

Productivity Commission

Study into Resources Sector Regulation

Submission from the Government of South Australia

October 2019



Submission from the South Australian Government

Summary

The South Australian Government strongly supports the Australian Productivity Commission's Study into Resources Sector Regulation, and is an active participant in the COAG Energy Council's Strategic Reform Agenda for Resources.

In March 2019, the South Australian Government committed to the development of a growth agenda to prioritise and guide the State Government's economic development initiatives.

Growth State: Our plan for prosperity includes accelerating state economic growth from an average of about 1.5 percent a year in the past 10 years to attaining a sustainable three percent average annual growth in Gross State Product during the next five to eight years.

A draft Energy and Mining Strategy has been developed in support of *Growth State*. The strategy includes ambitious export, exploration and investment targets to sharpen the focus for investment and identify policy trade-offs for government consideration. These targets are to:

- increase international exports from \$5.3 billion in financial year 2018 to \$8 billion in 2025 and then \$13 billion by 2030;
- increase private exploration expenditure in minerals and petroleum from \$158 million a year in 2018 to a sustained \$300 million a year by 2025; and
- increase new capital investment in energy and mining to \$18 billion in the seven years to 2025.

Achieving these targets will require continuous improvement to our regulatory frameworks that support the productivity and competitiveness of our resources sector without compromising environmental standards or community expectations.

The South Australian Government submission to the Commission's study highlights a number of initiatives undertaken in South Australia, which are considered leading practice in efficient and effective resources regulation.

The submission also recognises that the responsible and environmentally sustainable development of South Australia's energy and mineral resources needs to maximise the community benefit from their use.

The submission also identifies significant opportunities to reduce regulatory duplication and streamline interactions between state and national legislation, to increase investor confidence and support timely project assessment processes.

It also highlights key non-regulatory factors effecting resources sector investment including cooperation between state and federal governments.

Current resources regulation in South Australia

South Australia's regulatory framework under the *Mining Act 1971 (SA)* (*Mining Act*) and the *Petroleum and Geothermal Energy Act 2000 (SA)* (*P&GE Act*) ensures that the resources sector is sustainable from environmental, safety and economic perspectives.

South Australia's performance based regulatory model for resources activities focuses on the achievement of appropriate economic, social and environmental outcomes that have been set through a risk-based approach to determine which impacts must be managed. The state's regulatory framework supports the safe and responsible conduct of exploration and extraction activities in the mining and petroleum sectors.

This section of the submission highlights leading practice features of the resources regulatory framework and key initiatives undertaken in South Australia.

Lead agency approach

As detailed in the conclusions of the 2009 *Productivity Commission's Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*, a one-window-to-government (one-stop-shop) can be leading practice given appropriate controls to managing the risk of regulatory capture with transparency.

South Australia continues to pride itself in the area of 'lead-agency' approach. Through Memorandums of Understanding and Administrative Arrangements, the Department for Energy and Mining (DEM) has been able to maintain its lead agency regulatory responsibilities under the *Mining Act* and *P&GE Act* respectively, while efficiently maintaining compliance with other key South Australian co-regulators including the Environment Protection Authority (EPA), the Department for Environment and Water (DEW) and SafeWork SA.

Continuous improvement of regulatory frameworks

The South Australian Government has a strong interest in streamlining all regulatory processes where misalignment of process timelines, procedural delays and inconsistent outcomes has the potential to negatively impact costs for industry and damage relationships with the community. A single decision point for major approvals can save time, money and raise business and investor confidence.

The South Australian Government continues to support the key recommendations of the 2009 Productivity Commission review for improving existing regulatory arrangements, in particular reducing unnecessary delays (particularly for environmental and heritage processes) through setting statutory timelines, ensuring legislative objectives are clear, promoting clear guidelines on information requirements, and introducing a 'lead agency' approach for approvals.

