

## POSITION PAPER | *SAFEGUARD MECHANISM REFORMS*

Australian Petroleum Production and Exploration Association | 24 February 2023

The Australian Petroleum Production and Exploration Association (APPEA) welcomes the opportunity to provide comment and recommendations on the *Safeguard Mechanism Reforms* Position Paper.

**The Australian oil and gas industry is committed to net zero across the economy by 2050.** The oil and gas sector is investing billions of dollars in emissions reductions, including renewable energy deployment, energy efficiency, carbon capture, utilisation and storage (CCUS) and low-carbon hydrogen. APPEA supports national climate change policy that provides a signal to the economy to drive the transition and to facilitate broad-based investment in emissions reductions and net zero technology deployment.

**Australian natural gas has a central role to play in reaching net zero in Australia and the region, reducing costs, providing secure, reliable and affordable energy to homes and businesses, and ensuring an orderly transition to net zero.** Natural gas is supporting the transition away from coal, providing the firm dispatchable energy required to unlock large-scale renewable energy deployment, and powering Australian industries across the economy including those processing the critical minerals necessary for achieving net zero. The oil and gas industry is central to delivering step-change technologies such as CCUS and low-carbon hydrogen for economy-wide emissions reductions.

**To support the transition to net zero and to drive emissions reductions amongst the largest-industrial emitters across Australia, the Safeguards Mechanism needs to be flexible and responsive to the technical and economic conditions experienced by these facilities.** The Safeguard Mechanism will need to provide the long-term certainty required to underpin long lead-time capital intensive investments necessary for significant industrial emissions reductions. At the same time, the framework must be flexible and tailored to the operational and technical realities and timeframes required to achieve emissions reductions at these facilities, as well as to the economic and market environment these industries operate in.

To achieve this, APPEA recommends:

- **The Safeguard Mechanism must be responsive to the operational, technical, and economic realities and timeframes required for deep industrial emissions reductions and provide the flexibility necessary to drive step-change technologies such as CCUS, with a practical common-sense approach in its implementation.**
- **Access to sufficient credible and affordable offsets must be ensured.**
- **Emissions-intensive, trade-exposed industries must be supported in a way that maintains international competitiveness and prevents carbon leakage.**
- **Deploying the technological building blocks for decarbonisation – CO<sub>2</sub> transport and storage, low-carbon hydrogen, and firming renewable energy – in key industrial hubs around Australia is central to reaching net zero.**

APPEA and its members welcome the opportunity to engage further on how best to ensure the effective, flexible and sustainable design and implementation of the Safeguard Mechanism in line with the shared objective of reaching net zero.

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## BACKGROUND AND CONTEXT

**The Australian oil and gas industry is committed to net zero across the economy by 2050.** The oil and gas sector is investing billions of dollars in emissions reductions today, including renewable energy deployment, energy efficiency, carbon capture, utilisation and storage (CCUS) and low-carbon hydrogen.

**Australian natural gas has a central role to play in reaching net zero in Australia and the region, providing reliable, secure and affordable energy to homes and businesses.** Natural gas is supporting the transition away from coal, providing the firm dispatchable energy required to unlock large-scale renewable energy deployment, and powering Australian industries across the economy including those processing the critical minerals necessary for net zero. With the transition away from coal-fired power generation and growing shares of renewables, the reliance on natural gas for secure and dispatchable power is increasing. This was evident during the 2022 winter, where a combination of coal outages, limited renewable capacity and cold weather saw demand for natural gas increase by 55% relative to the same time in 2021. Looking forward, the Australian Energy Market Operator sees 10 GW of gas power capacity playing a “crucial role” in 2050, meeting peak loads and providing firming to support renewable power generation.

