

DCCEEW ELECTRICITY AND ENERGY SECTOR PLAN – DISCUSSION PAPER

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INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission under the Department of Climate Change, Energy, the Environment and Water's (DEECCW) Electricity and Energy Sector Plan Discussion Paper.

The EUAA take a technology neutral approach to energy. All energy technology must seek to deliver lowest possible price, highest possible reliability and increasing sustainability, both environmentally and socially. Failure to meet this standard means a failure to meet the National Electricity Objectives (NEO).

The EUAA support the pursuit of net zero targets but we must always seek to achieve this at least cost, not at any cost. We believe the focus on cost is critical to ensuring the public continues to support the transition to net zero. As we have seen, cost of living is the number one issue for most Australian families¹.

Additionally, we seek an equitable allocation of the costs and risks associated with the transition. All too often energy consumers are expected to carry the heavy weight of market risk that should sit with market participants. We also see that the distribution of costs as a growing concern, especially for those customers who are unable to participate in the energy transition (i.e. unable to access rooftop solar PV, batteries and electric vehicles). We firmly believe that this transfer of risk and growing inequity is inconsistent with the NEO.

We support governments setting policies to drive the transition to net-zero, but governments need to be seen to be supporting the transition financially instead of transferring the costs and risks to consumers. We are concerned that at some point in the not-too-distant future, consumers will be unable or unwilling to continue funding the transition. Further, if large energy consumers cease to exist due to the rising cost of energy, who will be left to make the everyday items used by all Australians? How will we maximise the "home grown" potential of the energy transition? We have recently seen one large energy consumer collapse due in part to the cost pressures of energy contracts². We cannot allow demand destruction to be a path to decarbonisation of the economy.

¹ According to SEC Newgate, while the energy transition continues to enjoy support, cost of living is the number one issue facing most Australians. <https://www.secnewgate.com.au/sec-newgate-mood-of-the-nation-energy-edition/>

²Qenos is a long-term EUAA member and has consistently cited rising energy costs as a material threat to their business. <https://www.afr.com/policy/energy-and-climate/gas-costs-could-sink-more-manufacturers-after-qenos-aig-20240418-p5fl03>

We support an orderly transition to a low carbon energy system that is orchestrated by government(s) to ensure sufficient capacity and network infrastructure are in place when the coal fleet retire. A single, consistent approach across all jurisdictions would be ideal (and most efficient). This does not appear to be the present case, where governments are driving policies that at times appear to be in conflict as they pursue large renewable energy targets, tight timelines for consultation and construction of new transmission lines and extensions to coal fired power stations being negotiated.

All of these “urgent” processes are contributing to an inflated cost of the transition, which consumers, those who can least manage the risks associated with the tight timeframes and lack of forward planning, have to foot the majority of the bill. As we are also observing, this rapid transition is driving serious community social licence issues that must be resolved.

An orderly and orchestrated transition underwritten by a consistent approach by governments, with the backing of consolidated revenue, would significantly reduce the risks, particularly the financial impact to consumers, associated with the rapid transition that is being pursued.

It is by doing these things that consumer social licence for the transition will be maintained. If costs spiral out of control and the energy system becomes unstable and unable to deliver a reliable service, then consumer social license will be lost placing net zero goals in great peril.

POLICY THAT HELPS

The focus of this submission is to identify the key policies that will assist with the transition to net zero at least cost to consumers. In doing so we will identify areas of improvement required and potential pitfalls to be avoided.

Capacity Investment Scheme

The Federal Government target of 82% renewable energy by 2030 was always ambitious, even before world events profoundly impacted international supply chains and escalating costs driven by a global decarbonisation race. We understand the pressure on the Federal Government to provide more “policy support” for the deployment of renewable energy technologies. In particular the push to significantly expand (both in scale and timeframe) of the energy consumer funded Large-Scale Renewable Energy Target (LRET).

Using data from the Renewable Energy Regulator, the Federal Large-Scale Renewable Energy Target (LRET) and Small-Scale Renewable Energy Scheme (SRES) schemes have seen at least \$32B in consumer subsidies provided to the renewable energy industry since 2001. The LRET will continue to provide a subsidy to the renewable energy industry of at least \$1.6B per year up to 2030. This is a significant investment in the future, funded by energy users and has seen the establishment of a strong renewable energy sector. The LRET has done its job.