South Australia is committed to continuous improvement of its regulatory frameworks. Notably:

- A Mining Acts Review process was recently undertaken, leading to the development of the *Statutes Amendment (Mineral Resources) Bill 2018*

(SA). The Bill, which recently was passed by both Houses of Parliament, proposes amendments to increase South Australia's competitiveness, promote investment in our regions, create improved landowner rights, and establish a fit-for-purpose environmental regulatory framework.

- The *P&GE Act* is reviewed regularly and has undergone two major reviews since its proclamation in 2000, with a third review currently underway.

Improving transparency of regulatory processes

Under the *Mining Act* and *P&GE Act*, DEM maintains online fit for purpose reporting requirements to facilitate efficient and effective environmental compliance monitoring of licensee environmental and safety performance, as per approval requirements. Annual compliance reporting of DEM's regulatory approval and surveillance activities for all *P&GE Act* and *Mining Act* activities are available on DEM's web site.

In 2018, DEM published its first environmental approval assessment report under the *P&GE Act*, and these post approval reports are now a standard feature which increase transparency of regulatory decision-making. See [South Australia Assessment of Leigh Creek Energy UCG Trial Proposal as an example](#).

Furthermore, where community concerns warrant additional transparency, the regulatory framework needs to be able to accommodate fit for purpose reporting appropriate to addressing the concerns being raised.

For example, in response to the community concerns to a pre-commercial demonstration trial regarding containment of Underground Coal Gasification (UCG) contaminants of potential concern (COPC), the approved [Statement of Environmental Objectives](#) required the licensee to furnish the regulator (DEM) with all [pressure and temperature monitoring data](#) to be reviewed and published publicly.

Tailored assessments

DEM's area-specific (regional) and activity-specific assessments covering all relevant co-regulation to protect social, natural and economic environments through Statements of Environmental Objectives (SEO) under the *P&GE Act* is recognised as leading practice for efficient and effective approval processes. The [SEO approval process](#) under the *P&GE Act* seeks to establish via community and government stakeholder consultation the social, safety and environmental objectives that a licensee must demonstrably achieve as part of being granted approval under the *P&GE Act*. Illustrating how this process delivers such outcomes can be observed through two recent SEO approvals as summarised in DEM reports into the [Leigh Creek Energy UCG pre commercial demonstration project](#) and [Beach Energy's South Australian Otway Basin Petroleum Production and Processing](#).

South Australia implements case-by-case assessment of land access for innovative and/or controversial energy projects. While some jurisdictions have blanket bans on UCG – South Australia considers whether or not social, natural and environmental risks can be managed to as low as reasonably practicable and to meet the net expectations for the State's peoples based on forecast activities in the context of local receptors (what is really in harm's way). In the case of UCG – robust pre-

approval research has been undertaken to evidence if operations could be undertaken safely in accordance with appropriate mitigation measures.

Granting land tenure required for timely development of petroleum resources

South Australia is believed to be the only jurisdiction that provides “Grouped Petroleum Retention Licences”. Grouped PRLs enable the best prospects to get drilled first e.g. earlier increases in production, royalties and employment. Since the first of the PRL initiative licences were granted in May 2014 (to 31 July 2019), 46 exploration wells have been drilled resulting in 19 new field discoveries in Grouped PRLs. A further 21 appraisal wells have been drilled (16 successful) and six development wells (five successful). Lesser results would have been sustained if work programs could not be shared amongst grouped licences. The provision of Grouped PRLs was a response to the top-ranked of the 125 priorities as defined by the South Australian Roundtable for Oil and Gas in December 2012.

Key areas for reform and investment

This section of the submission identifies significant opportunities to reduce regulatory duplication and streamline interactions between state and national legislation, to increase investor confidence and support timely project assessment processes.

Reduce Commonwealth-State regulatory duplication

While the South Australian Government works toward streamlining red tape to produce harmonisation of legislation, regulation, standards and processes to improve efficiency, there are opportunities for greater streamlining of state and Commonwealth processes through increasing the scope of accreditation of resources legislation in South Australia under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.