**Analysis from the Intergovernmental Panel on Climate Change and International Energy Agency show an ongoing role for natural gas in a net zero future, in 2050 and beyond.** In the IEA’s Net Zero Emissions (NZE) scenario over 40,000 PJ of gas is still required in 2050 – well in excess of Australia’s current gas production level of around 6,000 PJ.<sup>1</sup> While the IEA is widely reported as saying that “*There is no need for investment in new fossil fuel supply in our net zero pathway*”, this outcome is predicated on a sharp reduction in fossil fuel demand, and not pre-emptive underinvestment in supply. The IEA highlights that “*Reductions in fossil fuel investment need to be sequenced so they do not run ahead of the huge scaling up in clean energy technologies that is required to get to net zero emissions*” and that “*Cutting investment in fossil fuels ahead of scaling up investment in clean energy pushes up*

<sup>1</sup> <https://www.ga.gov.au/digital-publication/aecr2022/gas#production-section>

*prices but does not necessarily advance secure transitions*". According to the IEA, investment in clean energy needs to increase by over three times 2021 levels by 2030, and investment in end-uses and energy efficiency by over three and a half times – meaning we are not yet close to seeing the reduction in demand for fossil fuels contemplated in the NZE scenario. Closer to home, gas demand in our region is growing as part of the net zero transition. The IEA's Roadmap to Net Zero Emissions in Indonesia<sup>2</sup> found that Indonesia would move from being a net exporter of LNG from 2030 to importing around \$10 billion of natural gas in 2050 to support its transition away from coal, leading to a significant net reduction in total country emissions.

**The industry is pivotal to delivering step-change emissions reductions technologies such as CCUS and low-carbon hydrogen, that are critical to achieving net zero.** The IEA state that *"reaching net zero will be virtually impossible without CCUS"*. These technologies are critical, not only in the energy sector but also in hard-to-abate industries where few alternative decarbonisation technologies are available. CCUS plays a unique role amongst a portfolio of emissions reductions technologies as it can address emissions from existing and new facilities, mitigate emissions from hard-to-abate industry and underpin large-scale carbon removal. Natural gas combined with CCUS is currently by far the most affordable pathway to low-carbon hydrogen production – meaning significantly more emissions reductions per dollar today, paving the way for alternative low-carbon hydrogen pathways as these technologies mature and costs come down. Australia is at the forefront of these technologies, representing an opportunity to attract investment while helping our regional partners on their pathways to net zero. Repurposing existing upstream gas facilities and using depleted gas reservoirs in Australia and the region provides the lowest cost and shortest time-to-market for permanent CO<sub>2</sub> storage capacity and can anchor CCUS and hydrogen hubs while also preserving and growing the economy and jobs.

**APPEA supports national climate change policy that provides a signal to the economy to drive the transition and to facilitate broad-based investment in emissions reductions and in net zero technology deployment.** Investment from home and abroad in new gas and energy supply as well as in emissions reductions activities and technologies is central to reaching net zero. Climate change policy must work together with broader, simplified and streamlined energy and gas and environmental policies and regulations to achieve these aims. Recent government interventions in the gas sector create uncertainty in the market and across the economy more broadly. This in-turn has a chilling effect on investment that will impact Australia's ability to develop the projects and technologies necessary to reach net zero. Regulatory bureaucracy and red tape will further slow the deployment of the projects and technologies that are needed. The reform and implementation of the Safeguard Mechanism must be accompanied by broader government actions to ensure emissions reductions across the economy can be achieved at the scale and speed required to meet our net zero targets.

In addition to the APPEA submission, a number of APPEA members have made individual submissions on the Consultation Paper. This response should be read in conjunction with submissions from individual APPEA members.

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<sup>2</sup> <https://iea.blob.core.windows.net/assets/b496b141-8c3b-47fc-adb2-90740eb0b3b8/AnEnergySectorRoadmaptoNetZeroEmissionsinIndonesia.pdf>

## COMMENTS AND RECOMMENDATIONS

1. The Safeguard Mechanism must be responsive to the operational, technical, and economic realities and timeframes of deep industrial emissions reductions and provide the flexibility necessary to drive step-change technologies such as CCUS

**Many oil and gas facilities covered under the Safeguard Mechanism, particularly those that have only recently come into operation or will within the next few years, already align with international best practice through investing in all feasible energy efficiency and emissions reduction opportunities.** While representing an important achievement by the sector, for many of these facilities, there are now limited near-term, lower-cost emissions reductions opportunities still available. This means the substantial and rapid emissions reductions trajectories proposed for the Mechanism will require the deployment of large-scale emissions reduction technologies and activities such as CCUS, firming renewables and low-carbon hydrogen to reduce their emissions signature.

