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**Submission to the *Sustainably Growing
Energy & Mining in South Australia*
Consultation Paper**

November 2019

South Australian Chamber of Mines & Energy

The leading industry body representing the resources sector in South Australia

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1. Introduction

SACOME welcomes the opportunity to make this submission to Department of Energy & Mining's (DEM) *Sustainably Growing Energy & Mining in South Australia* Consultation Paper.

The South Australian Chamber of Mines and Energy (SACOME) is the peak industry body representing companies with interests in the South Australian minerals, energy, extractive, oil and gas sectors and associated service providers.

SACOME member companies are a cornerstone of the South Australian economy, with their combined activity generating the following key economic outcomes:

- \$6.1 billion in production value;
- 33% of exports from South Australia worth almost \$4 billion, making it the highest value export sector in the State;
- \$1.6 billion in Capital Expenditure investment in new mines and petroleum projects;
- Direct and indirect employment of 26,800 South Australians; and
- \$1.2 billion in royalties to the South Australian Government over the next five years.¹

DEM have been tasked with developing an Energy & Mining Strategy to feed into the Marshall Government's overarching *South Australian Growth Agenda* which sets a target of sustaining annual growth in Gross State Product (GSP) at 3% over the next 5-8 years, equating to approximately twice the average growth rate for the State in the 10 years to 2018.

The resources sector is identified as one of nine industry sectors with potential to meet the State Government's growth targets, placing significant expectation on the sector to drive unprecedented growth outcomes.

In contemplating ways to drive new economic growth within the stated timeframe, the key challenges are: in bringing identified but stranded resources to market through infrastructure development; undertaking regulatory reform to enhance South Australia's investment attractiveness; and pursuing emerging economic opportunities such as 'green' steel production, hydrogen, solar panel recycling and renewable energy export.

¹ SACOME 2024 Vision p.12 (<https://www.sacome.org.au/2024-vision.html>)

SACOME's recent submissions to the Infrastructure SA 20-Year State Infrastructure Strategy; Regional Growth Strategy; and Pastoral Act Review consultation processes² address many of the growth challenges faced by the resources sector. We recommend them to DEM as part of Energy & Mining Strategy development process.

A clear and consistent message from consultation with our member companies was that achieving these unprecedented growth targets requires a drastic 'step change' in approach.

In making this submission, SACOME reiterates that barriers to the growth of the South Australian resources sector are already well understood by government and industry. The challenge posed by State growth targets is in taking the necessary action to remove these impediments. SACOME remains committed to working collaboratively with the South Australian Government in advancing economic growth outcomes for the resources sector and the State.

Summary of Key Points

- It is unlikely that the proposed growth targets for the sector will be achieved with a 'business as usual' approach. The scale of government activity must match the scale of ambition set by DEM's growth targets and SACOME submits that a more interventionist approach on the part of government is warranted.
- A substantial increase in resources sector activity will only occur if the expected return on investment increases, either through prices for key commodities increasing sharply, or the relative cost of exploration and operation in South Australia falling.
- Substantial increases in commodity prices are not projected, and in any event are beyond the control of the South Australian Government. As such, the focus needs to be on reducing the cost of operation in South Australia to overcome the State's jurisdictional disadvantages.
- Those cost factors which are within the South Australian Government's ability to influence are well known, with water, power and requisite supply chain infrastructure being key considerations. SACOME has made detailed comment in its submission to the Infrastructure SA 20 Year State Infrastructure Strategy consultation process in this regard.
- Significant changes will be needed to these cost drivers if South Australia is to increase its relative competitiveness, but the solutions are well-understood.
- Rapid change will need to occur to support the timeframes set by the growth targets, given the substantial time it takes between a final decision to proceed with a project and exports commencing.

² <https://www.sacome.org.au/submissions.html>

2. Consultation Questions

2.1 Overview of South Australia's energy & mining sector

Is energy & mining as a sector identified appropriately?

SACOME submits that the resources sector has been appropriately identified as a sector with significant growth potential.

As noted in the consultation paper, South Australia has abundant and demonstrated mineral and petroleum reserves which offer ready opportunities for growth; and a range of emerging economic opportunities presented by renewable generation, steel production, critical minerals and hydrogen production.

