act*⁶, a bill brought before Congress in 2008, sought to strengthen the mechanisms in the US that incentivise efficient development of oil and gas reserves for the benefit of the public. Applying insights from the US experience with retention lease reform in Australia could facilitate increased competition in the market for developing national oil and gas reserves, provided such measures are applied in such a way as to minimise investment deterrence.

¹ Alex Robson, "It doesn't have to be this way: Australia's energy crisis, America's energy surplus," United States Studies Centre at the University of Sydney, December 2018.

² The Australian Department of the Environment and Energy (2018), "Quarterly Update of Australia's National Greenhouse Gas Inventory for June 2018" available at <http://www.environment.gov.au/climate-change/climate-science-data/greenhouse-gas-measurement/publications/quarterly-update-australias-national-greenhouse-gas-inventory-june-2018>

³ Ill-defined property rights create an incentive for individuals to invest in conflict, effectively creating an endogenous source of high transaction costs. See Robson and Skaperdas (2008).

⁴ The tragedy of the anticommons occurs when a number of individuals have overlapping exclusion rights to a resource. This can lead to resource underexploitation. See Robson (2013, Chapter 4).

⁵ See Energy Information Agency (2012) "Effect of Increased Natural Gas Exports on Domestic Energy Markets" available at https://www.eia.gov/analysis/requests/fe/pdf/fe_lng.pdf

⁶ GovTrack.us (2008), "H.R. 6251 — 110th Congress: Responsible Federal Oil and Gas Lease Act" available at <https://www.govtrack.us/congress/bills/110/hr6251>