

Powering Australia's Future

BY ALISON PENNINGTON AND THOMAS PROBST



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Summary

Australia has the most ambitious industrial policy in generations, and a commitment to maintaining and building Australia's sovereign capability. The Future Made in Australia (FMIA) framework and National Reconstruction Fund are designed to invest in industries that diversify and transform the economy. But current electricity market settings are unable to provide electricity at the right price or for long enough necessary to secure the viability of our current heavy industry, let alone encourage new investment in future-facing industries.

The Middle East conflict is the third major global energy price shock to hit in less than a decade. Australia's shallow industrial base is exposed to extreme volatility and higher energy costs, threatening over 200,000 direct and indirect jobs, tens of billions of dollars in economic benefits in wages, local supply chains, as well as the production of critical products needed for Australian construction and manufacturing. Other countries are moving to protect their domestic productive capacity, and Australia must do the same.

Renewable power is the cheapest and most stable form of generation. Unlike coal and gas, its 'fuel' is free and its price can be insulated from destabilising global commodity price shocks. But private incentives are preventing sufficient investment in renewables from occurring, exacerbating Australian industry's exposure to an increasingly unreliable and aging coal fleet prone to damaging shutdowns and price spikes.

The Federal Government has developed new mechanisms to drive the energy transition, and private investment has delivered 42 percent renewable penetration. But it is not enough to support industry. Under a market-driven system, there is no mechanism to match the supply of renewable energy to the demand of energy-intensive manufacturers at a price they can afford. Major industry investments are not materialising because there is no long-term energy security. This failure is the gap that government must close.

The market alone has never delivered a national energy and industrial transition. Quebec, Norway, Iceland, New Zealand, and the United States all provide industrial electricity through public entities with long-term contracts. Australia did the same 40 years ago when public investment surged into coal generation, laying the foundations for today's smelter fleet and decades of economic benefits.

This is why the Federal Government must establish Sovereign Power, a new Commonwealth entity to build and own firmed renewable generation, offering long-term power purchase agreements to Australia's strategic industrial facilities. Anchored by the Commonwealth's lower cost of capital and longer investment horizon, Sovereign Power can deliver electricity at a price that makes Australian heavy industry globally competitive in service to the nation's industrial future.

Sovereign capability means controlling the inputs that are fundamental to the functioning of an economy. Australia exercises control over raw materials and labour. But Australia lacks control over the third critical input - electricity. Foreign strategic industries tend to receive support from their governments in the form of lower cost power, forcing Australian industry to compete with their hands tied behind their back.

By providing affordable clean power itself, the Federal Government can secure sovereign heavy industry capability, increase overall investment in renewables, and attract new investment for a high-productivity, high-skill, and high-wage economy that builds new industries, creates good jobs and revitalises regional communities.

The government is already involved in powering heavy industry. Since 2024, governments have committed billions in ad hoc support packages to keep aluminium smelters and other energy-intensive facilities operating. These arrangements address the symptom but not the cause.

Sovereign Power replaces ad hoc deals with a purpose-built institution, spending public money more efficiently, more transparently. It does this within a permanent institutional framework that leverages maximum benefits from new investment in new local supply chains, and high-skilled, well-paid and meaningful jobs.

Key findings

Australia has the most ambitious industrial policy in a generation and it must take the opportunity to power it: The FMIA framework commits more than \$22 billion in production credits, grants and concessional finance to support strategic industries. Despite this investment, government intervention has demonstrated that the market is failing to provide long-term energy contracts at prices that make energy-intensive manufacturing commercially viable.

The government is already investing to secure Australia's strategic industrial base, but current arrangements are ad hoc: Since 2024, the Commonwealth and state governments have committed more than \$5 billion to keep aluminium smelters and other energy-intensive facilities operating. Moving from emergency interventions to a purpose-built institution would deliver more efficient, permanent outcomes that drive industry policy forward.

The private market cannot deliver firmed industrial electricity at the price heavy industry needs: The Capacity Investment Scheme (CIS) has awarded 20 GW but only 3.3 GW has started construction – a conversion rate of 17 percent. This has created a dual-sided failure: renewable generation is not being built because it lacks a direct link to major industrial demand, and major industry investments are not occurring without long-term energy security. Sovereign Power directly connects the energy build with industrial demand, unlocking the opportunity on both sides.

A public clean energy entity can close the gap: Using the Commonwealth's lower cost of capital and a longer investment horizon, a new corporate Commonwealth entity could deliver firmed clean electricity at prices that make Australian heavy industry viable and competitive.

This is not unprecedented: For most of the 20th century Australian sovereign industry received publicly owned, long-term, low-cost power. Privatisation unravelled this model, undermining the power of government to support sovereign industry and to coordinate a complex energy transition, while increasing foreign ownership and control in our energy system. Most major competitor jurisdictions provide industrial electricity through public or quasi-public entities. Many other nations offer long-term industrial power contracts that underpin smelting, refining and heavy manufacturing. Australia is now an outlier.

Figure 1: Current state and proposed future state



Figure 2: The Sovereign Power proposal



Recommendations

| No. | |
|-----|---|
| 1 | Establish Sovereign Power as a new corporate Commonwealth entity through standalone legislation. Its legislated objectives should define its purpose as providing cost-recovery electricity to strategic industrial customers, not as a general-purpose generator or retailer |
| 2 | Sovereign Power builds and owns generation assets, selling firmed electricity to strategic industrial customers through long-term power purchase agreements priced on a published cost-recovery formula. Pricing is independently reviewed by the appropriate regulator |
| 3 | Priority customers are existing trade-exposed, energy-intensive heavy industry downstream of mining, including Safeguard Mechanism facilities such as aluminium smelters, steel plants, alumina refineries and cement works |
| 4 | Sovereign Power should also serve new industries supported by the FMIA National Interest Framework, including critical minerals processing, green metals and green hydrogen |
| 5 | Sovereign Power will contract with industrial customers that make binding commitments to decarbonisation targets and/or the adoption of clean technologies |
| 6. | Sovereign Power is funded through a direct Commonwealth equity injection. The government could consider redirecting underutilised National Reconstruction Fund capital toward Sovereign Power's initial capitalisation |

Part 1: Why sovereign industrial capability matters

Key points:

1. Sovereign capability means controlling the inputs that are fundamental to the functioning of an economy: raw materials, labour, and electricity.
2. For most of the 20th century, publicly owned power underpinned Australian heavy industry. Privatisation and deregulation unravelled this model, increasing costs and exposing strategic industries to market volatility.
3. Every major competitor jurisdiction provides industrial electricity through public or quasi-public entities with long-term contracts. Australia is now the outlier.
4. Heavy industry supports over 200,000 direct and indirect jobs and tens of billions of dollars in economic activity, anchoring regional communities across Australia.
5. With global demand for clean products accelerating, affordable sovereign energy is the binding constraint on attracting new industrial investment and building a high-productivity, high-skill, high-wage economy.

Defining heavy industry

For the purposes of this report and proposal, heavy industry refers to energy-intensive downstream processing and manufacturing. These are the facilities that transform Australia's raw materials into higher-value products, including aluminium smelters, alumina refineries, primary steelworks, zinc and copper smelters, cement works, and similar facilities whose energy costs represent a decisive share of their operating expenditure and whose continued viability in Australia depends on access to affordable, long-term electricity. It also encompasses the emerging critical minerals, refining and advanced manufacturing sectors that the FMIA agenda seeks to develop. It does not include upstream resource extraction, which operates on fundamentally different economics, or data centres, which can absorb market-rate electricity costs.

Sovereign capability

The Australian Government has recognised the strategic importance of maintaining domestic heavy manufacturing capability. The FMIA framework, the Critical Minerals Strategy, and the series of emergency interventions to keep smelters and steelworks operating all reflect a judgement that these facilities are not just commercial enterprises, they are sovereign assets whose closure would permanently diminish Australia's industrial base.

Australia's heavy industry support sovereign capability in 3 ways:

1. The network of domestic steelworks, aluminium smelters, alumina refineries and critical minerals processing provide essential construction inputs like structural steel, rebar, cement and copper. These are used to build homes and other essential infrastructure like rail and roads.
2. Outputs from Australian heavy industry are used directly in the manufacture of defence products, including land vehicles and naval ships.
3. As inputs into large volumes of domestic production, the price of heavy industry outputs affects costs throughout the economy, increasing or dampening inflationary pressures. Onshoring and greening heavy industry can help stabilise these important prices, providing new tools to stabilise the macroeconomy, while creating more economic space for new investment, growth and higher wages.

Sovereign capability means controlling the inputs that are fundamental to the functioning of an economy. Australia exercises control over the first 2 critical inputs into heavy manufacturing:

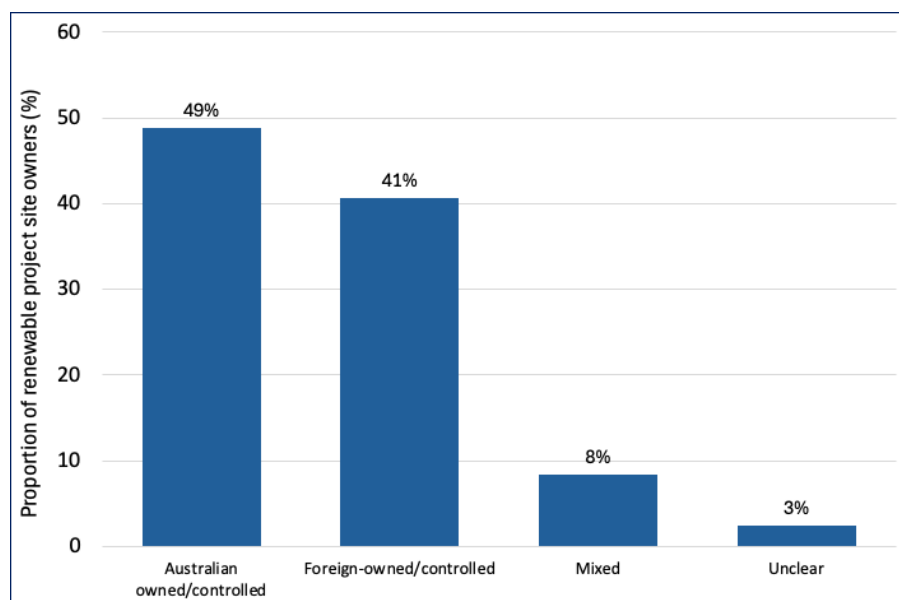
- Raw materials, through mining licensing, royalty regimes, critical minerals export controls, and Foreign Investment Review Board screening of resource acquisitions; and
- Labour, through skills policy, immigration settings, and industrial relations.

But electricity, the third critical input, and for many facilities the largest single operating cost, is the big gap.

Generation in the National Electricity Market (NEM) is overwhelmingly privately owned, and increasingly foreign-owned. Using the latest Australian Energy Market Operator (AEMO) information on all unique renewable project site owners supplying to the NEM, entities were coded based on their company headquarter location, ABN and/or business documents for the relevant renewable project to determine their status as ‘Australian owned/controlled’ (all listed companies in project are Australian including superannuation funds), ‘foreign owned/controlled’ (owners in another country other than Australia), ‘mixed’ (hybrid Australian and foreign ownership), or ‘unclear’ where ownership status could not be identified. An Australian company or project purchased by a foreign multinational was coded ‘foreign-owned’.

Worryingly, less than half of renewable generation entities supplying to the NEM are Australian owned or controlled, with foreign-owned or controlled entities representing at least 41 percent of all renewable generators. 8 percent have mixed ownership, involving commercial partnerships between Australian and foreign companies, and 3 percent were unidentified.