The consultation paper does not consider growth opportunities presented by development of a South Australian nuclear industry. A key finding of the Nuclear Fuel Cycle Royal Commission was that the provision of a secure, reliable and safe location for spent nuclear fuel could provide up to \$455 billion in a State Wealth Fund.

SACOME recognises that development of a nuclear industry is politically challenging, however, significant work has been undertaken to quantify the opportunity. Excluding it as a growth option artificially narrows growth options for the resources sector.

SACOME further submits that consideration should be given to 'value-adding' activity such as smelting, refining and manufacturing given the potential to move South Australian commodities to a higher price point for interstate and international export.

Development of industrial hubs in suitable areas of the State presents an opportunity to concentrate this value-adding activity, minimise duplication of critical utilities and infrastructure and create a user-base with sufficient critical mass to justify development/expansion of multi-modal export infrastructure. Implementing a regulatory structure that provides incentive for investing in an 'industrial zone' could assist in bringing greater upstream processing activity to South Australia.

SACOME members have suggested that energy and mining projects could be mapped across their full life cycle to extend economic opportunities from investment. Hillgrove Resources conversion of its Kanmantoo mine into a pumped hydro facility is one such example of life cycle planning.

Depleted oil and gas wells also offer opportunities for fuel storage and carbon sequestration, providing a potential ongoing use for an otherwise depleted asset.

Recycling of 'renewable' technology has potential to contribute to the State economy. As solar panels and wind farms reach the end of their operational life, ensuring that they are decommissioned both safely and with a view to future use of their constituent materials presents an opportunity for economic activity. Developing recycling facilities in South Australia (possibly as part of an industrial hub) could position South Australia as a national leader in this space.

Development of oil projects in the Great Australian Bight represent a significant opportunity for state growth, with a conservative base case scenario economic modelling for Equinor's project estimating a total output of \$5.8 billion per annum; and \$1.7 billion in Commonwealth and State taxation per annum from the development.

Expansion of the alternative fuel industry could also be included when considering broader opportunities for the resources sector given SUEZ-Resources recently reached the production target of 1 million tonnes of processed engineered fuel (PEF) for supply to Adelaide Brighton Cement for use in cement production.

2.2 Growth Targets

Are the four growth targets achievable and sufficiently bold to support our Growth State ambitions?

Can these targets serve to identify industry's barriers and opportunities for stronger economic growth?

Should we adopt an energy productivity target?

DEM has proposed the following four energy and mining targets:

- *International exports are to increase from \$5.3 billion in financial year 2018 to \$8 billion in 2025; and to \$13 billion by 2030.*
- *Private exploration expenditure will increase from \$158 million a year in 2018 to a sustainable average of \$300 million a year by 2025.*
- *New capital investment in energy and mining to total \$18 billion across seven years to 2025.*
- *Energy supplies in South Australia are to be nationally competitive before 2025 and internationally competitive by 2030.*

These proposed growth targets are unquestionably bold and ambitious.

Despite this boldness, the consultation paper relies on an assumption that all the projects slated for implementation and expansion in the consultation paper will progress in a timely and economically optimal manner. SACOME notes the following statement from the consultation paper:

Near unprecedented performance will be required in a contemporary context and, as a trade exposed sector, energy and mining remain sensitive to international headwinds such as commodity price cycles, a retreat towards trade protectionism and constrained capital markets.

The proposed growth targets represent a major 'step change' for energy and mining activity in South Australia, and SACOME respectfully suggests that given the ambitious nature of these targets, the actions of government must be equally ambitious to meet them – a 'business as usual approach' will not suffice.

SACOME members have made comment that the timeframes for achieving these targets are short, particularly when the many aspects of project development are considered. Securing

project approval, negotiating land access, undertaking capital raising, contracting specialist services and equipment, putting in place necessary infrastructure and utilities are all prerequisite to production/export and securing each aspect can be a lengthy process. If growth targets are to be achieved by 2025, near-immediate implementation of policy and funding initiatives is required.