**These step-change technologies are capital-intensive and require long lead-times to design, permit and construct.** The development and deployment of a large-scale wind farm or CCUS project can take many years to assess the feasibility, scope and design, consult stakeholders, raise financing, obtain permits and approvals, and construct and test before commencing operation and starting to achieve emissions reductions. Such large-scale projects often exceed five-years from inception to operation and can easily extend well beyond this if legal and regulatory frameworks are not in place, permitting delays occur, or government approvals are appealed and drawn out through extended legal processes – all of which are largely outside the facility’s control. There are significant sunk-costs from project inception to the time the final investment decision is taken, during which technologies will change. The Safeguard Mechanism needs to be responsive and flexible enough to accommodate for this, while providing a clear set of rules and stability going forward, which investors require.

**Flexibility provisions of the Safeguard Mechanism – including multi-year monitoring periods (MYMP), banking and borrowing, and Safeguard Mechanism credits (SMC) – must be responsive to these project realities or risk undermining the signal to invest in on-site emissions reductions.** Noting these long lead-times, the duration of MYMPs should be determined on a project-by-project basis to allow facilities with limited short lead-time abatement opportunities to invest in on-site technological emissions reductions. MYMPs should look to accommodate and encourage the introduction of technologies such as CCUS, firming renewables and low-carbon hydrogen – with development timeframes that are often in excess of the proposed five-year period – provided an MYMP application is accompanied by a comprehensive and credible emissions reductions project technical and investment plan that demonstrates a genuine commitment to project implementation and emissions reductions. The duration of MYMPs should also be able to be extended if delays occur outside the control of the facility, such as with permitting. Further, once projects become operational under an MYMP and they will have achieved the equivalent emissions reductions to a project that progressed through annual, incremental reductions in emissions, they should not be prevented from generating SMCs if their multi-year average emissions fall below their multi-year average baseline.

**Facilities requiring inter-temporal flexibility through borrowing should not be penalised through the application of an interest rate.** The ability of facilities to borrow (and bank) provides a useful flexibility mechanism to allow facilities to best manage the emissions reductions pathway. However, the application of a 10% interest rate on borrowing has the effect of penalising facilities for the need for inter-temporal flexibility, even though it does not impact the overarching emissions reductions commitment of a facility. Such an approach seems counter to the aims of providing flexibility to facilities and therefore it is recommended that the interest rate is not applied to the borrowing mechanism. Further, the volume and time period allowed for borrowing should be extended to accommodate long-lead time technologies.

**The generation of SMCs is a critical flexibility mechanism to drive large-scale on-site emissions reductions.** In practice, emissions reductions will not occur in an incremental, annualised fashion, in line with the proposed trajectory of the Safeguard Mechanism. Large scale emissions reductions, such as CCUS, low-carbon hydrogen, electrification, and integration of renewables tend to be “lumpy”, perhaps achieving a step change in facility emissions with reductions of 30 per cent, 50 per cent or more in line with the nature of the technologies employed. SMCs should allow for the deployment of these technologies to be incentivised in the near-term, allowing facilities to monetise their overachievement and providing flexibility to other facilities who cannot proceed with emissions reductions at the same pace. If SMCs are not available, then there is a reduced incentive to invest in these step-change emissions reductions technologies.

**If Safeguard facilities are not provided the flexibility to accommodate step-change emissions reductions technologies it will reduce the impetus for on-site emissions reduction activities.**

## 2. Access to sufficient credible and affordable offsets must be ensured

**The availability of robust, credible, certified, and affordable offsets – where one tonne offset is equivalent to one tonne of CO<sub>2</sub> not emitted – decreases the costs of reaching net zero across the economy, thereby increasing the chances of meeting these targets.** Access to sufficient offsets is an additional flexibility mechanism that allows facilities to smooth the transition to net zero and can be used in parallel with on-site emissions reductions to allow facilities to meet annual emissions reductions targets.