Figure 3. Proportion of unique renewable energy project owners by Australian or foreign owned/controlled



Data: AEMO, 2026. *NEM Generation Information Apr 2026*. ‘Site owners of renewable energy project’

Foreign investors are expected to account for over 70 percent of the renewable energy investment required to meet Australia’s clean energy targets.¹ Foreign state-owned entities

and government-linked businesses in which foreign governments are significant shareholders make up a large proportion of that foreign investment. The electricity that keeps Australia's smelters, steelworks and refineries operating is generated by assets with greater ownership by foreign governments of China, Malaysia, Saudi Arabia, Qatar and Thailand than the Australian Commonwealth government itself.

This is compounded by a national overreliance on supply chains that are highly susceptible to global events. Disruption to shipping through the Strait of Hormuz has had dramatic ramifications for energy costs around the world and supplies of fertiliser. Supply of around 8 percent of the world's aluminium² has also been impacted. The COVID-19 pandemic saw countries scramble to reindustrialise their capacity for manufacturing goods that had supply disrupted. The current conflict in the Middle East highlights the need to detach our industrial base from volatility beyond our control.

It is logical that we exercise reasonable control over all 3 critical inputs: raw materials, the workforce, and the electricity that sustain our industries. Sovereign Power as a publicly owned generation entity, contracted directly to strategic industrial facilities closes the loop. It means that all essential inputs are subject to Australian policy settings rather than the investment decisions of foreign shareholders, the pricing strategies of foreign-owned generators, or input price volatility caused by supply shocks.

Precedents

Every major competitor jurisdiction provides industrial electricity through public or quasi-public entities with long-term contracts. Australia's own smelter fleet was built on the back of publicly owned, publicly financed generation from the 1950s through to the 1980s.

International precedents

Australia is an outlier among advanced economies in attempting to power heavy industry through a fully privatised, market-only electricity system. Every major jurisdiction that hosts globally competitive aluminium smelting, steel production, or critical minerals processing does so with the support of public or quasi-public electricity providers.

Quebec is the most directly relevant comparator. Hydro-Québec, a provincial Crown corporation, underpins Quebec's aluminium industry through long-term risk-sharing contracts in which the electricity price is indexed to the aluminium price on the London Metal Exchange.³ As a result, Canada is the fourth-largest aluminium producer in the world and has the lowest carbon footprint among major producers.⁴

New Zealand's Tiwai Point smelter secured a 20-year power supply agreement in 2024 with Meridian Energy, a majority state-owned generator, alongside contracts with Contact Energy and Mercury NZ.⁵ The pricing of the 2024 deal is commercially confidential, though the previous short-term contract (2021–2024) was speculated to be approximately NZ\$35/MWh excluding transmission.⁶ The New Zealand Government owns 51 percent of Meridian Energy.⁷

Norway's aluminium industry operates on long-term contracts with a mix of state-owned, municipally owned, and self-owned hydropower assets. Statkraft, wholly owned by the Norwegian state,⁸ is the largest single counterparty and holds a significant share of long-term industrial power contracts.⁹ Approximately 80 percent of Norway's electricity production capacity is publicly owned.¹⁰

Iceland's 3 aluminium smelters (operated by Rio Tinto, Century Aluminium, and Alcoa) operate on long-term contracts of up to 40 years. Landsvirkjun, the state-owned national power company, is the primary supplier. Iceland's dedicated Kárahnjúkar hydropower scheme was built specifically to serve the Alcoa smelter under a 40-year contract.¹¹

These examples represent the dominant model for industrial electricity provision in every jurisdiction that competes with Australia for energy-intensive investment. Can Australia continue to be the exception?

The Australian precedent

Australia's own industrial base was built on publicly owned generation. The aluminium smelter fleet was developed from the 1950s through the 1980s as part of coordinated industry policy between state governments and international investors. Bell Bay in Tasmania opened in 1955, originally built by the Australian Aluminium Production Commission in

partnership with the Tasmanian Government.¹² Point Henry in Victoria followed in 1963¹³. The second wave, Boyne Island in Queensland (1982), Tomago Aluminium (Tomago) in New South Wales (1983), and Portland in Victoria (1986), was driven in part by Japanese trading houses and aluminium converters seeking secure supply after the 1973 and 1979 oil price shocks made Japanese domestic smelting internationally uncompetitive.¹⁴

State electricity commissions in New South Wales, Queensland, Victoria and Tasmania built and operated the generation capacity that served these facilities. The Gladstone Power Station in Queensland was built to supply the Boyne Island smelter.¹⁵ The Victorian Government entered a joint venture with Alcoa to build Portland, with subsidised electricity provided by the State Electricity Commission.¹⁶ In New South Wales, the state-owned Electricity Commission built coal-fired generation capacity including Bayswater to supply the smelters under long-term contracts.¹⁷ In Tasmania, the Hydro-Electric Commission supplied Bell Bay from the state's hydropower system.¹⁸ In each case, the electricity was priced at or below cost recovery by publicly owned utilities, and the capital was raised on the balance sheets of state governments.

The privatisation and corporatisation of state electricity assets from the mid-1990s onward dismantled this model. Victoria privatised its generation, transmission and distribution in the 1990s.¹⁹ South Australia followed in 1998.²⁰ New South Wales partially sold its generators from 2010 and leased its transmission network in 2015.²¹ Queensland, Tasmania, Western Australia and the Northern Territory retain significant public ownership of their electricity networks and generation, though the NEM's market-based pricing structure applies regardless of ownership in the eastern states.¹ The pendulum has swung back to public ownership in Victoria, which revived the State Electricity Commission in 2023 to provide renewable electricity to state government entities like schools and hospitals, public infrastructure, and eligible commercial and industrial businesses.²²

Privatisation transformed industrial electricity from a strategic input managed by the state to a commodity traded on a spot market. For as long as legacy coal contracts held, the price

¹ Note that Western Australia is not part of the NEM.

remained manageable. Now those contracts are expiring, and the market has no replacement product to offer.

The support packages for Tomago and Boyne Island are an implicit acknowledgement that the private market cannot fill this gap. In December 2025, the Commonwealth Government announced a deal under which Snowy Hydro will supply Tomago with a portfolio of renewables backed by storage and gas beyond 2028, using a scheme financial vehicle reportedly worth approximately \$1 billion that leverages the Commonwealth's credit rating. A separate joint Commonwealth and Queensland Government package underwrites renewable electricity for Boyne Island through new solar projects.²³

In both cases, the Clean Energy Finance Corporation (CEFC) provides financing for the underlying generation. The government is effectively recreating the public electricity model on an ad hoc basis, routing public money through Snowy Hydro and the CEFC to subsidise industrial power supply (and higher private financing costs), but without the transparency, institutional framework, or long-term plan that a dedicated entity would provide. By establishing a new Commonwealth entity to build and own firm renewable generation - Sovereign Power – the government would make this arrangement permanent, transparent, cheaper, and scalable.

Industrial development and growth

With cheap sovereign energy supply, Australia can get control of our energy security while building our manufacturing capabilities and new export opportunities. Sovereign Power integrates sovereign electricity supply into industrial policy – we power our own production.

In this way, Sovereign Power can help diversify Australia's economy, reducing the effects of a 'resource curse' typified by overreliance on exporting raw materials, helping us climb the ladder on value-added production. By generating cheap renewable power for the processing of raw ores (like bauxite, iron ore, lithium, copper and rare earths), and production of green hydrogen, low-carbon liquid fuels, and new manufactures, Sovereign Power allows Australia to onshore enormous volumes of economic activity, while dramatically reducing emissions from direct production and shipping. Onshore processing of just 25 percent of Australia's iron

ore and alumina exports using renewable energy would reduce global emissions by over 250 Mt CO²-e per year – more than double Australia’s entire 2030 emissions reduction commitment.²⁴

By suspending private incentives at the energy input end of production, Sovereign Power creates conditions for an explosion in value creation sites downstream. The macroeconomic and fiscal benefits flowing from Sovereign Power’s function are significant, including new growth, exports, jobs, upstream purchases of supplies, raw materials and services across the supply chain, and downstream purchases of consumer goods and services when workers spend their salaries in local economies. Other benefits include increased revenues to government, and lifting incomes and employment within lower-income, investment-deprived regions, especially those facing closure of coal-fired power stations.

The enormity of benefits flowing from Sovereign Power as a long-term growth engine for the economy can be organised into 3 main categories: benefits to sustaining existing energy-intensive industry, supporting new industry growth in FMIA priority industries, and the direct economic activity of Sovereign Power procuring generation.

1. Sustaining energy-intensive heavy industry

Jobs and incomes generated directly in Australia’s refineries, smelters and steelworks are an important source of strength in the economy, underpinning household financial stability and strong consumer spending for the over 42,000 workers directly employed and their families. Total wages and salaries paid to workers in primary metal and metal product manufacturing totalled \$4.8 billion in 2023-24 (most recent data).²⁵

But the overall economic impact of the sector extends beyond the individuals directly employed in energy-intensive heavy industry. This is due to the strategic role played by complex, capital-intensive industries which anchor a much broader range of economic activity, contributing to growth and productivity throughout the economy. Australia’s refineries, smelters and steelworks generate over 200,000 direct and indirect jobs.²⁶

Far from being isolated facilities, they are ecosystems that require continuous inputs, maintenance and logistics, while producing raw materials that sustain other industries including construction and building, packaging, renewable manufacturing and more.

For instance, NSW's largest electricity consumer is Australia's largest aluminium smelter. Tomago contributes around \$2.2 billion per year to the national economy. Tomago employs around 1,000 people directly, but 3,000 more jobs indirectly²⁷ and downstream effects in the Hunter economy.²⁸

2. Supporting new industry

By aligning with FMIA high-priority industries, Sovereign Power can rebuild Australia's value-added manufacturing capability and output. This is important because manufacturing has a disproportionate strategic importance to the domestic economy. It uses more innovation, technology, robotics, and other advanced knowledge than any other sector, making it the most important source of innovation in the economy. It supports higher-than-average productivity growth and good quality, high-paid jobs.

A stronger manufacturing presence with new facilities producing green metals, batteries and more across Australia can impact on the broader economy and employment by stimulating domestic supply chains. Under the right conditions, these facilities can act as anchors for far-reaching supply chains that reach throughout the economy, supporting hundreds of thousands of jobs in other sectors. In specialised, high-technology facilities like aluminium smelters or battery factories, job multipliers can be as high as 5-to-one: meaning that every direct job in the facility can ultimately support a total of 5 jobs (direct and indirect) through various upstream and downstream linkages.

It has been estimated that 400,000 additional jobs could be created by 2040 in new industries supported by FMIA production credit incentives, including 100,000 in critical minerals, 100,000 in green metals like green aluminium, 100,000 in battery manufacturing and 30-50,000 in green hydrogen.²⁹

3. Sovereign Power's direct activity

The economic stimulus generated by Sovereign Power's supply of cheap, stable electricity prices includes the billions it invests procuring renewable generation developers to build solar

and wind projects. Most jobs in renewable generation are in the construction phase, with a smaller number in operations and maintenance. The roles span management and engineering, civil construction, electrical and mechanical installation and safety and logistics.

Modelling by Sustainable Energy Now found for every 100 MW of new capacity construction, 230 jobs are created in solar, and 280 jobs in wind.³⁰ In the case of Tomago, Australia's largest aluminium smelter, a larger renewable electricity generating capacity is required to avoid asset damage during any prolonged power outages. As such, experts estimate the smelter would require 3GW in wind and solar generation, and an additional 2GW storage.³¹ Building the 3GW wind and solar generation alone could generate around 7,000 jobs over an estimated 2 years of construction.