Through the upcoming review of the *EPBC Act* and the review of the existing bilateral agreement, the South Australian Government will seek the broadest scope possible for accreditation under the *EPBC Act* of processes in the *Mining Act* and *P&GE Act*. This includes both assessment and approval processes.

The *Mining Act* is already accredited for assessment processes under the *EPBC Act*. The current review of South Australia’s mineral resources legislation provides the opportunity for the default assessment bilateral accreditation approach to be that of an ‘enhanced’ assessment bilateral agreement, consistent with that entered into with NSW, further streamlining the level of interaction between the States and the Commonwealth throughout the assessment process.

Ultimately, South Australia will also be seeking approval processes under the *Mining Act* and the *P&GE Act* to be accredited under the *EPBC Act* through a bilateral agreement. It is understood that minor administrative amendments to the *EPBC Act* are required before the states and territories’ environmental approval processes can be accredited. South Australia is strongly in favour of these amendments again being put before the Federal Parliament.

Streamline the regulation of uranium mining

South Australia's regulatory framework ensures that the uranium mining industry is sustainable from environmental, safety and economic perspectives. Assessment and regulation under the *Mining Act*, the *Radiation Protection and Control Act 1982 (SA)* and the *Environment Protection Act 1993 (SA)*, have provided decades of confidence to the community and industry in the safe conduct of uranium mining and transportation.

Currently any new uranium mines in Australia trigger automatic adherence to the *EPBC Act*. This is known as the 'nuclear action trigger'. The requirement for joint assessment and approval of new uranium mining activities by State and Commonwealth regulators is a significant barrier to the viability of new uranium mine developments in South Australia.

As the Act has a 'uranium mining and milling' trigger, this discriminates against the uranium mining industry by making an exception of uranium mining when its conduct and environmental impacts are no different to other forms of mining. Whilst extra requirements for community engagement are necessary, special legislative treatment beyond existing radiation protection and uranium exporting controls is not required.

Aspects such as nuclear proliferation and radiation are already extensively dealt with through existing Commonwealth and State legislation, agreements, and established regulatory systems.

Non-uranium mines captured under the nuclear action trigger

The capture of non-uranium mines under the nuclear action trigger is of significant concern to South Australia, due to the natural formation of its mineral deposits.

The definition of a nuclear action under the *EPBC Act* includes "establishing a large scale disposal facility for radioactive waste". For non-uranium mines with elevated concentrations of naturally occurring radioactive minerals (NORMs), it is possible that this criteria is triggered for higher volume waste systems such as tailings storages facilities (TSFs).

Most recently, the Carrapateena copper-gold project, an approximately \$916 million mine in the state's far north, was determined to be a controlled action under the nuclear actions trigger (in addition to potential impact on a threatened species).

Whilst a TSF for a copper mining and processing operation would not normally be considered a "nuclear action", the Carrapateena TSF will receive tailings that contain elevated concentrations of NORMS. The South Australian Environment Protection Authority (EPA), the agency principally responsible for regulation of radiation impacts in South Australia, considered that the Carrapateena proposal would not have a significant impact on the environment, as there would be no radiation exposures exceeding 1 mSv and no impact on plants or animals due to radiation.

As the radiation resulting from the uranium and thorium content exceeded the activity values and activity concentration value specified in the EPBC regulations, the proposal was declared a controlled action under the nuclear actions trigger.

However, this interpretation could also potentially capture a number of mineral sands, rare earth and other mining projects that have naturally occurring radioactive minerals. These critical minerals are essential to the transition and development of the Australian economy, and will be used in a range of emerging high-tech applications across a variety of sectors.