When state renewable energy incentives are included (i.e. the NSW Energy Transition Road Map, VRET) along with the tens of billions expected to be invested in transmission (including REZ) over the coming decades it is not inconceivable that support for the energy transition will easily surpass \$200B, delivered over multiple decades out to 2040.

Initial analysis by the EUAA suggests that if an extension of LRET was pursued as the primary Federal policy tool to reach 82% by 2030, an additional \$70 billion in consumer funded subsidies would be required. This would have had a devastating impact on consumers bills and almost certainly threatened customer social license and support for the transition to net zero.

The renewable energy industry is in a very strong position to continue its march forward. As a result of the extended period of policy support described above, renewable energy has come to dominate the energy investment environment.

According to the most recent CSIRO GenCost Report³, renewable energy represents the least cost energy generation technology (on an LCOE basis) even when transmission⁴ and firming costs are included. It is clear that renewable energy is the favoured technology by investors and that there is a strong commitment from government to drive the rapid exit of coal fired power stations. There is also very strong non-legislated demand for renewable energy as large commercial and industrial energy users continue to seek long-term power purchase agreements to meet net zero and ESG targets.

Given all of these advantages the question must be asked, when does the public, either as energy consumers or taxpayers, cease underwriting the expansion of renewable energy? Assuming the 82% by 2030 target is reached, the renewable energy industry will simply be the energy industry. Is the expectation that public support is required to not only achieve 82% by 2030, but beyond this date? At what point does public support reduce and we revert to the energy market (in whatever future fit for purpose form it takes) being the primary driver of investment decisions?

These important questions that must be addressed now to allow for appropriate transition of the industry. These questions aside, given the choice between a significant expansion of the existing LRET scheme, which is paid for by energy users, or a significant expansion of the CIS, which is supported by the federal treasury, the latter is the preferred option given the costs and risks associated with meeting 82% by 2030 are socialised across the tax base (the federal treasury), not energy users who are already feeling the strain of ever-increasing energy bills.

However, an expanded CIS is not a “silver bullet” (nor would an expanded LRET) and expectations of success may need to be tempered given there is only so much that governments alone can do. Delays in planning for generation and transmission assets, community social licence, supply chain constraints, skilled labour shortages and escalating costs are all significant issues that could derail progress.

Community social license is of particular concern and is likely to get worse as the cumulative impact of multiple new projects appear around regional communities. We do not address these issues in our submission but urge governments, regulators and the energy industry to work more diligently with these impacted communities.

The EUAA made a detailed submission to the recent CIS implementation design paper⁵ where we expressed our support. However, a number of issues remain including:

³ <https://www.csiro.au/en/research/technology-space/energy/energy-data-modelling/gencost>

⁴ The 2023 Draft GenCost report included these costs in the most recent analysis for the first time. Previously, transmission had been considered as a “sunk cost” and not included in the analysis.

⁵ <https://euaa.com.au/policies-submissions/#submissions>

- We are concerned that the CIS will tend to support short-duration storage. While this may be acceptable within the context of recent life extensions of existing thermal generation, further work must be done to ensure inter-day capacity gaps are met. In particular we are yet to understand how the required 10GW to 16GW of gas generation will participate in an environment where short duration capacity continues to be underwritten by the CIS.
- We also need to better understand how the CIS will interact with other measures, both existing and proposed. For example, we would welcome a discussion about the MPC as it relates to those assets that are underwritten by the CIS and if they should remain eligible to receive the full value of the MPC. We would also welcome a discussion on how the CIS interacts with FCAS markets (given the assets deployed are capable of provide capacity and FCAS).
- We have identified potential issues associated with storage required to withhold capacity when AEMO declare and LOR3 event. This will have the effect of capacity being withdrawn from the market when AEMO declares and LOR1 event, accelerating the market towards LOR3.

Consistent National Approach

Many EUAA members operate across all NEM jurisdictions and there is a growing concern with the apparent lack of coordinated policy response from jurisdictions. This creates a multi-layered policy environment that adds significant confusion and costs for consumers.