But for Sovereign Power to become a tool for national economic development, rather than a corporate subsidy, it must be embedded within a real industrial strategy that extracts benefits from public-supported private investment in domestic growth and job opportunities. This is possible using policy levers like local procurement with minimum content requirements, skilled workforce planning, and labour standards that deliver good, well-paid jobs for workers.

Local content could be enhanced through strengthening provisions in Sovereign Power and FMIA contracts to support more production, adaptation, maintenance, transport, and services in Australia. Since construction and maintenance of renewable infrastructure will be undertaken continuously for decades to come in Australia, there is ample time for government to get policy settings right to ensure that the investment made by Australians in these capital-intensive, value-added industries translates fully into the maximum economic and employment opportunities.

Uplifting jobs, wages and skills

By generating a new pipeline of projects in renewables generation and industry development through its power purchase agreements (PPAs), Sovereign Power can play a critical role supporting and coordinating the urgent expansion of Australia's skills pipeline. 100 renewables projects could be ready to build tomorrow, but an undersupply of qualified electricians would prohibit their rollout. In 2023 Jobs and Skills Australia (JSA) estimated an additional 42,500 electricians were needed by 2030 to deliver the government's renewables

targets and the FMIA agenda.³² This would require an additional 22,000 apprentices to start each year (or an additional 40 percent on the current yearly intake). However, even this figure underestimates likely qualified electrician demand since JSA's report was released prior to the dramatic rise in data centre proposals. JSA's estimate also does not include the workforce required to meet the state and Federal Government's housing or broader infrastructure agenda, including the 2032 Brisbane Olympics.

Government attempts to address this shortfall are failing, with apprenticeship commencements declining every year since 2022. 4,155 fewer electrical apprenticeships commenced in the 12 months to end-September 2025 than at the same time in 2022 – a 20 percent decline over 3 years.³³

Sovereign Power can anchor a regional Skills for Energy Transition planning mechanism. Its pipeline of projects would provide a clear demand signal to training organisations for the type and quantity of skills required and where, while solving the mismatch problem between the average length of construction for renewable projects (1-3 years) and apprenticeships (4 years full-time). By partnering with reputable, industry group training organisations (GTOs), Sovereign Power can move apprentices between projects, providing them with a range of experience without compromising on job security. Significantly, these apprentices would not be limited to Sovereign Power projects, and could be deployed across other host employers in the local region.

Sovereign Power's pipeline of work will also provide the necessary signals to lift new investment in training infrastructure, ameliorating effects of 'training drought' where no training courses in critical occupations are offered in areas earmarked for renewable development.

Working together with JSA, the relevant Jobs and Skills Councils, and state-training authorities, Sovereign Power's apprentice program will ensure the sustainability and longevity of their programs by investing in the workforce required to build tomorrow's projects. As the program takes shape, Sovereign Power could train a higher-than-average number of apprentices to compensate for sectors that have lower apprenticeship training rates.

Most of the critical occupations required for the energy transition are not unique to the renewable energy sector. Many of the trades in critical shortage – including electricians – are mobile, with workers frequently moving between key sectors (e.g. transport, energy and water, and housing, manufacturing, energy). To secure the necessary labour force to drive the energy transition, the renewable energy sector must offer competitive industry wages and conditions. Sovereign Power can establish industry benchmark wages and conditions, and require that all developers (and their contractors) meet minimum standards with regards to workplace health and safety (WHS) and industrial performance.

The provision of industry wages and conditions are more than a direct benefit to workers and their communities – they increase the productivity of Sovereign Power by ensuring that it secures a well-qualified workforce when and where it is needed, helping mitigate the most critical delivery risks in renewables identified by Infrastructure Australia – workforce shortages. Quality pay and conditions sufficient to secure the renewables workforce requires an increase in apprenticeship wages from their current low of between 50 and 90 percent of the adult minimum wage, to at least the full rate.

Table 1: List of benefits from Sovereign Power proposal

| Benefit | |
|---------|---|
| 1 | Reducing cost of renewables buildout due to lower cost of capital, reducing electricity costs to heavy industry. |
| 2 | Builds public value by bringing generation assets onto public balance sheet and capital stock, lifting internal expertise in designing and managing system. Profits reinvested into new capacity. |
| 3 | New tool for macroeconomic stability, protecting against energy price shocks, reducing inflation. |
| 4 | Long-term coordination power combined with cheaper energy prices can turbocharge local industry and manufacturing, with significant benefits to local supply chains, jobs and skills. The 'crowding in' effect allows private investment to follow public investment signals. |
| 5 | Supports the maturation and reduced costs of technologies critical to decarbonisation, which only accrue through long-term investment. |
| 6 | Apprenticeships and skills pipeline can be better managed, securing good, high-paying jobs. |

Part 2: The market is failing heavy industry

Key points:

1. The Albanese Government has made supporting Australia's existing heavy industry and green industries a strategic priority.
2. Over the past few years, multiple major players in Australia's heavy industrial sector have required government support to survive. There has been a clear market failing in the private sector's ability to provide power to Australia's heavy industry at rates that enable global competitiveness.
3. Most recently, the Commonwealth Government, to preserve Australia's aluminium manufacturing capability, has provided support to the Tomago manufacturing facility as a result of the electricity market's inability to provide a new PPA at a rate that makes the facility commercially viable.
4. Australian and global demand for renewable electricity and products made with 'green energy' is set to grow dramatically.
5. With the next technological revolution currently underway, the advent of AI and the shift to electric vehicles, and other demands for increased electrification of the economy, Australia puts at risk the attraction of major investment.
6. Conditions of rising demand for both clean power and clean products that intensively use clean power create the conditions for an Australian industrial renaissance. The binding constraint on realising this virtuous circle of rising demand for clean electricity and its supply are multiple barriers to private sector capital investment.

High energy costs drive industrial decline

Failure to improve Australia's energy security through more generation and lower prices is driving industrial decline. Manufacturing as a share of GDP has fallen consistently since the 1970s to only 5.1 percent of GDP in 2025, the smallest among OECD nations, with consequences for Australia's lagging productivity, job quality and self-reliance. Australia lacks

economic complexity, ranking 74th among 125 countries in Harvard's Economic Complexity Index, falling a whopping 13 places since 2012.³⁴ Industry policies like FMIA are critical to reversing this trend. However, supply shocks are hitting harder and faster, with the cost of manufacturing inputs including gas and electricity, materials, transport and insurance rising significantly since the pandemic. Since 2022-23, 1,400 manufacturing firms have become insolvent.³⁵

Australia's aging coal-fired fleet is now a primary driver of higher electricity prices. The reliability of coal power plants is deteriorating as they near retirement. With coal-fired power stations more frequently shutting down, large supply gaps must be filled urgently, relying often on more expensive sources like gas to plug demand. The Institute of Energy Economics and Financial Analysis found that closed coal power plants lost 34 percent of their capacity on average as they neared retirement, and that prolonging their retirement age will lead to spikes in the price of electricity and gas.³⁶ Without sufficient renewable generation to plug the gap left by coal's exit from the grid, sudden unpredictable drops in baseload power force manufacturers to pay higher prices, driving up production costs and undermining their global competitiveness.

Notwithstanding the Federal Government's recent announcement of its intention to introduce a Domestic Gas Reservation Scheme, energy policy prioritising the gas export market over Australian industry has also exacerbated industrial decline. Since the expansion of LNG exports in 2015, gas prices have tripled, driving rising electricity prices.³⁷ Gas input costs for manufacturers have risen 186 percent since 2000, reflecting the permanent integration of Australian gas into global export pricing.

For energy-intensive industry, the economic case for building long-term operations on gas-fired electricity has closed. Even with a domestic reservation policy, the price of gas is linked to international LNG markets, setting a floor well above the levels at which energy-intensive manufacturing is globally competitive. Unlike coal and gas, renewable electricity has no ongoing fuel costs, and can be supplied under fixed-rate secure agreements. But ensuring renewable electricity powers Australia's manufacturing sector requires government to confront the private incentives creating roadblocks to investment.

Chicken or egg? The case of Tomago Aluminium NSW

The consequences of energy price instability are the declining prospects of Australia's heavy industry, with the Federal Government pursuing several ad hoc support packages since 2022. Valued at over \$5 billion these include Whyalla Steelworks, Glencore Mount Isa copper smelter, Nyrstar lead and zinc smelters, Liberty Bell Bay manganese smelter, and Rio Tinto's Boyne Island aluminium smelter. Without direct government intervention to provide Tomago with power below the current market rate, Tomago was highly likely to go under too.

With Tomago's long-term PPA with AGL due to expire in 2028, majority shareholder Rio Tinto's call to market for a new agreement was unable to produce an internationally competitive price for electricity. To save Australia's aluminium manufacturing capabilities, the Federal Government stepped in to develop an innovative solution to directly support the Tomago aluminium manufacturing facility.³⁸

“
All market proposals received so far show future energy prices are not commercially viable, and there is significant uncertainty about when renewable projects will be available at the scale we need.

JÉRÔME DOZOL / CEO, TOMAGO ALUMINIUM / OCTOBER 2025

Tomago is just one example of an industrial off-taker where public revenue underwriting band-aids aren't sufficient to match affordable renewable energy to industrial demand. For renewable developers to agree to build projects, their investors need confidence that the entities buying their power will pay an agreed rate, over the full term of the PPA. With Australia's energy-intensive heavy-industry facilities facing rising profitability constraints driven by high and rising power prices (comprising up to 40 percent of total production costs), as well as international competition from other state-subsidised operations, it doesn't make 'market sense' for renewable developers to supply power to energy-intensive industry.

The Federal Government's recent intervention to secure Tomago's energy supply was a necessary and welcome step to preserve Australia's aluminium manufacturing capability. But the fact that such direct action was required underscores the structural gap in the market.

Tomago still cannot attract private investment without a long-term PPA, and securing one remains the challenge. It is the classic ‘chicken or egg’ problem.

A suite of energy-intensive heavy industry plants downstream of mining face Tomago’s predicament, as do future priority industries in the government’s FMIA industry policy. Without urgent action to generate cheaper energy, future private investment in the industries critical to economic diversification and national prosperity is at risk. Meanwhile significant industry policy commitments have been made by the Federal Government with ambitious plans to generate good jobs, domestic capability, and regional growth. But unlocking these benefits relies on competitive energy prices first. We have a sequencing problem.

Now the risk is that green private capital requirements accelerate the threat of deindustrialisation and loss of Australia’s sovereign industry capability. This investment stalemate cannot be solved without government action. It requires top-down planning – a role implicit in the government’s own energy transition policy architecture of decarbonisation plans and legislated renewables targets. Direct state investment and delivery would better serve government’s capacity to plan and shape future industrial development.

Roadblocks to private-financed renewable generation

Mismatched private incentives

Australia’s current market-based approach to building new renewable generation relies on de-risking private investment through public underwriting. However, there is a structural mismatch between private finance incentives, and the realities of an energy transition that is both capital-intensive and logistically complex. The result is a lack of coordination of planning to supply power at appropriate prices to our heavy manufacturing sectors.

The other structural mismatch is between the price that electricity must sell for private finance to turn a profit, and the precarious financial position of energy-intensive industrial facilities disproportionately exposed to high energy costs, costs of upgrading facilities for renewable power, global commodity price volatility, and competition in a global market where their competitors are often directly or indirectly subsidised by their governments.