The barriers to project development and expansion in South Australia are well understood and broadly comprise:

- Power;
- Water;
- Infrastructure (rail, road, port, civic in addition to power and water);
- Land access;
- Government approval processes and timeframes;
- Native Title and Aboriginal Heritage issues;
- 'Best in class' regulation as a driver of investment attraction and enabler of project development;
- Availability of capital/finance;
- Anti-resources sector sentiment/moratoria.

Rather than serving to identify barriers and opportunities, the economic growth targets more importantly provide an impetus for problem solving.

Given the extensive work that has already been undertaken to define the barriers to growth, SACOME submits that the main objective of DEM's Energy & Mining Strategy should be resolving these already-understood barriers in a way that enables economic growth in the shortest timeframe possible.

2.2.1 Energy Growth Target

SACOME members have made specific comment on the energy target, suggesting that the stated goal of '*nationally competitive before 2025 and internationally competitive by 2030*' is subjective and challenging to measure. For energy supplies to be nationally competitive against Western Australia for example, gas prices would need to materially soften in the near term whereas electricity prices are arguably competitive against the east coast electricity market. When considering international competitiveness, member companies have also asked whether measurement will be made against countries that produce energy or against countries that import energy.

Some SACOME members have suggested that the timeframes attached to the energy growth target as an enabler of national/international competitiveness are too long, and that a much shorter timeframe for energy competitiveness would better help to secure economic growth opportunities.

Support for an energy productivity target among SACOME members varies with some being supportive and others suggesting an energy efficiency target may be a more useful measure. All members have expressed that any productivity/efficiency target must be specific and measurable.

2.3 Key Growth Opportunities

What other opportunities should we be pursuing? Are there any other opportunities for leveraging South Australia's clean energy transition to grow jobs and investment?

SACOME submits that the key growth opportunities for the State are in facilitating expansion of existing projects; in ensuring a pipeline of future minerals and petroleum projects through exploration; and in moving projects with demonstrated potential to the development and production phase. The consultation paper provides a useful summary of these projects.

Additional growth opportunities are summarised below:

- Development of a South Australian nuclear industry;
- Development of offshore oil projects in the Great Australian Bight;
- Value-adding/upstream processing of commodities;
- Development of industrial hubs;
- Whole of life-cycle project investment/development;
- 'Renewable' technology recycling (solar, batteries etc);
- Development of a South Australian hydrogen industry;
- A state-wide inventory of research hubs and their activities to maximise opportunities for collaboration.

SACOME members expressed that additional growth opportunities for gas exploration and development should be pursued. The former PACE Gas program successfully incentivised activity to bring new gas supplies into the South Australian domestic market, incorporating a domestic reservation policy as a means of ensuring supply for local use.

A similar program providing direct funding, or incentives like royalty reductions over a fixed period, or priority access to new acreage and with a requirement for priority supply to South Australian commercial and industrial customers could facilitate growth outcomes and as an input for lower cost electricity. Expanding the Accelerated Discovery Initiative (ADI) to include gas production would be logical in the context of DEM's economic growth targets.

SACOME also submits that investment in new technologies or methods that can help to overcome South Australia's competitive disadvantages offer multiple benefits both in terms of facilitating project development and in creating products and services for export. An example of this is dry beneficiation technology which significantly reduces the amount of water required for ore beneficiation. This technology has potential to address one of the key barriers to mineral project development in South Australia through reducing the amount of water and water infrastructure required to enable mining projects in remote locations. In considering other growth opportunities for the resources sector it is important to do so in a way that assesses reward for effort. In developing its Energy & Mining Strategy, SACOME submits that DEM (in conjunction with other relevant arms of government) scope growth

opportunities for the State via a cost-benefit approach. SACOME suggests that this will better facilitate the allocation of limited resources in a way that maximises economic benefit.

In its submission to the Infrastructure SA 20-Year State Infrastructure Strategy consultation process, SACOME advanced the concept of a 'Roadmap to 3% Growth' to map requisite activity for resources sector projects capable of delivering the State Government's growth targets.