It is recommended that the 'Significant Impact Guidelines' are revised in relation to the application of the *EPBC Act* to non-uranium mining projects. This would mean specifically excluding 'operations for the recovery of mineral sands or rare earths' and other mining projects that have naturally occurring radioactive minerals. The Explanatory Memorandum (EM) for the *EPBC Act* explicitly notes that nuclear actions include mining or milling uranium ore, but does not include operations for the recovery of mineral sands or rare earths. Where this situation occurs with mineral sands or rare earths, assessment and adherence to the proven and trusted South Australian regulatory framework is sufficient.

Non-regulatory factors affecting resources sector investment

This section of the submission addresses key non-regulatory factors affecting resources sector investment, including government activity at both a state and federal level.

Innovative geoscience to drive new investment and discoveries

National government geological programs create new opportunities for resources discovery, imperative to attracting investment. Whilst Australia is recognised as a leading resources jurisdiction, there is still significant potential for major discoveries, and data is a key tool to attract corporate and financial interest and investment. We need to generate new, innovative, exciting geoscience that industry wants, responding to global drivers and demand.

Precompetitive data reduces the risk associated with greenfields exploration, reduces expensive re-acquisition of data, catalyses research, remapping and refinement, leverages increased exploration spending and expedites discovery of new resources deposits.

The discovery of the Carrapateena iron oxide copper gold deposit in 2005 is an example of the ability of targeted government support to bring forward economic activity in the mineral resources sector. A South Australian Government study in 2007 found targeted government exploration support brought forward the Carrapateena discovery by about 20 years, as it is unlikely private sector investment would have backed the high-risk drilling campaign without the support of government funding.

The discoveries of Olympic Dam and Prominent Hill had already identified the Gawler Craton as highly-prospective for iron oxide – copper–gold (IOCG) deposits. However, the drilling intersection partly-funded by government not only confirmed Carrapateena as a world-class discovery, but also became a major driver of exploration sentiment in South Australia.

OZ Minerals subsequently acquired the Carrapateena deposit from RMG Services and announced plans to begin construction on a self-funded \$916 million mining project. Two parallel declines have recently reached the ore body, and Carrapateena is on schedule for first concentrate production in the fourth quarter of 2019.

OZ Minerals announced in March 2019, the results of a scoping study for an expansion to optimise value from the Carrapateena mine. If approved, the additional circa \$1.0 to \$1.3 billion investment has the potential to increase average life of mine copper production from 65,000 tonnes per annum to ~105,000 – 125,000 tonnes per annum from 2026.

Reinvigorated interest in the prospectivity of the Gawler Craton also led to exploratory drilling by OZ Minerals in nearby tenements that confirmed the Khamsin IOCG deposit in late 2012 and subsequently identified the Fremantle Doctor and Saddle IOCG deposits as possible extensions of the Carrapateena mineralisation. All these deposits are within a 10 kilometre range of the original Carrapateena discovery.

On the basis of this evidence, the South Australian Government recently launched the Accelerated Discovery Initiative (ADI). The ADI will provide co-funding opportunities to greenfields exploration activities to support new major minerals discoveries, drive further mine developments and stimulate growth, investment, exports, jobs and innovation in the state's mineral resources sector. The ADI funding commitment is \$3.3million per year, with the total cost capped at \$10 million over 2019–2020.

The Commonwealth Government is currently supporting a geoscience program, Exploring for the Future (EFTF), dedicated to boosting investment in resource exploration in northern Australia. This four-year program will conclude in 2020, so now is the appropriate time to establish an equivalent national geoscience initiative for southern Australia to complement the existing northern Australia program.

Woomera Prohibited Area (WPA) Coexistence Framework

The South Australian Government also regards securing ongoing access to the Woomera Prohibited Area (WPA) to be of vital importance to the future economic development of South Australian mineral and energy resources, and related infrastructure sectors. South Australia welcomed the 2018 Review of the Woomera Prohibited Area Coexistence Framework as an opportunity to improve and modernise the framework to ensure it keeps pace with leading practice.

The WPA is a military testing and evaluation site covering approximately 122,000 square kilometres in the northwest region of South Australia. It is considered to be one of the largest test ranges in the western world and is acknowledged to be a significant national security asset for Australia.