As we have stated previously, a more consistent national approach to the transition is highly desirable. In this regard we are pleased to see the recent joint announcement by the NSW and Federal Government that signals greater cooperation and coordination under the CIS.⁶ This is a positive step in the right direction and we hope this type of closer collaboration becomes the norm, not the exception.

Rewiring the Nation; With A Few Tweaks

The 2022 AEMO ISP states that 10,000Km of new transmission will be required to achieve a net zero energy system. This will place significant pressure on final energy bills through transfer of costs to consumers via TUOS.

In addition to ISP projects we also observe state governments pursuing their own transmission goals, especially via Renewable Energy Zones (REZ) which will add many billions of dollars to the costs that are already anticipated. So much transmission infrastructure required over the coming decades will lead to significant increases to the network component of the final bill.

While it is assumed that lower wholesale prices will put downward pressure on energy bills, any gain may well be cancelled out by significant increases in other areas, most notably network costs.

Rewiring the Nation (RTN) funding is designed to get transmission built and reduce consumer bills. The EUAA supports and welcomes the concept of RTN. However, the degree to which the significant increase in TUOS will be mitigated will depend on how RTN funding is delivered.

⁶ <https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-big-boost-reliable-renewables-nsw>

EUAA and ECA commissioned Boardroom Energy to undertake some indicative analysis of the consumer benefit of concessional finance as a grant compared to debt:

- If RTN followed an equity-injections or an equity own-and-transfer approach (capital recycling) then consumer benefits are far greater as they reduce TUOS payments for a period of time.
- Concessional finance as debt may help the project proponent to secure finance but it has limited positive impact on consumers.

That analysis is presented below in Tables 1 and 2. The end result of this analysis shows that low-cost loans have negligible impact on the TUOS that consumers will pay. If governments want to take the “heat” out of network costs then equity is the most likely solution. We note that outgoing Chair of the Net Zero Authority, Greg Combet, has suggested government consider such actions in a recent speech to the National Press Club⁷ where he stated

“With particularly large transformative projects Governments may need to consider being significant equity players, helping to de-risk projects, and adopting a long-term view before recovering capital.”

We strongly encourage governments to reconsider the role of RTN in line with our and Mr Combets recommendation.

Table 1: Impact of Government Finances

Type	Impact on government finances	Capital recycling?	Impact on TNSP	Impact on customers (no change to NER/NEL)	Impact on customers with change to NER/NEL
Grants	Expenditure - direct hit to bottom line	No	Reduce financing requirement	Reduce (TUoS) charges	Reduce charges
Equity injections	Balance sheet item - may eventually need to be written down depending on future returns	Yes	Reduce financing requirement	None	Reduce charges
Own and transfer	Temporary balance sheet item	Yes	Reduce financing requirement, but may have to share ownership with government	Reduce charges	Reduce/defer charges
Low cost loans	Balance sheet item - may eventually need to be written down depending on future returns	Yes	Cheaper finance	None	Moderately reduce charges
Deferred interest loans	Balance sheet item - may eventually need to be written down depending on future returns	Yes	Deferred cashflow	None	Moderately deferred charges

Source: Boardroom Energy analysis

⁷ Full transcript of the speech can be found here <https://www.pmc.gov.au/news/address-national-press-club>

Table 2: Indicative Savings

Reference	Item	Value
A	new asset value (\$m)	3300
B	asset life (years)	50
C = (A/B)	annual depreciation (\$m)	66
Indicative rate of return		
D	RoD	4%
E	RoE	6%
F	gearing	60%
G = D * F + E * (1 - F)	allowed return	4.8%
H = G * A	initial year return (\$m)	
J	Component that is concessional finance	750
Scenario 1: concessional finance as grant		
K = J / B	Depreciation saved	15
L = J * G	return on capital saved	36
M = K + L	Annual savings if asset covered by grant	51
Scenario 2: concessional finance as debt finance is at 200bp below market		
N = D - 2%	concessional interest rate	2%
P = N * F + (1 - F)	cost of capital	3.6%
Q = L - (J * P)	Annual savings	9

CER Orchestration

In many ways we are pursuing a dual-track approach to net zero. On one hand we have the big system transition where large, grid connected VRE combined with batteries and long-duration assets like Snowy 2.0 and Hydro Tasmania Battery of the Nation are seen as the solution. This represents the centrepiece of government policy driven by the CIS, Rewiring the Nation and the ISP. The catchphrase of “there is no transition without transmission” embodies this.