**The 2020 Independent Review of Australian Carbon Credit Units reinforced the important role of offsets and endorsed the integrity and credibility of the Australian Carbon Credit Units (ACCU) framework and market.** The review confirmed the importance of offsets as part of a comprehensive climate policy to reduce emissions, where they are used to supplement and not replace genuine emissions reduction activities.

**APPEA welcomes the ongoing inclusion of domestic offsets in the Safeguard Mechanism and would encourage the inclusion of credible international offsets.** The inclusion of international offsets, that are of equivalent standard and integrity to domestic offsets, provides additional liquidity to the Australian market, ensuring sufficient supply and working to moderate compliance costs. Article 6 of the Paris Agreement outlines voluntary international compliance carbon markets as a key mechanism to achieve emissions reductions targets.

**If access to offsets becomes restricted it would significantly increase the cost of compliance risking an increase in cost of living in Australia, the achievement of the Mechanism outcomes, and the competitiveness of Australian industry on the international stage.** Costs of Safeguard Mechanism compliance needs to be taken into account in the prices of resources and products produced at the covered facilities. If costs of compliance increase it will place upward pressure on prices of outputs destined for both the Australian domestic market and products for export, which will ultimately reflect in the cost-of-living pressures for Australians and for the competitiveness of Australian exports internationally.

**For the government’s proposed cost containment measure – the sale of ACCU offsets by the government at a fixed price of \$75 per tonne of CO<sub>2</sub> – to be effective, sufficient credits will need to be available.** The proposed cost containment measure requires the government to have an adequate supply of ACCUs available in order to be effective. The position paper indicates that government modelling suggests this is the case, however no details have been provided on this analysis, including the underlying data and assumptions. Under the current methodology, it is possible that the supply of offsets at \$75 per tonne of CO<sub>2</sub> may become exhausted, meaning the cost of offsets and of compliance would no longer be contained.

**If the government wish to facilitate the ongoing effectiveness of the cost compliance measure, it is recommended that the government takes on the responsibility for purchasing and surrendering the ACCU associated with the \$75 per tonne payment.** As an alternate, but equivalent, approach to cost containment, when facilities pay the government \$75 per tonne of CO<sub>2</sub> it can be delinked from the purchase of an offset by the facility, to be surrendered by the facility. Rather the obligation to purchase and surrender an offset is passed onto the government following the payment, with the equivalent emissions reductions being subtracted from the facility's annual emissions reduction obligation. Such an approach results in the equivalent emissions reductions while ensuring the effectiveness and availability of the cost containment measure for the facility, even in the case that the governments pool of ACCUs is temporarily exhausted. Such an approach provides an additional level of flexibility given the government is not constrained by an annual compliance schedule and presents limited risk to the government based on their analysis suggesting sufficient ACCUs will be available.

### 3. Emissions-intensive, trade-exposed industries must be supported in a way that maintains international competitiveness and prevents carbon leakage

**The export of liquefied natural gas (LNG) makes a significant contribution to the Australian economy.** The value of Australia's LNG exports is projected to reach a record \$90 billion in 2022-23, underpinned by more than \$300 billion of investment by the industry since 2010. This year, tax and royalty payments from oil and gas are expected to triple, injecting almost \$14 billion into government revenues to boost public services and infrastructure such as roads, schools and hospitals. The industry's investment continues to support over 80,000 well-paid and highly skilled jobs as well as billions of dollars in spending on Australian goods and services in the regions we operate in.

**Australia's LNG industry operates in a highly competitive global market.** To ensure the ongoing contribution of LNG exports to the Australian economy and to Australian jobs, it is important to ensure this sector is able to maintain competitiveness while reducing emissions. APPEA welcomes the government's commitment to provide tailored support to ensure that emissions-intensive, trade-exposed facilities (EITEs) are not competitively disadvantaged as the nation decarbonises and the economy remains strong and resilient.