SACOME suggests that this Roadmap prioritises:

- The potential economic value of resources provinces/clusters/projects to the State;
- The infrastructure and regulatory actions necessary to build a path to market;
- What actions the State can take to resolve barriers to development;
- Opportunities to leverage Commonwealth funding and/or prioritisation;
- Timeframes for implementation; and
- Understanding the opportunity costs of doing nothing.

2.4 Key Challenges

Are all the key challenges to strong sustained growth in the energy and mining sector captured in the consultation paper?

Are there any priority areas that should be the focus of the Energy & Mining Strategy?

The key challenges to economic growth are well-summarised in the consultation paper.

As previously stated, the key challenges to growth of the resources sector are well understood as significant work has been undertaken by industry and government to define them. As the consultation paper has identified, the resources sector is trade-exposed and energy and mining activities remain sensitive to international headwinds such as commodity price cycles, protectionism and constrained capital markets.

In addition, South Australia's jurisdictional challenges continue to operate as a deterrent to private sector investment. These challenges include: deep cover; remoteness of project locations; a lack of existing infrastructure which has meant that investors are unwilling to fund projects compared to other Australian/global prospects; and a preference on the part of government for non-interventionist, micro-economic policies over direct intervention.

The general feedback from SACOME members is that the consultation paper sets out goals and challenges but provides minimal guidance on how the government intends to overcome them. Members who provided feedback during the consultation process also made comment in relation to the limited funds available to the State Government and DEM to achieve unprecedented economic growth targets. Greater clarity on funding arrangements for implementation of the Energy & Mining Strategy is actively sought.

Major challenges identified by SACOME members across the breadth of resources sector activities are set out below. SACOME submits these as priority areas that should be the focus of the Energy & Mining Strategy.

2.4.1 Exploration Challenges

SACOME members are well-versed with the realities of exploration in South Australia. Deep cover remains a perennial issue and the State Government has sensibly reintroduced exploration incentive in the form of the Accelerated Discovery Initiative (ADI) to offset this jurisdictional disadvantage. The reality, however, is that the ADI merely brings South Australia back to relative parity with other Australian states who implemented exploration incentive programs due to the success of South Australia's Plan for Accelerating Discovery (PACE).

Member companies continue to make the point that operators drilling in South Australia are also drilling in other Australian and international jurisdictions. If the State is looking to secure greater economic growth outcomes, it must implement a meaningful paradigm shift that lifts South Australia as a jurisdiction of choice for exploration. Suggestions have included better targeting exploration incentives (which SACOME acknowledges the ADI will do); and faster release of geomagnetic data survey sets.

Land access continues to be a critical issue for both mineral and gas exploration as the consultation paper has identified. Junior explorers continue to communicate the importance of this issue given the time and cost attached to securing land access as a component of their overall activity.

2.4.2 Energy Challenges

Achieving an \$18 billion export target will require significant energy use. For the resources sector this means major energy infrastructure investment in remote locations. In addition, other sectors will also have competing energy requirements meaning that cross-sectoral coordination of energy needs is a necessary prerequisite.

Reducing power prices must be a priority if growth targets are to be realised. Power is a key input for resources projects and goes directly toward project viability

Given the role that infrastructure plays in facilitating project development, SACOME submits that reducing power prices must be a strategic priority.

SACOME members also supported the idea of consolidating the development of renewable energy generation projects in line with renewable energy zone and industrial hub concepts as a means of better developing economies of scale for supply of renewable energy to industry.

Consideration should also be given to the energy requirements of upstream processing/value-added activity such as smelting and manufacturing as this will require a reliable supply of power to be available at a competitive price.

Ongoing uncertainty about energy policy at a Federal level remains a concern. Any activity the South Australian Government can take to improve certainty for investment in generation projects is welcomed, particularly with regard to better alignment of energy and emissions policy.

2.4.3 Water Challenges

Water is a key challenge for mineral resources projects in South Australia. Given the importance of water as an input, serious consideration must be given to its availability and transmission to project sites as a prerequisite for achieving growth targets.

It is also important to emphasise that water is a contested resource given its importance to many industry sectors, community and the environment.