The private sector cannot deliver renewable generation at the scale, pace or price required to secure the transition or industry growth. Renewables buildouts have front-loaded capital investments, compensated by low operational costs. This amplifies private investors' exposure to high borrowing costs from day one (rather than spreading the cost over decades of the project's life), posing barriers to profitability. There is also major revenue risk for renewables projects later in the project's life due to the 'tenor gap', whereby the 3–7-year contracts offered by retailers and commercial users to buy future energy from the renewable generator undershoot the 10–30-year project life for financing renewables. This problem was recognised in the Nelson Review, which the CIS, and soon to be Electricity Services Entry Mechanism (ESEM), attempts to address by underwriting contracts in years 8-15.³⁹

If the investment hurdles to renewable energy buildouts can be solved, Australia can unlock the benefits of cheaper abundant renewable energy. Coal and gas used to fuel traditional power stations must be bought, mined, processed and transported, but the 'fuel' powering renewables is entirely free and inexhaustible. Unlike coal and gas whose price fluctuates with global market shocks and geopolitical instability, renewable energy prices can be locked in for decades. That's why solving this problem is critical not just to Australia's energy transition, but to our wider economic security and strategic autonomy.

Private sector investment co-ordination failure

Other related factors lifting renewable investment risk is the complex synchronised coordination task of linking complementary and enabling investments within an integrated electricity network, each discrete asset with separate ownership structures and each required to be profitable (for e.g. a renewable generation project and transmission project owner), as well as regulatory burden, and rising building costs.

The renewable transition requires large volumes of capital invested under a long-term vision. A private-financed, discrete, project-based, and fragmented renewable infrastructure rollout would be a feat even in stable investment conditions. Under today's uncertainty capital allocation has become a 'wait and see' game. The market mechanism has become dysfunctional.

Government has limited levers

The AEMO has powers to plan for supply growth, but has only arm's-length tools for realising those plans through initiatives like the Integrated System Plan mapping locations of infrastructure demand, and the fast-tracking of regulatory approvals for priority projects.

But the Federal Government has the power to deploy new levers, investing directly in producing the electricity it needs to solve the transition and industry power problem, with Sovereign Power. It can command investment when and where it needs it.

The renewables gap

In 2024 (latest national data), renewables contributed roughly 36 percent of total national electricity generation, driven by solar (18 percent), wind (12 percent), and hydro (5 percent), while fossil fuels provided 64 percent (coal 45 percent, gas 17 percent, oil 2 percent).⁴⁰ More recent late-2025 data from the NEM shows renewable sources have reached over 50 percent of electricity generation in the NEM.⁴¹ Meanwhile, the contribution of coal power to Australia's electricity mix is declining due to an aging fleet becoming less reliable and more expensive to run. Three-quarters of Australia's coal-fired power fleet are projected to retire by 2038.⁴²

The Australian government's target of 82 percent renewable electricity by 2030 is not on track, delayed by 10 years by some estimates. Australia needs to install 100 GW of renewable power by 2030 to meet its target. Approximately 10 GW of capacity needs to be installed annually, however only about 2–3 GW has been installed annually over the past 5 years, leaving a shortfall of 8 GW per year.

The 82 percent target also chases a moving target. AEMO forecasts that NEM operational electricity consumption will increase by 28 percent over the coming decade, driven by data centre expansion, business electrification and new industrial loads.⁴³ Data centre electricity consumption alone is forecast to triple by 2029-30 and reach 12 percent of grid-supplied electricity by 2049-50. The absolute volume of renewable generation required to meet the 82 percent target is rising as the buildout falls behind.⁴⁴

The reason for delay is a significant gap between the level of investment in renewable electricity generation, transmission and storage required to meet 2030 targets, and the level of actual investment occurring. Increasing the volume of renewables investment is critical to closing that gap, but the renewables rollout is being blocked by private incentive hurdles to capital investment. Australia's energy-intensive heavy industry is our window into this problem, which requires cheaper energy to decarbonise and be viable.

The next section explains why the cost of capital is higher for private investors in renewables, and how that translates into higher electricity prices, particularly for energy-intensive industries.

The cost of capital

Specialised turbines, solar panels, large land plots, and new transmission infrastructure are examples of the high, fixed, capital outlays associated with renewables builds. These costs are front-loaded, requiring all investment up-front, with operating costs then very low due to nature's provision of fuel for free. It is rare that green investors finance these large upfront capital investments with cash. Instead, they need to secure revenue streams that service their debts, and provide dividends to their shareholders as reward for their investment.

To secure approved finance and press 'go' on investment, renewable projects must demonstrate profitability. But there are 2 obstacles complicating the financial performance of private renewables generators, interrelated and rooted in the idiosyncrasies of intermittent renewables generation:

1. Renewable generators are exposed to significant price volatility on the NEM – high peak prices and negative price 'oversupply' events. This means they need long-term agreements with a power buyer (utility, corporation or government) who agrees to purchase their power over a set period, usually 7-15 years, to secure their revenue projections – called power purchase agreements (PPAs). Governments have a strong track record of using PPAs to secure long term low-cost electricity, with the ACT Government pioneering reverse auction system to source 100 percent of its electricity from renewable sources. PPAs are important for getting new generation financed by

banks and investors. Exposure to price volatility for those generators without PPAs or with any uncovered output is called 'merchant price risk'. It can lead to perverse practices like renewable generators withholding supply to boost prices, and disconnecting facilities rather than accepting a negative price.

PPAs are critical investment tools in the renewables market, but they aren't keeping pace with generation targets. Since retailers are signing fewer PPAs, corporate PPAs where buyers contract directly with generators for their electricity demands have increased in prevalence, with 60 percent of renewable capacity investment since 2017 utilising a corporate PPA during its development.⁴⁵ However, corporate PPAs are unable to continue filling the gap due primarily to mismatched contract terms (corporate buyers prefer lower-liability, shorter contracts and generators need longer contracts to secure financing and build new facilities), and many mid-market corporations lack the very strong credit rating required to satisfy renewable developer financiers.

2. The second related investment obstacle is 'revenue cannibalisation'. This occurs when new generation capacity from a particular technology is added to the grid, then due to their specific generation patterns, energy floods the grid at once (e.g. when the sun shines, it shines for all local generators), forcing prices down, reducing overall revenues. While more energy on the grid and lower prices would be celebrated, in narrow business parameters, the market remuneration per megawatt hour for those technologies is now lower compared to times when they are not producing. Essentially, the prices are too low to attract more investment. This erodes project revenues long-term, extending the timeline for investors to recover their initial capital.

Merchant price risk and revenue cannibalisation increase the costs of financing renewable projects. Equity investors demand higher returns, and debt providers charge higher interest rates. This boosts the renewable developer's minimum benchmark return necessary to satisfy their financiers, which is called the Weighted Average Cost of Capital (WACC). The cost of equity, which covers dividends to shareholders, typically carries the greatest weight in the

WACC, of around 65 percent. But the actual return required for firms to invest is often much higher, including renewable investment. This is called the ‘hurdle rate of return’, and is typically calculated as the WACC, plus a risk premium.

The Reserve Bank of Australia (RBA) studied the hurdle rate phenomenon, remarking that in the 5 years 2016-21 hurdle rates for capital investment across firms were consistently much higher than the WACC – averaging between 12 and 15 percent, compared with an average WACC of 6 percent.⁴⁶ This departure from minimum WACC returns has occurred despite strong and sustained returns on capital investment for 20 years (except for a COVID-related drop in 2020), and regardless of declining interest rates (i.e. hurdle rates were sticky).

These higher private financing costs add up, and are a significant driver of the final cost of electricity, measured by the Levelised Cost of Electricity (LCOE). The LCOE is the minimum price electricity must be sold for a project to break even over its lifetime. The major components of the LCOE are the WACC, and the additional ‘hurdle’ rate risk premium of 5-18 percent which private renewables developers require, depending on project type and risk profile. Hence if the policy objective is to reduce the cost of electricity, you have to reduce the contribution of financing costs to the cost of generating electricity.

It follows that governments have the power to circumvent these complex private incentives and borrow themselves at much lower rates, reducing the cost of capital and the cost of electricity. For instance, a two-percentage point decrease in the cost of capital, can reduce the cost of electricity by 20 percent. Government can reduce total financing costs by side-stepping the web of financiers who ‘clip the ticket’ to justify their risk, reducing reliance on the private sector’s higher subjective return rate.

The public financing advantage

Equity injections for Sovereign Power would be funded through a combination of government borrowing, direct government revenue funding, and retained surpluses (once operational). The Federal Government manages the gap between its spending commitments and revenue by borrowing through the issuance of Treasury bonds. These are fixed-income, low-yielding, safe products that offer lower returns to investors than corporate bonds or state government

bonds (called ‘semi-government bonds’) as they are backed by the Australian government which has almost no risk of defaulting on interest payments.

Unlike debt financing used in the majority of the Federal Government’s energy transition programs which creates a fixed liability for government without any ownership stake, equity financing involves the government providing capital in exchange for ownership shares, sharing in profits/losses, while gaining strategic policy oversight. Public investment is then translated into an asset on the government’s balance sheet, rather than a pure liability.

The savings benefits from government’s lower cost of capital accrue not just from lower interest costs on borrowing. Sovereign Power is free from obligation to pay ongoing dividends to shareholders, with any income generated from assets instead reinvested back into new capacity. It is also free from the subjective hurdle rate faced by private investors whose required returns are upgraded for any risk and opportunity costs of investing their money elsewhere.

Government market-making falls short

The Federal Government has insulated generators from market price volatility and the ‘risk’ of too much cheap renewable power generated at once, through long-term revenue stabilisation measures and financial incentives, like the CIS. By guaranteeing a minimum floor for revenues, the CIS aims to deliver generators stable and predictable revenue streams needed to finance projects, derisking the investment. This helps generators strike long-term PPAs with energy buyers – like an industrial facility – to purchase their power at agreed prices.

By underwriting prices this way, the government aims to attract \$73 billion investment from 2024-27. But just because a developer wins CIS support, it doesn’t mean that projects are built, and there are key problems emerging to the CIS underwriting model including rising construction costs, supply chain pressures and planning approval bottlenecks. Only 3.3 GW of a total 20 GW in winning CIS bids has started construction – only 17 percent of planned generation. Of the 14 projects totalling 3.3 GW in construction, 12 are batteries and 2 solar farms.⁴⁷

The government is aware of these problems. The Nelson Review delivered in December 2025, recommended replacing the CIS with a permanent mechanism called the Electricity Services Entry Mechanism (ESEM). The ESEM is designed to fix several structural flaws in the CIS. It would make contract prices transparent rather than confidential, create standardised and tradeable contracts rather than bespoke bilateral deals, and only underwrite the later years of a project's revenue, leaving the first 3 or more years to the market. If it works as intended, the ESEM should bring more generation to financial close than the CIS has managed.⁴⁸

Despite this effort to improve the system, neither the CIS or the ESEM address the problem of the under-provision of long-term, low-cost PPAs for heavy industry. Both are general wholesale market mechanisms. They are designed to get generation built. They are not designed to provide long-term, cost-recovery electricity contracts to strategically important industrial customers at a price those customers can afford. The heavy industry generation and pricing gaps are interrelated problems, which require a dedicated solution.

More fundamentally, government revenue support makes private investment less risky, but it does not make it cheaper. A developer who wins a CIS contract or an ESEM underwrite still borrows at roughly 7 percent. The electricity they produce still needs to be priced to recover that cost of capital, and generate an expected profit margin.

No amount of market-making by government changes the interest rate a private developer pays on its debt, or the return its equity investors demand. These are structural features of private financing, not market failures that better contract design can fix. Delivering electricity to heavy industry at a price heavy industry can actually afford requires a different policy instrument.