However, in recent time this is hitting significant hurdles. Planning, community opposition, supply chain constraints, escalating costs etc all look likely to contribute to the 82% by 2030 target being in some jeopardy if we only pursue the big system approach.

On the other hand, the rooftop PV revolution appears to be going from strength to strength. Customers are supported by government/society (via feed-in tariffs and other incentives) to become more self-reliant (but still reliant on the grid). More PV, more batteries, more electric vehicles, smart home controls systems, smart meter rollouts etc.

However, while all of this is good for the consumers who can access it represents a growing inequity between the have and have nots while the lack of coordination of these resources is causing significant issues for the energy market through negative/volatile pricing increased system strength requirements to name but a couple of issue.

We would also note that while individual households have made significant investment in CER, much of this would not have been possible without the co-investment of governments and other energy users who bear the cost of these subsidies on the energy bill (i.e. via SRES).

Given the issues associated with the big system roll out and with consumers reacting to significant increases in energy bill costs, the small system rollout looks set to accelerate in the coming years. Therefore, the orchestration of these resources becomes crucial if we are to achieve an energy market that is predictable, that is lower risk than it currently is, that is lower cost than it currently is and that is equitable for all energy users.

We welcome the current efforts by market bodies to understand the dynamics of CER and to develop frameworks to move forward. While there are a number of policy options we would offer the following:

- We support the principle of two-way network pricing. While there was a time when CER was of benefit to all consumers (depending on location) as it assisted in delay or deferment of network augmentation, the sheer volume of CER and anticipated growth means network augmentation and new investment in system strength solutions now means significant costs are being incurred. These costs are not equally distributed with a disproportionate amount being covered by those who do not have CER.
- We support “solar soaker” type tariffs that encourage consumer demand to be moved into times of abundant solar and wind resource, most notably during the middle of the day. These tariffs should be universal in nature so that all consumers can take advantage of lower energy prices. This would also help avoid curtailment of generation and reduce price volatility that is creating significant risks for market participants.
- We support the CIS as it will help underpin significant new storage in the market, which will also assist in soaking up this excess supply and in doing so reduce the market volatility that we currently see.

Gas Powered Generation (GPG)⁸

The EUAA has long had a focus on reducing the barriers to the availability of reliable and competitively priced gas supplies for domestic gas users. Although the Electricity and Energy Sector Plan’s focus is on GPG when it talks about natural gas and renewable gases, we note that GPG consumption cannot be isolated from other consumers of gas as there are competing demands from industry and the community.

The EUAA believes that natural gas will continue to play a central role for manufacturing, heavy industry and flexible electricity generation for during the transition to new-zero and also has a critical role to assist many industries with decarbonising the Australian economy.

⁸ Noting that natural gas exploration and extraction will be covered in the Resources Sector Plan gas consumption in industry will be covered by the Industrial Sector Plan.

Electrification, where possible, could have the most meaningful impact on decarbonising some of Australia's harder-to-abate sectors but is reliant on new, large-scale renewable energy, including solar, wind, hydro and battery storage at competitive prices.

While some members are looking closely at alternatives fuels such as biomethane and green hydrogen, until a commercially viable renewable gas industry is developed in Australia, natural gas will continue to be critical to the continued operation of industry. This is particularly pertinent to industry who cannot electrify and for the decarbonisation of the industrial sector who currently utilise coal. Even where electrification options may be commercially viable, the long investment cycle of industry means that these technologies won't/can't be deployed immediately, and may be further delayed due to a lack of acceptable non-fossil fuel electricity sources.

Therefore, securing adequate quantities of reliable and affordable natural gas supplies must be the first priority of the Federal government.

The EUAA supports the Federal Government's Mandatory Code of Conduct that we trust will see a reduced cost of natural gas and improved commercial behaviour from gas producers. The ADGSM will also continue to play a role in ensuring adequate supply of gas as will the ongoing market monitoring role of the ACCC. However, the EUAA sees these as part of an overall strategy that will secure adequate quantities of reliable and affordable natural gas for domestic energy users.