SACOME members have suggested development of a South Australian 'industrial water strategy' to provide a consolidated understanding of the amount of water required for use across the economic sectors identified as contributors to the 3% growth target; and which provides direction on provision of this water for industrial use across relevant economic sectors. The industrial water strategy could also draw on the expertise of bodies like Infrastructure SA to progress development of desalination and pipeline infrastructure to projects/provinces capable of progressing economic growth targets.

SACOME also notes the importance of water to hydrogen production and suggests that an industrial water strategy should also consider requirements for the development of a South Australian hydrogen industry.

2.4.4 Infrastructure Challenges

Infrastructure is a key impediment to growth of the South Australian resources sector.

DEM's Energy & Mining Strategy must give serious consideration to resolving the 'chicken and egg' dilemma of resources project development in South Australia, as developing the State's 'stranded' resources wealth arguably provides the best means of achieving the growth targets set out in the consultation paper. Further, SACOME has highlighted the importance of maintaining existing 'resources road' infrastructure in major provinces like the Cooper Basin to ensure that our oil and gas producers can continue to operate efficiently.

SACOME's submission to the Infrastructure SA 20-Year State Infrastructure Strategy consultation process provides detailed consideration of the infrastructure challenges the South Australian resources sector faces. SACOME sees considerable advantage in DEM working in close collaboration with Infrastructure SA to develop the Energy & Mining Strategy given the importance of infrastructure to realising growth targets.

Relevant recommendations from this submission are to:

- Develop a 'Resources Infrastructure Corridor' framework to facilitate infrastructure investment by holistically resolving land access, approvals and logistics issues; and to provide operators with a de-risked and expedited path to project development.

- Consider creation of a statutory corporation that acts as a ‘first mover’ and de-risks investment in resources projects through construction of infrastructure which can be accessed by operators on a ‘take or pay’ basis.
- As a near-term objective, prioritise repair, maintenance and upgrade of existing resources infrastructure to improve efficiency and reduce operational costs.
- Create a category of ‘critical economic roads’ which reflects the importance of this infrastructure to industry sectors identified by the South Australian Growth Agenda which are prioritised for maintenance.
- Scope opportunities for Commonwealth-State partnership presented through policy initiatives like the National Resources Statement and bodies like Infrastructure Australia.

SACOME encourages DEM to review our submission to the 20-Year State Infrastructure Strategy given the significant overlap in issues between that consultation process and this one.

2.4.5 Land Access Challenges

Ensuring the land access and social acceptance aspects of sector development are addressed is critical in enabling growth. As the consultation paper has noted, there is a general lack of agreement on coexistence models in South Australia.

Operators tend to each have individual solutions to land access issues and despite the criticisms levelled at the resources sector, there are many examples of land access and community engagement being done well.

The Energy & Mining Strategy provides an opportunity to consolidate experience and develop a State framework for land access that is championed by the South Australian Government and draws a direct link to the living standards of all South Australians.

2.4.6 Education and Skills Challenges

Achieving the targets proposed by DEM will require a substantial workforce. This will necessitate the need to train and/or attract sufficient personnel as the sector grows in size and output.

Further, the nature of work in the resources sector is undergoing significant change with the uptake of new technologies and operating practices. The Energy & Mining Strategy should make effort to scope what projected workforce requirements for the State look like in the context of economic growth targets.

2.5 Government Role and Focus

Is there a greater or lesser role for government/industry?

Where can the South Australian Government work in collaboration with industry, Commonwealth Government and national industry groups to support the Strategy over the next 5-10 years?

SACOME notes the following statement regarding the role of government in the consultation paper:

'The South Australian Government recognises the primary role of private investment and innovative effort by industry in delivering economic growth from the mining sector ... The government focus is to build the environment for competitive business to succeed and create the conditions for business and economic growth.'

'Critical micro-economic reform will address misaligned incentives that lead to inefficient or uncoordinated investment in key infrastructure, as well as de-risking growth opportunities through improved strategic planning at a state-wide level.'

The South Australian Government has stated that it will act to catalyse private investment or to overcome economic barriers and market failure only where necessary. The economic growth targets proposed in the consultation paper hope to achieve an 'unprecedented' shift in economic activity for the resources sector. Despite the scale of the economic growth task, government continues to see its role as one of facilitator.