With communities dependent on industrial facilities facing uncertainty and stagnation, and households hit with higher power bills, anxiety and distrust for renewable transition grows. Instead of expending more public resources solving the 'square peg, round hole' financial hurdles facing private investors in the hope it elicits the investment we need, government must shift its focus to securing cheaper electricity sources for industry in its own name.

Part 3: Sovereign Power

Key Points:

1. The cost of capital is the primary determinant of the cost of a renewable generation project.
 2. Government's low cost of borrowing can build generation that delivers cheap PPAs to strategically important industries on a cost-recovery basis.
 3. Government should establish a new organisation, *Sovereign Power*, wholly owned and funded by the Commonwealth Government, to deliver the energy to power a FMIA.
 4. Sovereign Power's mandate should explicitly note that it exists to build renewable generation in instances where there have been clear market failings, and where it aligns with the government's overarching industrial strategy. This ensures that any crowding out effect on the private generation market is negligible.
 5. The entire purpose of Sovereign Power will be to provide low-cost PPAs to energy-intensive heavy industry to ensure its ongoing commercial viability and global competitiveness.
 6. By creating additional electricity supply for energy-intensive consumers in a hard-to-reach pocket of the market, Sovereign Power can dampen prices for consumers and business, and speed up Australia's renewables transition.
 7. The idea of government directly building generation to promote industrialisation is not new and is common practice across the world.
 8. By leveraging government's lower borrowing costs alone, it can provide power to strategically important off-takers at around 44 percent below the market rate.
-

We need more electricity powered by renewables to decarbonise energy production as fossil fuels exit the system, and we need cheaper reliable electricity supply to support heavy industry and future industry growth.

The Federal Government's intervention to provide the Tomago smelter with cheap electricity demonstrates that there is a clear market failing in the capacity of the market to support Australia's heavy industry. This market failing could be disastrous for Australia's sovereign capability, and in direct opposition to the government's industrial policy to promote new value-added, jobs-rich, high-productivity economic activity.

While the Tomago support package was most explicitly tied to electricity prices, government has provided ad hoc support to a raft of heavy industry facilities in the past 2 years. A variety of factors are driving the unstable financial environment for heavy industry, but high electricity costs compared to international competitors is undoubtedly a major contributing factor.

Given the clear inability of the private sector to provide commercially viable, long-term PPAs to our heavy industry, the Federal Government should directly invest in and undertake the job itself. By investing in new generation for energy-intensive industry, Sovereign Power can reduce overall demand on the grid, bringing down electricity costs directly for its industrial customers.

By servicing energy-intensive facilities stuck in the 'chicken or egg' investment problem with private renewables developers, Sovereign Power can secure strategic industries, and also speed up the renewables transition by funding new generation projects to power them.

The proposal

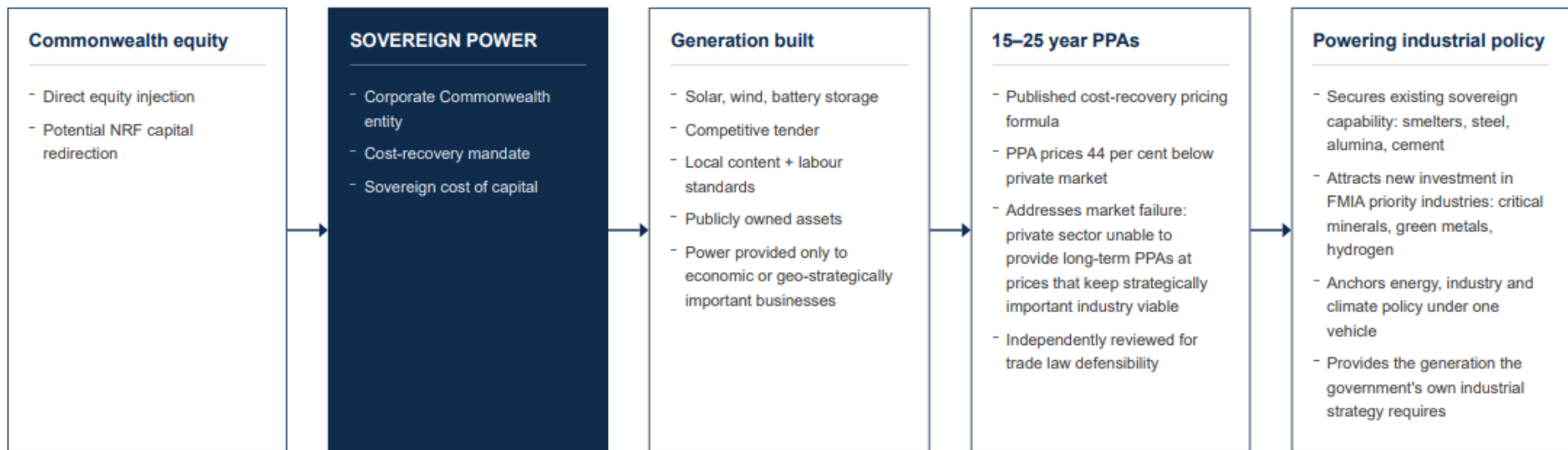
Australia needs a dedicated vehicle to build publicly owned clean generation and provide long-term, affordable electricity contracts to its strategic industries. We propose the establishment of *Sovereign Power*, a new corporate Commonwealth entity (CCE) under standalone legislation, funded by direct Commonwealth equity injection.

The separate legal identity of Sovereign Power allows it to own property and enter into contracts, and unlike government business enterprises (e.g. NBN Co.) would not be proscribed for profit-seeking purposes.

Sovereign Power would build firmed renewable capacity (generation paired with battery storage) sized to match the baseload needs of its contracted industrial customers. It would leverage the expertise and capacity of private renewables developers, procuring contractors to build these assets through competitive tender, with local content and labour standards embedded in procurement.

The entity would sell electricity through long-term PPAs of 15 to 25 years, priced on a cost recovery basis. The pricing formula would be published and would cover capital recovery over the asset's physical life, operations and maintenance, a share of firming costs, and a regulated return sufficient to cover debt service and a modest reinvestable dividend. The formula would be independently reviewed to ensure transparency.

Figure 4: Proposed entity, funding structure, service, and justification



Who it serves

Sovereign Power would serve 2 industry groups. The first group are existing trade-exposed, energy-intensive heavy industry. These are the manufacturing processing facilities currently facing contract cliffs and receiving ad hoc government support: aluminium smelters at Tomago, Boyne Island, Bell Bay and Portland, the Whyalla steelworks, and other manufacturing Safeguard Mechanism facilities (i.e. excluding coal, gas, waste and transport).

Shoring up this group is our baseline sovereign industrial capability. Australia produces close to 40 percent of its aluminium at Tomago alone.⁴⁹ If these facilities close, over 40 years of industrial capacity, accumulated workforce skills and supply chain relationships are lost permanently. This capacity is not rebuilt at short notice. The strategic case for keeping them operating, particularly in a period of geopolitical uncertainty and rising trade barriers is strong.

Sovereign Power would expand to serve a second industry group comprising new priority industries and businesses that meet the National Interest Framework identified under the Federal Government's FMIA program. This includes critical minerals processing, green metals (iron ore, steel and aluminium), green hydrogen, and renewables manufacturing. These are the industries that the government's production credit programs are designed to support, and which a credible long-term energy supply will improve investment attractiveness.

An additional priority criterion for Sovereign Power PPAs are the six Net Zero Economy Agency regions of Collie (WA), Central Queensland, Hunter Valley (NSW), the Pilbara (WA), Latrobe-Gippsland (VIC), and the Upper Spencer Gulf (SA). There are approximately 100 Safeguard Mechanism facilities in these regions, which are targets for industry planning due to their high exposure to fossil-fuel power generation closures, decarbonisation demands, and the urgency of securing new industry. Under this priority criterion, energy-intensive heavy industry companies that are Safeguard Mechanism facilities and/or FMIA priority industries who establish facilities in Net Zero regions could be fast-tracked for a Sovereign Power PPA.

Data centres are excluded from Sovereign Power's customer base. Data centre operators have demonstrated they are willing and able to pay market rates for electricity, with recent contracts exceeding USD \$115/MWh. They do not need public support to secure supply.

How it interacts with the National Energy Market

Sovereign Power would build firm capacity (generation paired with battery storage) designed to match the baseload needs of its contracted customers. Storage absorbs daytime solar surplus and dispatches it overnight, reducing the mismatch between the generation profile and industrial load. Any residual surplus would be sold into the NEM at spot prices. This surplus participation is incidental to Sovereign Power's primary purpose and small relative to total NEM supply, as generation capacity is sized to contracted industrial load rather than built speculatively.

During extended periods of low renewable generation, when battery storage is depleted, the industrial customer would draw from the NEM at prevailing wholesale prices. This is standard practice for large industrial customers in the NEM, including under existing PPA arrangements. Sovereign Power customers would remain grid-connected at all times. Combining solar and wind across different generation profiles with battery firming is intended to minimise these shortfall periods, but the NEM provides the backstop as it does for all market participants.

In the case of the Western Australian Net Zero Economic Agency zones, custom arrangements will need to be made for how Sovereign Power generation interacts with the South-West Interconnected System and the North-West Interconnected System.

Sovereign Power and the ESEM/CIS

Sovereign Power would sit alongside the existing suite of energy and industry programs, not replace them. The CIS and the incoming ESEM would continue to support general wholesale market investment. The CEFC would continue to provide concessional finance. AEMO would continue to plan the system. The FMIA production credits would continue to support demand-side industrial competitiveness.

Sovereign Power fills a specific gap that none of these programs addresses: the direct provision of long-term, affordable, firmed clean electricity to strategic industrial customers. The CIS underwrites private investment but cannot force private developers to offer long-term contracts at prices heavy industry can afford. The CEFC provides finance but does not own or operate generation. The ESEM provides a contracting backstop for general wholesale supply but is not designed for bespoke industrial offtake.

The government should redirect underutilised National Reconstruction Fund (NRF) capital towards the initial capitalisation of Sovereign Power. The NRF has a \$15 billion balance sheet and has been slow to deploy since its establishment in 2023. However, the NRF's legislative mandate is focused on co-investment alongside the private sector, which differs from Sovereign Power's model of direct public ownership. This redirection of NRF purpose can be settled through legislative amendment.

What it is not

Sovereign Power would not offer retail electricity to households or small business. It would not operate any existing generation assets. It would not manufacture solar panels, wind turbines or battery cells. It would not replace the CIS, the CEFC, AEMO or the AER. It would not provide grants or subsidies. It would not operate as a Government Owned Corporation required to earn a commercial return. It is a publicly owned coordinating entity and contract counterparty, operating on a cost-recovery basis to bridge a gap the private market cannot fill.