The EUAA sees it as a priority that the Federal Government support the exploration and tapping of new natural gas supplies to place downward pressure on domestic gas prices. This includes implementing active tenement management for the efficient exploration through to production of new natural gas fields, including "use-it-or-lose-it" approaches as recommended by the ACCC in their July 2020 Gas Inquiry 2017-2025 Interim Report.

We emphasise the point that while more gas supplies are required, a greater diversity of suppliers is equally important to ensure we move towards a workably competitive domestic gas market as described by the ACCC. We believe the Federal Government can be proactive in this space.

Many smaller gas producers require long-term gas offtake agreements (15+ years) to underwrite financing arrangements for new projects. Unfortunately, not many domestic gas users are able to take on a long-term arrangement of this nature. To resolve this issue, we strongly suggest that the Federal Government consider a form of underwriting arrangement, similar to what is occurring in electricity markets, to provide the necessary assurances for smaller gas producers to increase gas outputs. Whether increasing output of existing small gas producers, or creating new supplies, the EUAA believes there are opportunities for the Federal Government to play a positive role to ensure domestic gas supply and accelerate us towards a workably competitive market.

We note that the Mandatory Code has set an "anchor price" of \$12/GJ which is workable in the short-term but not ideal for many EUAA members. Members have pointed out that the \$12/GJ is ex-producer and has transportation, retailer and other charges added prior to purchase by industry, making the "as-delivered" cost much higher.

Some members are also reporting that the \$12/GJ is proving to be above the current international price of gas and makes it difficult for foreign owned companies to invest in Australian plant. With higher gas prices (even at \$12/GJ), the products industry produce will increase in price, all the way down the supply chains to retail products and household. We strongly suggest that government ensures the ACCC are empowered to act on evidence of

market abuses of power and require the ACCC to expressly report on market behaviours and how they have responded in each instance, to ensure the anchor price does not become a “floor price” that restricts downward pressure on contract prices.

Access to reliable and affordable natural gas will become a particular concern to industry and households in Victoria and New South Wales due to those states policies on new developments. It is envisaged that the “as-delivered” price of gas in those two states will increase significantly as local gas supplies are replaced with gas transported from Queensland and Northern Territory. The Federal Government should be working with those state governments to ensure continuity of supply to industry in those states, which may include accessing new gas supplies in the short to medium term.

The EUAA strongly believes that the Federal Government should be coordinating the parts of the economy that can electrify, to electrify (i.e. residential, commercial buildings, personal vehicles, light commercial vehicles and some industrial heating), freeing up quantities of gas for industry where electrification is not a viable alternative. However, the transition away from natural gas needs to be considered and implemented in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs (i.e. those left using gas will pay an increasing proportion of the network bill) for the remaining natural gas consumers.

Some EUAA members have expressed a concern regarding recent gas market reforms that may allow the market operator to curtail customer gas load in favour of gas-powered generation (GPG). With up to 10GW of additional GPG proposed by AEMO to meet growing gaps in capacity, the EUAA and its members are concerned about supply constraints and pipeline capacities being prioritised to GPG. While supportive of using gas as peaking generation this should not be achieved by load shedding of gas customers so a clear and transparent method for the prioritisation of lights versus industry needs to be developed.

We encourage the Federal Government and market bodies to ensure there are fair and transparent policies in place to ensure that adequate supplies of natural gas are available to those with firm contracts, while ensuring that electricity supply is secure. This may require adequate notification and compensation mechanisms for consumers who are unable to maintain access to natural gas during these periods of high GPG output. To alleviate these issues, establishing a hierarchy that, for example, DER, energy efficiency, curtailment and load shifting are prioritised prior to large volumes of GPG being deployed to the NEM, ensuring a balance between increased gas demand from GPG and decreased output of electricity generation, while taking into account the needs of industry.

Renewable Gases

The EUAA notes that it is likely that Australia is limited to supplying only 22.5% of the current natural gas consumption from biomethane,⁹ with most currently operating biogas plants supplying small electricity generation units or flaring the biomethane. There are currently few projects either operating, in construction or planned to supply biogas to industry or the existing natural gas network. This lack of access to commercial quantities of biomethane presents a barrier to industry trying to decarbonise, as does the geographic distance between biomass resources and industrial plant locations for some businesses.