The facilitative approach favoured by government has not resolved the structural issues that continue to function as a barrier to greater levels of investment in South Australia. It is reasonable to argue that a more direct, interventionist approach on the part of government is now necessary if it hopes to meaningfully catalyse investment.

It is important to acknowledge that the economic targets set under the Growth State agenda are the State Governments targets. They are not targets set by industry and, of themselves, do not change the variables relating to investment or project development in South Australia. Without meaningful change to government activity, there is nothing that changes the status quo for economic growth of the resources sector in South Australia.

The central challenge for the South Australian Government is to distinguish itself as a destination for investment by the resources sector to enable growth of any scale, let alone growth of the magnitude set by the suggested targets.

In discussions with our member companies, the concept of investment 'dominoes' has provided a useful guide for strategic thinking about resolving barriers to development. Some

operators have suggested that resolving any one of the investment dominoes (generally viewed as access to power, water, land links, port, and land access) would assist in de-risking projects to make them more attractive to investors. This presents government with an opportunity to develop a strategic investment attraction policy which differentiates South Australia as destination.

SACOME acknowledges the economically constrained environment that the South Australian Government operates within. As such, we propose a 'minimum investment' approach that looks to catalyse project development. The South Australian Government is well-placed to pursue a range of funding opportunities presented by:

- The Liberal Party holding government at the Commonwealth and State level;
- The province development objectives of the National Resources Statement;
- Strategic alignment between Infrastructure SA and Infrastructure Australia processes;
- Recent Reserve Bank statements urging Australian governments to drive economic growth through infrastructure investment.

SACOME also strongly supports the principle of cross-sector benefit. In preparing the Energy & Mining Strategy, DEM should consider opportunities to maximise investment in a manner that provides benefit to other industry sectors and local communities wherever possible.

2.6 Energy & Mining Priorities

In each of the four streams, are the proposed industry goals, key challenges and scope for further action correctly identified? What more could be done?

SACOME submits that the four strategic 'streams' are usefully defined; and that the goals, challenges and 'scopes for further action' are relevant to the economic growth task at hand.

SACOME members have commented that the growth targets fundamentally require ongoing development of major mineral and petroleum provinces across the State, with the obstacles to development having already been exhaustively defined.

Given the barriers to growth are well understood, SACOME submits that a practical approach to resolving them could be to develop 'barrier removal' frameworks that provide a structured approach to implementing solutions. This methodology could be readily integrated into 'province development frameworks' whereby the various factors relevant to economic growth outcomes are mapped as part of the larger regional context.

Further, this scoping work could then provide a basis for quantifying the cost of removing economic growth barriers and allow a practical conversation about funding to occur as part of the State Budget process; in seeking Federal input; and in determining levels of industry co-contribution.

This mirrors existing recommendations made by SACOME on infrastructure impediments, where we have suggested development of a Resources Infrastructure Framework to facilitate infrastructure investment by holistically resolving land access, approvals and logistics issues; and to provide operators with a de-risked and expedited path to project development.

SACOME also makes comment on the continued reliance on Commodity Strategies by the South Australian Government and DEM. While these are useful promotional documents, they do not fundamentally alter investment decisions by operators as they do not seek to resolve South Australia's enduring barriers to investment.

As the Regional Mining and Infrastructure Plan identified in 2014, consolidation and shared infrastructure are required to overcome barriers to investment. The private sector has hitherto been unable to reach agreement on what a shared cost/access framework might look like, meaning government has a critical role to play as a first mover. To break the investment deadlock, commodity strategies must make meaningful progress on enabling a path to market, rather than to simply continue promoting the State's substantial but stranded resources wealth.

3. Conclusion

SACOME is committed to working in partnership with the South Australian Government in progressing economic growth for the South Australian resources sector. We commend the Marshall Government for its focus on the difficult task of state development.

In providing comment on the Energy & Mining Strategy consultation process, SACOME emphasises the importance of resolving the well-understood barriers to investment that operate against resources project development in this State. SACOME and its member companies share the objectives of economic development and prosperity at the core of the Marshall Government's *Growth State* policy and recognise the importance of collaboration with government in working toward these worthy goals.