Part 4: Modelling the cost difference

Key points:

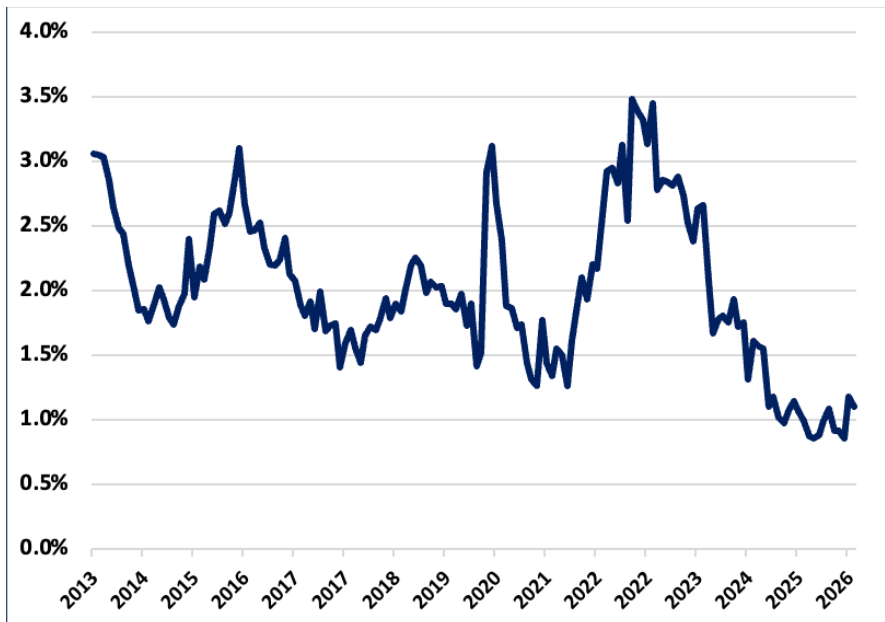
1. Public borrowing has averaged 2 percentage points cheaper than private borrowing over the last 13 years. On the debt component alone, this spread translates to annual savings of \$460 million on an illustrative \$23 billion of investment in generation capacity.
 2. A publicly owned entity eliminates the equity layer entirely. There are no shareholders requiring dividends or minimum returns. This is the larger source of the public financing advantage, beyond cheaper debt.
 3. Sovereign Power's PPA price would be set under a published cost-recovery formula, independently reviewed by an appropriate body, covering capital recovery, operations and maintenance, firming costs, and a regulated return margin.
 4. Illustrative modelling based on CSIRO GenCost 2025-26 inputs suggests a central sovereign PPA price of approximately \$66/MWh, roughly 44 per cent below an equivalent private sector PPA of approximately \$117/MWh.
-

The following analysis is purely illustrative. It uses publicly available data and indicative assumptions to demonstrate the structural cost advantage of public financing. The figures presented are not forecasts or commitments. Actual costs would depend on project-specific design, procurement, financing terms, and market conditions prevailing at the time of investment.

To demonstrate how much cheaper it is for the government to borrow compared to the private sector, Figure 5 shows the difference between the returns paying to investors purchasing investment-grade corporate bonds (BBB relevant to renewables infrastructure development risk profile) compared with Commonwealth government Treasury bonds. For the last nearly 13 years (all available data), public borrowing has averaged 2 percentage-points cheaper than private borrowing. In the more recent 4-year period, public borrowing has averaged 1.9 percentage-points less. On the debt component alone, this spread translates

to annual savings of \$460 million on a given \$23 billion volume of investment in generation capacity.

Figure 5: Average yield spread across time periods: Treasury bonds against corporate bonds (BBB)



Data: RBA, Bloomberg. Table F2.1 - Australian government 10-year bond and 10-year non-financial corporate BBB-related bonds. Both monthly, original, nominal (non-indexed) data.

But the bond yield spread captures only part of the public sector financing advantage. Private renewables projects are financed with a blend of debt and equity, and equity investors require returns well above the corporate bond rates reflected in Figure 5. A publicly owned entity eliminates the equity layer entirely. There are no shareholders requiring dividends or minimum returns. This is the larger source of savings. For a full cost comparison, including the equity differential and commercial margin, see Appendix C.

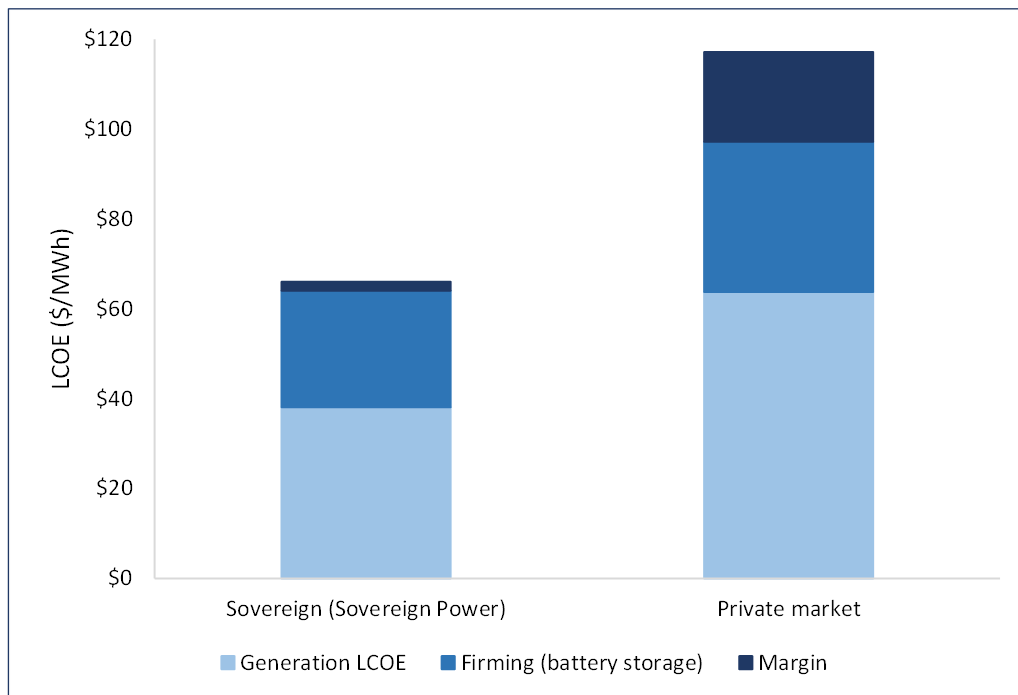
How electricity should be priced

The price Sovereign Power charges through its PPAs would be set under a published cost-recovery formula covering 4 components. These include capital recovery over the asset's physical life at sovereign cost of capital, operations and maintenance costs, a share of firming costs (battery storage), and a regulated return margin covering debt service and a modest reinvestable dividend. The pricing formula would be independently reviewed by an independent body to ensure transparency and to provide a defensible basis under trade law.

Transmission would not be included in the PPA price. As is standard practice in the NEM, the industrial customer would pay Transmission Use of System charges directly to the relevant network operator.

Our illustrative modelling based on CSIRO *GenCost 2025-26 Consultation Draft* inputs at 2030 cost projections suggests a central PPA price of approximately \$66/MWh. This assumes a sovereign cost of capital of 3.0 percent real, a diversified portfolio of solar and wind with co-located battery storage for firming, and asset recovery periods reflecting the technical life of the generation assets. The full methodology, inputs and sensitivity analysis are set out in Appendix B.

Figure 6: Difference in PPA price for sovereign versus private generation developer



Source: McKell Institute

An equivalent private sector PPA for the same firming product would cost approximately \$117/MWh. The saving of approximately 44 percent reflects 3 sources: the Commonwealth's lower cost of capital reduces the generation cost by approximately \$26/MWh, the lower cost of capital reduces firming costs by a further \$7/MWh, and the absence of a requirement to earn a commercial equity return and cover development risk, shape and curtailment premiums, and trading desk intermediation removes approximately \$18/MWh in commercial

margin that a private developer might charge above breakeven. This is not a comparison between public and private costs of building the same asset. Effectively, this is a comparison between public cost-recovery pricing and the price at which the private market is willing and able to sell the product to industrial customers.

Conclusion

Australia's heavy industry is caught between 2 transitions. The coal fleet that powered it for 40 years is closing. The renewable fleet that will replace it is not being built fast enough, or at a price that heavy industry can afford.

The provision of public goods like healthcare and education demonstrates that Australians already understand not every site of production should be exposed to the narrow logic of profit. The same applies to energy. In the 1970s when responding to the other oil crisis, public investment surged into coal generation, laying the foundations for Australia's current batch of heavy industries which have delivered decades of economic benefits. By building public energy capacity into the new renewable electricity system, we have an opportunity to anchor new generations of long-term investment and prosperity.

Fossil-fuel price rises, global financial system volatility, and inflationary pressures arising from the Middle East conflict brings new urgency to our proposal. Protecting our energy and economic sovereignty amidst the biggest geopolitical realignment since WW2 should be a priority for our small, trade-exposed nation.

While states hold majority responsibility for energy, Commonwealth coordination and leadership is required to ensure Australia's sovereign capability, and leverage the maximum benefits of public financing. Through supply of attractive low-cost electricity to strategic industries, Sovereign Power facilitates a coherent vision of economic development, anchoring effective, efficient industry and energy policy coordination. Sovereign Power unites hitherto disparate initiatives like FMIA, NRF, and Safeguard Mechanism under the same umbrella. By providing cheap clean power itself, the Federal Government can advance several policy objectives simultaneously:

1. Renewable energy transition
2. Ensuring sovereign heavy industry capability
3. Securing new investment that generates good jobs and domestic capability in priority industries through FMIA's 'Front Door'
4. Decarbonisation of existing heavy industry under the Safeguard Mechanism

The alternative is to continue as we are. More public money routed through financial intermediaries to fund an inadequate private-led renewable transition, without a structural solution, and without an anchor. Sovereign Power would spend public money more efficiently, more transparently, and with a permanent institutional framework that propels industry policy forward and builds something lasting.

As a new Commonwealth entity, Sovereign Power can build firmed renewable generation through competitive procurement, selling long-term cost-recovery PPAs to strategic industrial customers at approximately \$66/MWh on an energy-only basis. It is a generator with a single purpose: to power Australia's industrial policy.

With Sovereign Power the Federal Government can plant the flag for a new muscular democratic state that resolves energy system insecurity, and breaks through decades of neoliberal policy instability which is culminating in fiscal blowouts, low productivity, low investment, and rising inequality.

If we grasp this historic moment and establish public clean energy capability, we can break the cycle of energy price spikes and secure Australia's economic foundations for decades to come. The writing is on the wall. Whoever owns their energy production, owns their future.

Appendix A: Macroeconomic stabilisation benefits

Energy provides the foundations for the entire economy. Whether it is electricity running a factory or diesel fuelling tractors, no production happens without energy. Transportation and trade rely on energy, enabling supply chains. Energy is transformed into goods and services by workers, whose labour is ‘produced’ in households, powered by energy (and unpaid, largely feminised labour).