⁹ RACE for 2030, B5: Opportunity Assessment – Anaerobic digestion for electricity, transport and gas Final Report, May 2023

Similarly, green hydrogen faces difficulties in being rolled out and scaled up to meet governments emissions targets. One EUAA member has run tests operating on 100% hydrogen, and had difficulties with the high moisture flue gas, embrittlement of the boiler and different steam pressures for use in existing plant operations. However, some have had relative success with hydrogen trials, and others continue to work on opportunities for industrial application. Given the production of a MWh equivalent of hydrogen requires 1.2 MWh of electricity, the EUAA considers that there is a risk of undue strain on electricity infrastructure during a time when Australia is undergoing its biggest transformation in the electricity sector. The additional electricity infrastructure requirements are in addition to the NEM upgrades identified in AEMO's 2022 Integrated System Plan.

It is from this perspective that the EUAA strongly believes that the parts of the economy that can electrify, should electrify (i.e. residential, commercial buildings, personal vehicles, light commercial vehicles and some industrial heating), and that the limited biomethane and initial tranche of green hydrogen production should be directed to the industries that cannot electrify. Further, biomethane should have enhanced protections to ensure that the limited supplies go to those industries that cannot electrify and cannot utilise hydrogen.

However, the transition away from natural gas needs to be considered and implemented by the Federal Government in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs for the remaining natural gas consumers, and that sufficient volumes of renewable gases and natural gas are available at all times during the gas transition to meet the total gas demand.

To resolve some of the issues around utilisation of renewable gases, including collection of feedstocks for biomethane, the EUAA strongly urges the Federal Government to orchestrate the transition, identifying industry that requires biomethane and assisting in co-locating biomethane production either onsite or nearby. EUAA considers that food harvesting and processing regions make ideal early candidates for biomethane production and consumption.

Similar orchestration could also be performed for the green hydrogen industry. In particular the costs associated with any green hydrogen production facility built for export (including additional electricity infrastructure to support it) should be borne entirely by the hydrogen exporter and not cross subsidised by domestic electricity and gas users.

Gas Pipelines

Of major concern to EUAA and its members is the impact of reducing gas consumption and decommissioning of the existing natural gas pipelines throughout Australia. This has the potential to become a significant intergenerational equity issue where future gas users, unable to electrify their homes or businesses, will pay an ever-increasing network bill that is unavoidable, and has significant impact on future GPG build location and its ability to supply affordable electricity for firming of renewables.

The EUAA encourages the Federal Government to develop a policy for the allocation of costs associated with the reduction in gas consumption and decommissioning of pipelines, taking into account the accelerated depreciation and the impact to tariffs and gas transportation costs. The transition away from natural gas needs to be considered and implemented by the Federal government in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs for the remaining natural gas consumers

Decarbonising Gas – Issues

EUAA urges the Federal Government to consider geographic barriers to emissions reductions by industry, noting that many industries located plant close to feedstocks, energy inputs and/or ports which now places them at a disadvantage for supply of appropriate renewable gas volumes and/or space restrictions due to encroaching industry or residential zones.

The EUAA is also aware of several industry consumers looking to expand production to (among other markets) assist with Australia's energy transition. This increase in production will likely necessitate increased natural gas (and electricity) consumption. Conversely, some members have adjusted production down to assist meeting Safeguard Mechanism targets, which has the effect of increasing per production emissions. Government would be advised to consider a fair and equitable method for determining emissions liabilities, as one member has reported that their financial obligation now prevents them from investing in emissions reductions.

These issues could be resolved through the Federal Government creating fungible certificates for renewable gases. The safeguard mechanism could provide a useful platform to facilitate this.

Certificate schemes are best implemented Federally with fungible certificates, rather than state based, allowing for industry to apply one rule across all jurisdictions and to transfer the benefits to plant that are geographically or technically difficult decarbonise. Including renewable gases in the proposed "Certificate of Origin" certificate scheme would help businesses to decarbonise.

While the EUAA supports a fungible certification system for renewable gases, there are various policy options be pursued in this space. For biomethane, we do not believe it is appropriate to support a RET style subsidy scheme as this would simply increase the cost of gas for all consumers. At this point in time a combination of grant funding and/or a government supported underwriting scheme to support deployment would be most appropriate. For hydrogen, due to its immaturity we believe that grant funding for early stage trial facilities is most appropriate. We do not support RET style subsidy schemes or the cross subsidisation of the transport sector by stationary energy users as is the case in NSW.