**The proposed measures to support EITEs – access to funds under the Safeguard Transformation Stream (STS) of the Powering the Regions Fund (PRF) and adjusted baselines – may be insufficient to allow these sectors to remain competitive.** Australian industry is competing against jurisdictions with limited or no climate policies as well as those with significant incentives in place for industry to reduce emissions, such as under the Inflation Reduction Act (IRA) in the United States. International incentives for large-scale emissions reductions are significant and risk impacting the competitiveness of Australian industry and diverting investment away from Australia. APPEA welcomes the technology neutral approach proposed for the STS. However, the proposed STS model, including its budget, policy objectives and design may be insufficient to address the specific challenges faced by EITE facilities. APPEA recommends strengthening and/or complementing the STS component with additional dedicated resources tailored to the emissions reduction needs of EITE facilities to ensure Australian industry remains competitive. In parallel, consideration should be given to addressing non-financial barriers to project development, including regulatory streamlining, common user infrastructure and a secure, stable investment environment.

**The IRA allocates US\$369 billion across a range of energy and climate change related programs.** Specific incentives under the IRA include tax-credits of between US\$50 – 85 per tonne of CO<sub>2</sub> for CCUS on industrial facilities and power generation and up to \$180 per tonne of CO<sub>2</sub> stored from direct air capture and storage (DAC). Support for low-carbon hydrogen production under the IRA ranges from US\$0.60 - 3/kgH<sub>2</sub> depending on the CO<sub>2</sub> intensity of the hydrogen produced. This incentive program is already attracting industrial investment from other parts of the world to the US.

**Insufficient support to EITEs not only risk reduced investment in critical resources in Australia, but may also result in carbon leakage, by encouraging emissions intensive industry to move to jurisdictions with less stringent climate policies and targets, undermining the core objective of the Mechanism.** This hinders the development of emissions reduction technologies and undermines global efforts to mitigate climate change.

#### 4. A common-sense, practical approach must be taken to Safeguard Mechanism implementation that rewards emissions reductions by facilities

**Currently, Safeguard facilities can choose the method by which their baselines are set – either a site-specific or industry average baseline. This flexibility promotes innovative, lower-emissions solutions by recognising prior action.** Under the proposed reforms, there is concern that baseline setting is too heavily weighted in favour of site-specific emissions intensity baselines, with the view to transitioning facilities to an industry-average model by 2030. This limits recognition of prior capital-intensive investments into decarbonisation activities and technologies and is further compounded when these facilities are held to the same baseline decline rates as facilities that have not made the same level of investment to-date.

**The proposed approach to baseline setting presents a number of unintended and counter-intuitive consequences and may dissuade further investment in emission reductions activities.** Facilities that have recently implemented capital-intensive emissions reduction actions may have less margin to comply with baseline decline rates – even when where they are still well below the industry average. Additionally, facilities currently using an industry-average baseline will be required to undertake a transition to a new site-specific baseline, with further compliance costs while moving between the two systems. In this respect, the proposed framework for baseline setting is at odds with the Mechanism’s principles of equity, efficiency and effectiveness.

**The proposal for new facilities to have more onerous baselines than existing facilities – and that continue to decrease despite being potentially well below industry averages – presents a barrier to entry for new facilities that can bring advanced, low-emissions technologies and approaches to the Australian market.** Existing facilities will be assessed based on site-specific baselines or industry-average baselines whereas new entrants will be assessed against international best practices. Further, even after entering the market with potentially significantly lower emissions intensity, new facilities will still see their baseline decline at the prescribed rate, rather than having a fixed baseline until their performance is matched by the industry average. Such an approach does not appear to be in line with the fair and equitable principle set out at in the position paper and will act as a barrier to entry for new facilities that can bring advanced, low-emissions technologies and approaches to the Australian market. Restricting these new entrants will limit competition in the market as well as the opportunity for improvement in the emissions intensity of the sectors involved, contrary to the aims of the Mechanism. Further, new projects to support emissions reductions activities within the project boundary of existing facilities should not be classified as new facility, contrary to what is proposed.