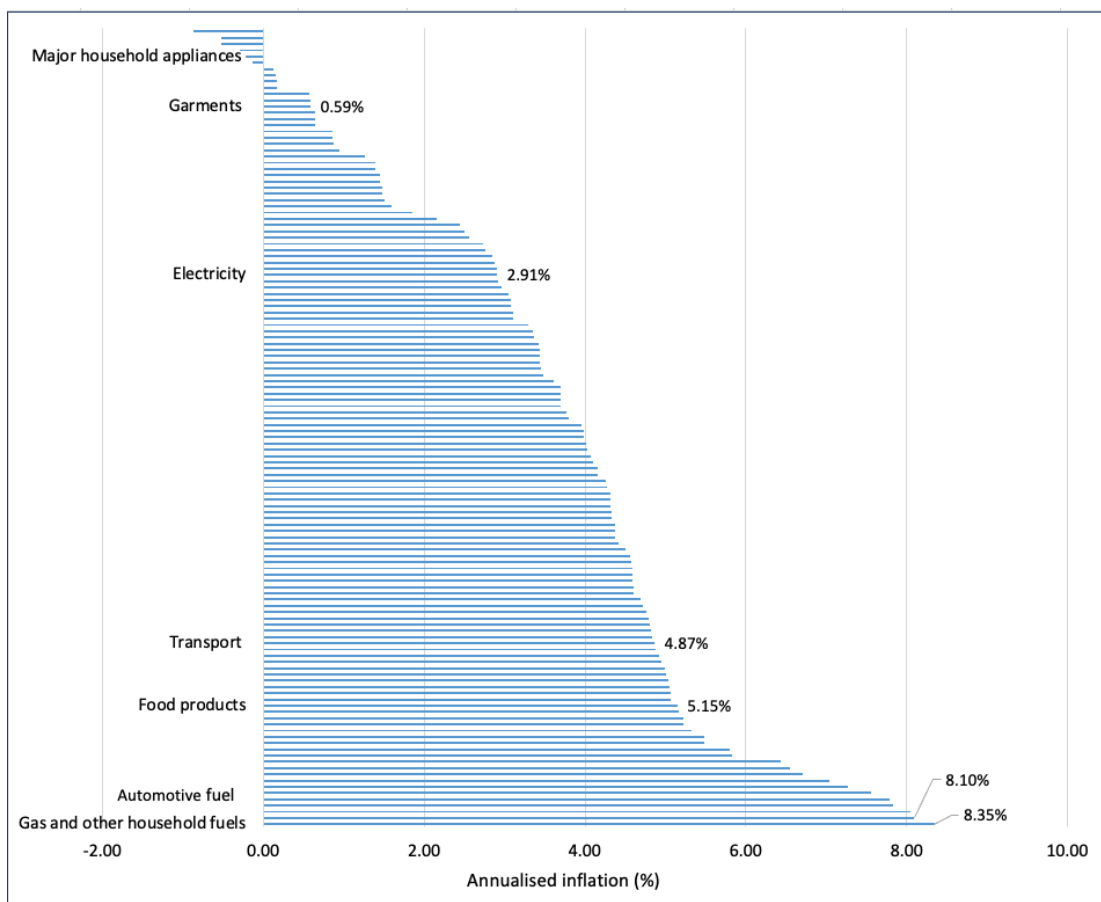
As the strategic chokepoint in all economic flows, any energy shortage or cost rise ripples across the economy, leading to slowdowns and inflation. Conversely, providing energy at low and stable costs can ‘lift the ceiling’, creating opportunities for new growth and innovation. By increasing the level of public control over arguably the most important price in the economy, Sovereign Power can also ‘lift the ceiling’ for governments, creating new policy space for industry policy innovation, as discussed. But it can also offer a new tool in the fight against inflationary events, the frequency and severity of which will only rise as the world navigates a future marked by energy supply disruptions, climate change, and geopolitical conflict.

One way of demonstrating the macroeconomic benefit of Sovereign Power’s reduced electricity prices by reducing energy-intensive industry grid demand, and its capacity to hasten renewable transition, is to consider the contribution of energy prices to the painful inflation surges that followed the 2 recent global supply shocks - the COVID pandemic from 2020 and the Russia-Ukraine conflict in 2022. Inflation was very low or negative in 2020 with pandemic cost relief measures in place, and began rising from March quarter 2021. Hence, we measure the contribution of rising energy prices in the 5 years from December quarter 2020 to December quarter 2025, as measured by Consumer Price Inflation (CPI). While CPI specifically tracks costs incurred by households, the factors behind higher energy bills for consumers — such as surging wholesale market prices, supply shortages, and network costs— are generally the same causes driving up operational costs for businesses.

Figure 7 shows energy costs have dominated economy-wide inflation in Australia since late-2020. Gas and other Household Fuels and Automotive Fuels were the fastest growing costs, with annualised growth over 8 percent each year. High gas prices are the primary driver of elevated electricity costs across the NEM. In total volume terms, around 17 percent of

electricity production relies on burning gas, but the bigger effect flows from the marginal generator role gas plays in the NEM as the last and most expensive source of last resort, plugging demand holes. Half of all households yet to electrify also rely on gas for heating, hot water, and/or cooking. As such, insufficient renewable electricity generation and a slow transition for households and power-hungry heavy industry increases our reliance on high export gas prices. This has a direct effect on prices across the economy, most notably electricity costs, resulting in higher business costs and household financial pressures.

Figure 7. Gas and fuel dominate inflation data in last 5 years (Dec qtr. 2020-Dec qtr. 25)



Data: ABS CPI. Quarterly, original data. Table 18. Annualised data.

Electricity prices rose at an annualised growth rate of only 3 percent in 5 years, but this uncharacteristically low rate was due to the Federal Government’s \$6.8 billion electricity bill rebates. Since the relief was short-term, it masked ‘real’ prices, creating an inflationary time-bomb when rebates wound up at end-2025. Accordingly, electricity costs jumped a whopping 37 percent in the year to February 2026, and will only get worse as electricity costs drive

services inflation and business pass-through occurs typically 4-6 months after the initial rise.⁵⁰ The oil price shock from the US/Israel war with Iran is already mounting inflationary pressures, with RBA expecting inflation to reach 4.2 percent in mid-2026.⁵¹

While acceptable as an urgent, limited measure to relieve households and dampen the inflation surge, subsidising electricity producers (and their profits) is not a sustainable or efficient solution to rising electricity prices, carrying significant opportunity costs to the taxpayer. For instance, an equivalent \$6.8 billion investment could build 5 GW worth of utility-scale solar power, knocking 5 percent off the 100 GW additional capacity required to reach our 2030 target.⁵²

Another inflationary channel for higher energy prices is when businesses pass-through higher energy costs onto prices charged for goods and services, protecting their profit margins. This powerful inflationary force on the economy is magnified by the sheer volume of energy inputs consumed by business and industry, which accounts for around 70 percent of all electricity consumption and over half of domestic gas consumption in Australia – with heavy industry the biggest energy consumers. By reducing heavy industry demand on the grid and lowering energy prices, Sovereign Power can reduce secondary pass-through effects. The RBA estimates that supply-side inflation effects driven primarily by business pass-through contributed 3.5 percentage points to inflation in the year to March 2023, a period when inflation reached its peak of 8 percent (at end-2022).⁵³

The point of this exercise is to show that macroeconomic supply shocks from high energy costs, whether caused by wars or pandemics, multiply pain across the economy through high inflation. Detaching energy prices could have muted the inflationary domino effects outlined above, which resulted in 13 interest rate hikes, deteriorating public finances, reduced growth, and a cost-of-living crisis.

By underinvesting and integrating a higher cost of capital into electricity prices, the slow, private-led renewables transition will increase inflationary pressures on Australia's economy. On the upside, by reducing electricity prices through carving out power-hungry facilities from the grid, Sovereign Power can help dampen inflationary pressures long-term, creating more economic space for new investment, growth and higher wages. This economic space is critical

to Australia navigating pathways out of its productivity slump, and as economic, political and environmental conditions deteriorate around us.

The opportunity to break the cycle of energy price spikes, gain new tools to fight inflation, and generate secure foundations for the growth of Australia's sovereign industry capability is the public energy benefits trifecta.

Appendix B: Costing methodology

This appendix provides a description of the data sources, assumptions and methodology underpinning the pricing model used in this report. It is intended for readers who wish to understand how the headline PPA price estimates were derived and to assess the sensitivity of the results to changes in key assumptions.

The model calculates the levelised cost of electricity (LCOE) for a portfolio of firmed renewable generation under 2 financing scenarios: a sovereign scenario reflecting the Commonwealth's cost of capital, and a private scenario reflecting commercial financing conditions and typical internal rates of return required to make generation projects feasible. The difference between the 2 represents the price advantage that a publicly owned generator can offer to industrial customers.

B.1: Data sources

The model draws its inputs from CSIRO's GenCost 2025-26 Consultation Draft, published December 2025. GenCost is the standard reference for electricity generation cost projections used by AEMO, the Australian Energy Regulator, and the Department of Climate Change, Energy, the Environment and Water. All technology cost inputs use the 2030 projection year under the Current Policies scenario, with capacity factors set at the midpoint of GenCost's published range. 2030 was chosen to reflect the most likely timeframe for projects to commence if this proposal were to be adopted in the near future.

Non-GenCost inputs, including the sovereign cost of capital, private developer margins, and battery operating parameters, are sourced from Oxford Economics, National Renewable Energy Laboratory and published market data. Table 2 provides a complete list of inputs with their values and sources.

Table 2: Data sources for model inputs

| Input | Value | Source |
|---|------------|---|
| Sovereign real WACC | 3.0% | Oxford Economics 2024 (lower bound); AER regulated network WACC |
| Private real WACC | 7.0% | GenCost 2025-26 Draft, Apx Table B.9 (cell V2) |
| Solar PV capital cost | \$1,239/kW | GenCost B.9, 2030, Current Policies (col N, row 36) |
| Solar PV capacity factor | 25.5% | Midpoint of GenCost B.9 range: 19-32% |
| Solar PV fixed O&M | \$12/kW/yr | GenCost B.9 (col F, row 36) |
| Solar PV economic life (private) | 30 years | GenCost B.9 (col C, row 36) |
| Solar PV technical life (sovereign) | 40 years | Aurecon 2024 for AEMO |
| Solar PV construction time | 0.5 years | GenCost B.9 (col D, row 36) |
| Onshore wind capital cost | \$2,697/kW | GenCost B.9, 2030, Current Policies (col N, row 37) |
| Onshore wind capacity factor | 38.5% | Midpoint of GenCost B.9 range: 29-48% |
| Onshore wind fixed O&M | \$29/kW/yr | GenCost B.9 (col F, row 37) |
| Onshore wind economic life (private) | 25 years | GenCost B.9 (col C, row 37) |
| Onshore wind technical life (sovereign) | 30 years | Aurecon 2024 for AEMO |
| Onshore wind construction time | 1 year | GenCost B.9 (col D, row 37) |
| Battery capital cost (4-hour) | \$355/kWh | GenCost B.5, 2030, Current Policies (col X, row 16) |
| Battery round-trip efficiency | 85% | NREL 2025; GenCost/Aurecon 2024 |
| Battery cycles per day | 1.0 | NREL 2025; AEMO ISP central case |
| Battery fixed O&M | \$10/kW/yr | GenCost 2025-26 Draft, Apx Table B.9 |
| Battery economic life | 15 years | GenCost 2025-26 Draft |
| Solar share of portfolio | 60% | Author assumption |
| Wind share of portfolio | 40% | Author assumption |
| Firming share (via battery) | 25% | Author assumption; midpoint of 20-30% range |
| Sovereign margin | \$2/MWh | Admin, debt service, modest reinvestable dividend |
| Private margin | \$20/MWh | Oxford Economics 2024; Infradebt; CORE Markets PPA data |

All costs are expressed in real 2024-25 Australian dollars.

B.2: Methodology

The model calculates the LCOE for each generation technology using the standard capital recovery factor (CRF) approach, consistent with the methodology used in GenCost. The LCOE for a given technology is:

$$LCOE\left(\frac{\$}{MWh}\right) = \frac{\left(\frac{r(1+r)^n}{(1+r)^n - 1} \times Capex \times (1+r)^T + O\&M\right)}{CF \times 8,760} \times 1,000$$

Where:

- r = real discount rate (WACC)
- n = asset economic life (years)
- T = construction time (years)
- $Capex$ = overnight capital costy $\left(\frac{\$}{kW}\right)$

- $O\&M = \text{annual fixed operations and maintenance cost } \left(\frac{\$}{\text{yr}}\right)$
- $CF = \text{capacity factor (proportion of time the asset generates)}$
- $8,760 = \text{hours in a year}$
- $1,000 = \text{conversion from } \frac{\$}{\text{kWh}} \text{ to } \frac{\$}{\text{MWh}}$

The portfolio blended generation LCOE is the weighted average of the solar and wind LCOEs, using the portfolio shares (60 percent solar, 40 percent wind).