A useful approach from government would be in the area of orchestration and facilitation, where government identifies the consumer with the specific renewable gas requirement, e.g. identifying industry that requires biomethane and facilitating the co-location of biomethane production either onsite or nearby. Another example is for government to identify regions with co-located resource (biomass) from food harvesting with food processing located nearby. The second component of the policy would allow for grants to either or both the production facility (to reduce the cost of the renewable gas) and the consumer (to reduce the cost of implementation, particularly where the business is transitioning to green hydrogen). This follows the "sectorial" decarbonisation approach being pursued by government.

The EUAA believes that a market-based certificates scheme for renewable gases would not be appropriate at this time and is concerned about cross subsidisation of one sector at the expense of another.

Safeguard Mechanism

Energy and emissions reduction via the Safeguard Mechanism should be viewed as parts of the whole that is achieving net zero. While they represent different policy areas, they are tightly linked as they both present energy and technology challenges faced by business.

The EUAA support the pursuit of net zero targets by 2050 with many member companies putting in place their own net zero and ESG targets. We are also supportive of the new Federal emissions reduction target of 43% reduction below 2005 levels by 2030. However, given many EUAA members can be classified as operating in “hard to abate” sectors, it must be recognised there are technological limitations in terms of what can be achieved in the period to 2030 and beyond.

The EUAA and its members recognise efforts by the Federal Government to understand the specific issues faced by safeguard facilities and to accommodate, within reason, amendments to the proposed design. However, the challenge of meeting the new 2030 targets in less than 7 years is at best extremely challenging and in most cases is misaligned with the long-cycle nature of investments that underpin our commercial and industrial base.

It is also important to recognise that recent changes to the Safeguard Mechanism are not occurring in a vacuum with all member companies also dealing with the fundamental changes to our energy systems.

Over time the redesigned Safeguard Mechanism and tightening of emissions targets to 2030 and beyond will fundamentally change the economy and have lasting impacts on Australian society. This is after all the purpose of policy in this area, just as renewable energy policy has been designed to change the fundamentals of the energy market that has delivered Australia a low-cost energy advantage for many decades. We will continue to struggle with this transition over the coming decades, the end result of which is likely to be a more complex energy system that is higher cost but has near zero emissions.

Just as there are trade-offs in the stationary energy sector, there will be trade-offs as we decarbonise our industrial base. We recognise that new threats are emerging including the negative impacts of climate change, maintaining competitiveness in a carbon constrained world and ESG objectives of investors driving a strong preference for low to zero carbon investments. Like in energy, meeting these challenges will require a series of trade-offs and ultimately hard decisions will need to be made by governments and industry. This will be unavoidable.

Undoubtedly benefits will arise for those who can adapt their existing business or build new ones as zero emissions economies take off. We should support these industries to the point when they can stand alone. There will be industries where their time has come, and they will inevitably fade away. We should help manage their orderly exit, paying close attention to supporting the workers and communities impacted by closures. There will also be industries that are fundamental to the ongoing strength of the Australian economy and central to a least cost transition of the energy system. This raises a set of far more complicated questions, the answers to which will be required sooner rather than later.

One of the key barriers to meaningful abatement for many large industrial facilities is the availability of appropriate technology. No amount of carbon penalty will encourage a facility to deploy a non-existent technology. Public funding (i.e. grants) for both R&D and early-stage deployment of abatement technology must be a feature of the portfolio approach of government.

Access to preferential debt and other assistance for broader scale deployment is also a key aspect of a portfolio approach. We welcome government actions to date in these areas but support needs to be consistent and have longevity to provide a level of confidence to make significant multi-decade investments.

Carbon Leakage

While our members are stepping up to the challenge of decarbonising their business where they can, many face significant technological challenges that limit their ability to deploy low carbon assets. Either way, over the coming decades they will be spending significant capital on low emitting assets and/or purchasing offsets to meet declining baseline obligations. If these are costs not faced by their major competitors, then the risk of carbon leakage is very real.