**A common-sense approach must be taken to production variables to incentivize facilities’ transition to less emission’s intensive products.** Under the proposed rules, if a facility were to transition from one production variable to another to lower emissions, the difference in emissions intensity between the two products would not be recognized, rather the facility would be measured only against the new production variable. This will undermine or completely remove any incentive for the facility to follow such an emissions reductions pathway. For example, a facility that produces natural gas for onsite use as well as for sale to market – either domestic or international – may consider the shifting some or all of their production to low-carbon hydrogen using natural gas with CCUS, in an effort to reduce emissions. Potentially significant emissions reductions would be achieved from such a transition. Under the current rules however, this reduction in emissions intensity – between natural gas and low-

carbon hydrogen – would not be recognized and credited. Rather the facility would be moved from a natural gas-based production variable emissions intensity to one for hydrogen. The approach of considering production variables in isolation therefore removes the incentive to pursue such a potentially important emissions reductions approach and in-turn may lead to higher emissions overall.

**Further information is requested on the estimation of the reserve.** The reserve serves a number of important purposes in the proposed Safeguard Mechanism, addressing uncertainties around “*the volume of baselines for new facilities that come on-line before 2030*”, “*the possibility that production growth is higher than expected at existing facilities*”, and “*the level of differential decline rates for emissions-intensive, trade exposed facilities*”. Getting the level of the reserve wrong could have ramifications for industry by unduly front-loading emissions reductions, requiring baselines to reduce at an increased rate in later periods, or creating implied barriers to entry or encouraging actual barriers to entry for new entrants. Given the importance of the reserve for the functioning of the Mechanism, it is requested that further detail is provided on how the reserve was calculated and what assumptions have been considered, including assumptions around new entrants.

## 5. Further clarity and consultation is required to ensure the efficient and effective finalization and implementation of the Mechanism

**APPEA shares the government’s aim to transition to net zero by 2050 but notes the proposed reforms to the Safeguard Mechanism are moving quickly and uncertainties and unresolved provisions still exist.** Some of these include the definition of “*international best practice*”, the use of international offsets, how permitting and other delays beyond the control of facilities will be accommodated, and whether further support will be provided to EITs. To ensure the effective and efficient operation of the Mechanism, which provides the framework and confidence to encourage the emission reductions investment required, these uncertainties will need to be resolved in close consultation with industry and stakeholders.

## 6. Additional focus should be placed on deploying the technological building blocks for decarbonisation – CO<sub>2</sub> transport and storage, low-carbon hydrogen, and firming renewable energy – to key industrial hubs around Australia

**A significant proportion of the facilities covered under the Safeguard Mechanism are located in a small number of industrial regions around Australia, which should provide the focal point for decarbonisation efforts.** Figure 1 shows the geographical distribution of all 215 facilities covered under the Safeguard Mechanism. Currently under the proposed Safeguard Mechanism each of these facilities are individually responsible for meeting their emissions reductions targets without any recognition of the common technological building blocks and infrastructure that underpins their decarbonisation efforts. Specifically, the overwhelming majority of these facilities will require the provision of one or more of the three step-change emissions reductions technologies of CO<sub>2</sub> transport and storage, low-carbon hydrogen, and firming renewable energy. The importance of these building blocks, along with the hard-to-abate nature of many of the sectors covered by the Safeguard Mechanism is why most optimised decarbonisation pathways see the provision of these building blocks first – e.g. a decarbonised electricity grid by 2030 – with hard-to-abate sectors following once this enabling technology and infrastructure is in place.

**Australian government policy should place greater emphasis on supporting the CO<sub>2</sub> transport and storage, infrastructure, low-carbon hydrogen supply, and firming renewable energy in key industrial hubs around Australia.** Figure 1 identifies nine potential priority regions that could form the focal points for Australia’s industrial decarbonisation efforts. These nine areas represent 85% of all facilities and 95% of all emissions covered under the Safeguard Mechanism. Supporting industrial hubs that combine CO<sub>2</sub> transport and storage infrastructure, low-carbon hydrogen supply, and firming renewable



energy can become the engine rooms for decarbonising existing operations and a magnet for new net-zero industries. Such hubs create efficiencies of scale and mean that each facility doesn't have to "go-it-alone" in reaching their emissions reduction targets. This will in-turn decrease the costs and increases the likelihood that Australia can reach net zero across the economy by 2050 as well as allowing Australia to remain competitive in a net zero global economy.