Battery firming costs (LCOS)

Battery firming costs are calculated as a levelised cost of storage (LCOS). Battery capex input is drawn from GenCost Appendix Table B.5.

The LCOS calculation applies a similar annualisation method that GenCost uses for generation LCOE, adapted for battery storage. Capital costs are annualised over the battery's economic life at the relevant discount rate, fixed O&M is added, and the total is divided by annual useful energy throughput to produce a cost per MWh of energy delivered through storage.

$$LCOS \left(\frac{\$}{\text{MWh}}\right) = \frac{\frac{r(1+r)^n}{(1+r)^n - 1} \times Capex_{\text{kWh}} \times Duration + O\&M}{Duration \times Cycles \times RTE \times 365} \times 1,000$$

Where:

- $r = \text{real discount rate (WACC)}$
- $n = \text{battery economic life (years)}$
- $Capex_{\text{kWh}} = \text{battery capital cost } \left(\frac{\$}{\text{kWh}}\right)$
- $Duration = \text{battery storage duration (hours)}$
- $O\&M = \text{annual fixed operations and maintenance } (\$/\text{kWh}/\text{yr})$
- $Cycles = \text{full charge – discharge cycles per day}$
- $RTE = \text{round – trip efficiency } (\%)$
- $365 = \text{days per year}$
- $1,000 = \text{conversion from } \$/\text{kWh} \text{ to } \$/\text{MWh}$

Two simplifications distinguish this calculation from the full CSIRO methodology. First, charging costs are excluded. CSIRO's LCOS includes the cost of electricity used to charge the battery. In the Sovereign Power model, the battery is charged from the same solar and wind portfolio, so the charging cost is already captured in the generation LCOE. Including it again would be double-counting. Second, cycle degradation is not modelled. CSIRO models battery

capacity declining to 80 percent over the asset's lifetime.² Excluding degradation marginally understates the firming cost by an estimated \$1-2/MWh.

The firming cost applied to the PPA price is the LCOS multiplied by the firming share (25 percent of total energy delivered through storage).

PPA price

The final PPA price is the sum of 3 components:

The sovereign and private scenarios use the same technology cost inputs (capex, O&M, capacity factors) but differ in 3 respects: the discount rate (3.0 percent sovereign versus 7.0 percent private), the asset recovery period (technical life for sovereign, economic life for private), and the margin (\$2/MWh sovereign versus \$20/MWh private). The private margin reflects equity returns sufficient to justify the project, and development costs that a commercial developer must recover above the LCOE calculated at their WACC.

B.3: Results

Table 3: Central case results (\$/MWh, real 2024-25)

| Component | Sovereign | Private |
|--------------------------------|-----------|---------|
| Blended generation LCOE | \$38 | \$64 |
| Firming cost (battery storage) | \$26 | \$33 |
| Margin | \$2 | \$20 |
| PPA price (energy-only) | \$66 | \$117 |

The sovereign PPA price of approximately \$66/MWh is 44 percent below the private market equivalent of approximately \$117/MWh. The saving of approximately \$51/MWh reflects

² CSIRO, *Renewable Energy Storage Roadmap*, available at: <https://www.csiro.au/en/work-with-us/services/consultancy-strategic-advice-services/CSIRO-futures/Energy/Renewable-Energy-Storage-Roadmap>

3sources. The lower discount rate reduces the generation LCOE by \$26/MWh, the lower discount rate reduces the firming cost by \$7/MWh, and the lower margin saves a further \$18/MWh.

These are energy-only prices. They exclude Transmission Use of System charges, which the industrial customer would pay directly to the relevant network operator as is standard practice in the NEM. They also exclude the effect of FMIA production credits, which could further reduce the effective cost to eligible customers.

B.4: Sensitivity analysis

The model tests the sensitivity of the sovereign PPA price to changes in 5 key assumptions. Each sensitivity varies one parameter while holding all others at their central case values. All sensitivity formulas are live in the workbook and update automatically if any input is changed.

Table 4: Sensitivity of sovereign PPA to key assumptions

| Parameter | Assumption | Sovereign PPA (\$/MWh) | Change (\$/MWh) |
|-----------------------------------|----------------------------|------------------------|-----------------|
| Sovereign WACC | 2.5% | 63 | -3 |
| | 3.0% (central) | 66 | baseline |
| | 3.5% | 69 | +3 |
| | 4.5% | 76 | +10 |
| | 5.0% | 80 | +14 |
| Battery cycles/day | 0.7 | 77 | +11 |
| | 1.0 (central) | 66 | baseline |
| | 1.5 | 57 | -9 |
| Firming share | 20% | 61 | -5 |
| | 25% (central) | 66 | baseline |
| | 30% | 71 | +5 |
| Portfolio mix (solar/wind) | 80/20 | 62 | -4 |
| | 60/40 (central) | 66 | baseline |
| | 50/50 | 68 | +2 |
| | 35/65 | 71 | +5 |
| Sovereign asset life (solar/wind) | 40/30 (central) | 66 | baseline |
| | 35/30 | 67 | +1 |
| | 30/25 (private convention) | 71 | +5 |

Appendix C: Comparing public vs private lifetime project costs

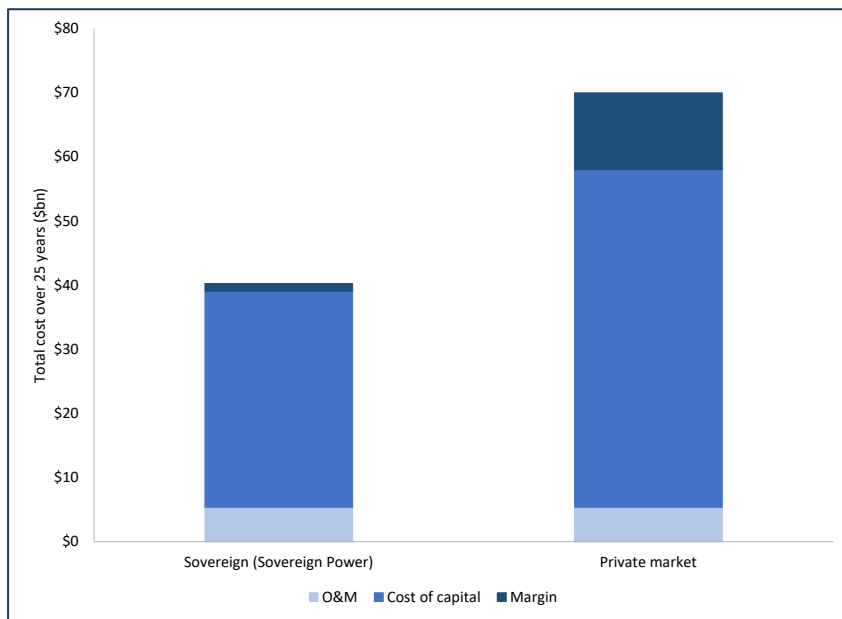
The following cost comparison is illustrative only, based on indicative assumptions set out in Appendix B. Actual project costs would vary depending on technology mix, site conditions, procurement approach, and prevailing financing terms.

This section compares the costs of delivering \$23 billion in renewable generation and storage to power Australia's heavy industry. Regardless of who builds it, the solar panels, wind turbines and batteries, and the construction costs are the same. What differs is the cost of financing that construction. The Commonwealth government borrows at a real interest rate of approximately 2.5 percent (RBA, 10-year Treasury Indexed Bond yield, April 2026). A private renewable energy developer faces a WACC of approximately 7 percent in real terms. That 4.5 percentage point gap exists because private developers must provide returns to equity investors of 8 to 14 percent on top of their debt costs, while a government entity funded through sovereign borrowing carries no equity layer at all. Over 25 years, this gap means private financing of the same assets costs \$19 billion more in capital charges alone. Not for better infrastructure or more reliable supply, but for the higher cost of private capital.

The financing cost is compounded by the margin each model requires. A public entity operating at cost recovery needs only a thin margin to cover administration and a modest reinvestable return. A private generator must deliver a commercial return to its shareholders on top of recovering its capital costs. We estimate this to be around \$11 billion.

In total, private provision of the same generation capacity could cost Australian industry approximately \$30 billion more over the life of the assets. Of that, roughly two-thirds is attributable to the higher cost of private capital and one-third to the commercial margin. Private generators face legitimate financing costs and must deliver returns to their investors. For strategically important industries operating on thin margins, within globally competitive markets whose other participants receive cheap, reliable state-funded energy inputs, the financing model matters a great deal.

Figure 8: Lifetime cost of project between Sovereign Power model and private generation



Source: McKell Institute, GenCost

Appendix D: Competitive neutrality case

Sovereign Power does not compete with the private sector. No private generator currently offers 15 to 25-year, firmed, cost-recovery PPAs to financially stressed, trade-exposed industrial customers at a price those customers can afford. Sovereign Power fills a gap that neither the CIS or ESEM addresses. It provides a product the market has demonstrated it cannot deliver, to customers the market has demonstrated it will not serve on terms suitable to either party.

Private generators face a fundamental counterparty problem with these facilities. The government does not face this counterparty risk because the same government that owns Sovereign Power is also the government whose industrial policy keeps these facilities operating. For new industries supported under the FMIA framework, the logic is the same: the government's own policy creates the customer, so the counterparty risk that deters private investment does not arise. Instead of undermining private generators, the closure of these facilities would remove approximately 24 TWh of baseload demand from the grid, demand that underpins wholesale prices and supports the commercial case for the broader generation pipeline. Keeping these customers alive preserves the demand base on which private investment depends.

The entity's enabling legislation would include an objectives clause defining its purpose as providing cost-recovery electricity to strategic industrial customers in circumstances of demonstrated market failure. This provides the legal foundation for defending against complaints under the Competition Principles Agreement. We believe the argument that no private generator offers the product in question, is robust. Critically, Sovereign Power would not be structured as a Government Owned Corporation (GOC). Unlike a GOC, which is typically required to demonstrate equivalent commercial returns to the private sector, Sovereign Power would operate on a cost-recovery basis with no mandate to generate a profit or a dividend to government. Its purpose is not to compete with the private sector in the electricity market, but to coordinate the procurement and delivery of firmed renewable generation for strategically important industrial customers that the private market has demonstrated it cannot serve.

On trade law, Sovereign Power PPAs are priced on a published cost-recovery formula independently reviewed by the appropriate regulator, covering capital recovery, operations and maintenance, firming costs, and a modest regulated margin. Cost-recovery pricing does not confer a benefit within the meaning of the WTO Agreement on Subsidies and Countervailing Measures, because the price reflects the full cost of provision. Transmission is excluded from the PPA and paid by the customer at standard regulated rates, removing that vector of subsidy challenge entirely.

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⁴⁹ Tomago Aluminium, *Our Story*, available at: <https://www.tomago.com.au/our-story/>

⁵⁰ ABS. 12 months to February 2026.

⁵¹ Reserve Bank of Australia, 2026. 'Statement on Monetary Policy – February 2026'.

⁵² Price per MW for solar \$1.3-\$1.5 million/MW. Data from CSIRO's GenCost 2025-26 report. Excludes 'firming up' investment in batteries and transmission. Australia needs over 100 GW to meet 82% target for 2030, and between 120-170 GW for 100% electrification.

⁵³ Beckers, B., Hambur, J. and Williams, T. 2023. 'Estimating the Relative Contributions of Supply and Demand Drivers to Inflation in Australia', *Reserve Bank of Australia*, Bulletin – June 2023.