EUAA member companies are responsible for 55 safeguard facilities, 34 of which would be classified as manufacturers or non-resource extraction facilities. These non-resource extraction facilities cover a very broad cross section of the Australian economy including a range of metals processing such as steel, aluminium, copper and metals recycling, glass, paper, cardboard, chemicals, plastic, fertiliser and cement. Not only are these key inputs into the Australian economy (such as the food and beverage supply chain) but provide a key role in the transition to a net zero energy system (such as solar and wind generation projects and new transmission assets).

Of the 21 safeguard facilities operated by member companies that would be classified as resource extraction, almost all are critical upstream suppliers of the raw materials that will make up the energy system of the future (along with key inputs into other parts of the economy).

Almost without exception all 55 facilities could be classified as operating in “hard to abate” sectors where deployable low or zero emissions technology simply isn’t available and is unlikely to emerge in the period to 2030, despite the best endeavours of many who are working daily on specific decarbonisation strategies for their liable facilities. Additionally, while elements of the safeguard mechanism have been “settled” the real impacts of implementation and operation of it are still uncertain making it difficult to fully assess carbon leakage at this stage.

It is disappointing that one of our current members, who operate the 56th safeguard facility will not see the next financial year due to collapse, caused partially by the rising cost pressures associated with rising energy costs. The Federal Government needs to consider these facilities as it sets the Electricity and Energy Sector Plan to ensure that this is not a recurring theme.

Even with government financial support, there will still be considerable costs borne by domestic energy users of a rapid transition to renewable energy. Significant grid expansion, storage, system strength and regional schemes (i.e. off shore wind targets, NSW Roadmap, Queensland Energy and Jobs plan, various hydrogen policies) are likely to result in a growing final energy bill.

In the same way as energy intensive trade exposed industry would suffer varying levels of disadvantage if not for baseline allocations, domestic industry would suffer similar disadvantage if required to compete against product made in jurisdictions that do not have similar obligations.

A large percentage of member companies are consistent in their advice, if these issues are not addressed, reduced output and declining employment from existing domestic industry, forgone investment and employment in new

industry (including those that are likely to contribute to a renewable energy future) and carbon leakage will be the result.

Therefore, we are pleased to see this issue has been recognised by the Federal Government who have listened closely to stakeholder concerns and moved swiftly to commence the process of developing options to avoid carbon leakage and ensure competitive neutrality for Australian industry.

FURTHER POLICY CONSIDERATIONS

There is a view that once we reach a very high percentage of renewable energy we will enter an extended period of low wholesale prices...there are good reasons to doubt this.

Assuming the average operational life of wind and solar is between 20 to 25 years then:

- By 2035, a significant amount of today's renewable assets will need to be replaced and by 2050 all renewable energy assets will have to be replaced; some will be approaching their 3rd investment cycle.
- Based on the AEMO ISP Step Change Scenario, installed capacity of the NEM in 2050 will be 300GW (currently 80GW). Based on a 20-year asset lifecycle, between 10GW – 12GW of renewable capacity will need to be replaced every year.
- This ongoing need for repowering existing sites will ensure that wholesale energy prices need to be maintained at an investible level (i.e. \$80MWh to \$100MWh). We need a more realistic view of future energy costs.
- Solar is easier to re-power, but wind energy requires a complete re-design and re-build from the foundations up.

This leads us to ask two fundamental questions:

- If the objective is to achieve very low wholesale prices into the future, potentially far too low to support new project development, is the expectation that we will need to support renewable energy indifferently?
- The waste streams from decommissioned renewable energy (both large and small) along with batteries from homes and vehicles will be significant. What is the circular economy plans to address this and ensure as much of this material is recycled back into new renewable energy projects making them both financially and environmentally sustainable

CONCLUDING REMARKS

While the EUAA and its members support the energy transition to decarbonise, we find that a number of policies and disparate jurisdictional approaches is placing significant financial pressures on consumers, ultimately impacting the cost of living.

We encourage the Federal Government to consider the financial impact on all consumers of proposals in its Electricity and Energy Sector Plan, leaning into its recommendations with financial support and creating an environment where costs are shared with governments, and governments are seen to be coordinating and orchestrating the transition, noting that many consumers are not energy literate and that large C&I is in business to

produce a product and/or service and does not need the added burden of managing the energy sectors transition through implementing a trading desk.

Do not hesitate to be in contact should you have any questions.



Andrew Richards
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