**The Australian oil and gas sector is central to the development of CCUS, low-carbon hydrogen, and to providing the natural gas supply necessary to firm renewable generation and stands ready to engage with the government on how such future low-emissions industrial hubs can be realised.**

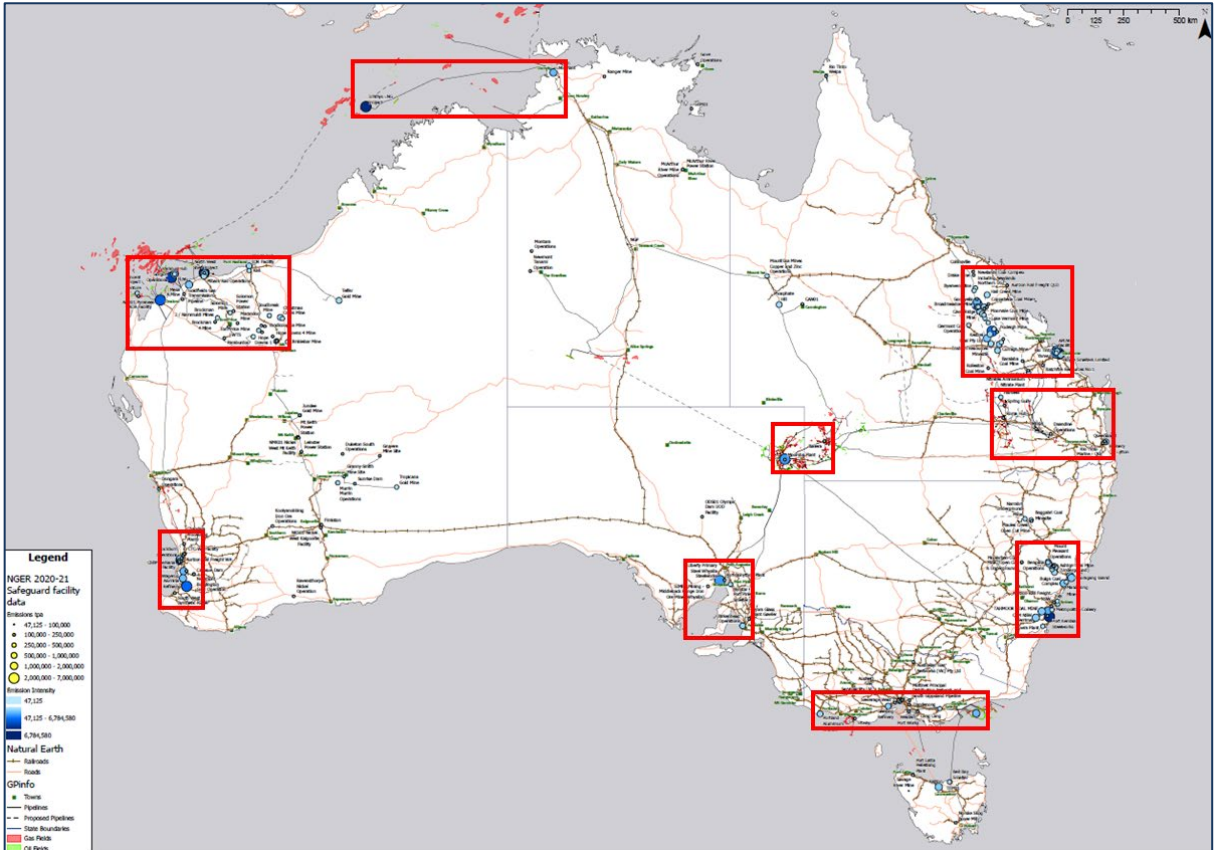


Figure 1: Geographical distribution of Safeguard Mechanism facilities and potential decarbonisation focal hub (Source: map compiled by CSIRO; proposed focal hubs by APPEA)

APPEA and its members welcome the opportunity to engage further on how best to ensure the effective, flexible and sustainable design and implementation of the Safeguard Mechanism in line with the shared objective of reaching net zero.

Yours sincerely



Samantha McCulloch  
Chief Executive

## ANNEX 1: THE AUSTRALIAN UPSTREAM OIL AND GAS INDUSTRY

The Australian oil and gas industry has invested well over \$400 billion in the Australian economy undertaking exploration and developing natural gas production, transport, liquefaction and export facilities over the last decade. A further \$27 billion commitment has been made in the past 18 months.

This investment will deliver returns for Australia for decades to come, through increased gas supply for Australian customers, export revenue, jobs, and in payments to governments in royalties and taxes – nearly \$65 billion<sup>3</sup> in payments have been made to government over the last decade.

LNG is now Australia's second largest export commodity after iron ore, with export revenue of more than \$70 billion in 2021-22, expected to rise to over \$90 billion in 2022-23.<sup>4</sup> As well as providing a significant return to the Australian economy, this LNG export industry is also a key enabler of domestic gas supply.

The oil and gas industry supports 80,000 jobs directly and indirectly in Australia and hundreds of thousands more in manufacturing.

Investment in new gas supply for the east coast market is critical to the ongoing functioning of a stable, reliable electricity market and affordable domestic gas supply while the broader energy market transitions through the closure of coal-fired power generators, the construction and grid connection of new renewable projects and the implementation of storage or peaking capacity to firm renewables.<sup>5</sup>

The industry is pivotal to reaching net zero, supporting the transition away from coal, providing the firm dispatchable energy required to unlock our renewable energy potential, and powering Australian industries across the economy. The industry is also central to delivering step-change technologies including CCUS and low-carbon hydrogen.

**APPEA is the peak national body representing Australia's oil and gas exploration and production industry, accounting for around 95 per cent of the nation's petroleum production.**

APPEA has around 60 full member companies representing oil and gas explorers and producers active in Australia, as well as around 140 associate member companies that provide a wide range of goods and services to the upstream oil and gas industry.

APPEA has for many years supported a national climate change policy that delivers greenhouse gas emissions reductions, consistent with the objectives of the Paris Agreement, and applies a broad-based price signal on emissions to facilitate investment decisions at the lowest cost to the economy. APPEA is committed to working with the Government as it develops policy responses to climate change.

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<sup>3</sup> See [Media Release: Oil and gas industry helps bankroll public services despite pandemic challenge | APPEA](#) and [Historical-Summary-2019-20.pdf \(appea.com.au\)](#) for more information. Over and above this, Australia's LNG exporters are set to almost triple their financial contribution to the public this financial year, forecasted to pay an extra \$9 billion to federal and state governments. New preliminary forecasts released in October 2022 revealed the gas export sector is estimated to pay around \$13 billion during 2022-23 – up from \$4.8 billion forecast for last financial year (see [Media Release: LNG exporters forecast to pay extra \\$9 billion to governments as tax and royalty collections almost triple | APPEA](#) for more information).

<sup>4</sup> See [Office of the Chief Economist - Resources and Energy Quarterly - September 2022 \(industry.gov.au\)](#) for more information.

<sup>5</sup> For example, the Australian Energy Market Operator's (AEMO) recent *2022 Integrated System Plan* (available at [AEMO | 2022 Integrated System Plan \(ISP\)](#)) confirmed the long and enduring value of natural gas partnering with renewables with the report finding (page 57): "Peaking gas-fired generators will play a crucial role as significant coal-fired generation retires, as an on-demand fuel source during extended periods of low VRE output, and to provide power system services for grid security and stability and High renewable output and high demand – gas is needed to meet the demand peaks just after sunset, and to keep going through the night to cover wind variability." See [Media Release: 'Crucial' role for gas powering electricity grid for decades: AEMO report | APPEA](#) for more information.