It is also vital that the WPA, which encompasses the mineral-rich Gawler Craton and Stuart Shelf where three of our major mines are operating, and constituting 12 percent of the State, continues to remain accessible for resource exploration and mining. Prominent Hill copper gold, Challenger gold and Cairn Hill iron ore have

delivered more than \$140 million in royalties and 1,500 jobs in the region since the Commonwealth legislation, the WPA Rule, came into operation in 2014.

The Review's detailed findings and recommendations have been fully supported, with the Australian Government recognising the success of the current arrangements and renewing its commitment to coexistence in the WPA, while reaffirming the importance of the WPA to national security.

The South Australian Government is providing comprehensive leadership and support to the implementation of the priority Review recommendations, including:

- delivery of a contemporary coexistence framework through more flexible access zone management.
- provision of guidance and certainty for foreign investment and access.
- support for scientific research and geoscientific surveys to ensure detailed knowledge of the mineral, energy and natural resources potential of the region.
- South Australian representation on governance and decision-making bodies for the WPA.

Support for reduction of greenhouse gas emissions

Enabling land access for domestic greenhouse gas emissions reduction should be a priority. In South Australia, compatible licensing has enabled entitlements to extract geothermal energy and to undertake Carbon Capture and Storage (CCS) to geo-sequester greenhouse gas, and Carbon Capture and Utilisation and Storage (CCUS) to enhance oil recovery without the prospects for royalty payments. This puts these low to no emissions technologies on a level playing field with wind, solar and hydro energy supplies to support a low carbon future.

Community engagement and benefit sharing

Responsible and environmentally sustainable development of South Australia's energy and mineral resources needs to maximise the community benefit from their use. This section of the submission highlights key initiatives in South Australia to improve community engagement and benefit sharing.

Gas Industry and Social Environment Research Alliance

In 2017, the South Australian Government partnered with CSIRO's Gas Industry and Social Environment Research Alliance, otherwise known as GISERA, to provide independent information for communities and government about onshore conventional gas development in the Limestone Coast region of the State's South East. The South Australian Government's contribution of \$1 million over three years will complement the contribution from CSIRO, the Commonwealth and industry. The [project](#) is funded until June 2020.

To help identify South Australian research priorities, a SA Regional Research Advisory Committee (RRAC) was established to approve research proposals on the range of scientific questions identified as important by the community, government and local industry. The SA RRAC includes a majority of independent local members

and has identified the following six projects that address key issues raised by the local community so that they can better understand the environmental and social impacts of onshore gas development in this diverse economic area:

1. Gas impacts and opportunities on primary industries
2. Water contamination: causes, pathways and risks
3. Community well-being and attitudes to conventional gas
4. Assessing the value of locally produced conventional gas in SA's South East
5. Groundwater balance in gas development regions of South East SA
6. Microbial degradation of onshore gas-related chemical compounds

South Australia's Roundtable for Oil and Gas

South Australia's [Roundtable for Oil and Gas](#) formed in 2010 and currently has >2,440 members from over 1,860 organisations comprising industry, government, peak representative organisations for industry, environment protection and aboriginal people, research institutions and individuals. The aim of the Roundtable is to provide a forum for members to help inform the South Australian Government on the key priorities for the upstream petroleum sector, and underpin the content of a planned roadmap of onshore and offshore oil and gas projects in South Australia. The Roundtable informed the 2012 publication of the Roadmap for Unconventional Gas with its 125 recommendations for implementation. Many of the recommendations have been acted upon. The next meeting of the Roundtable will be held on 11 November 2019.

Streamlining native title steps as a precedent to land access for petroleum

Conjunctive Native Title Agreements are agreed between relevant Native Title claimants/owners, licensees, and the State Government in accordance with the *Native Title Act 1993*. To date, 55 land access agreements have been executed in relation to a total of 51 licence areas. These agreements are a precedent to the grant of Exploration Licences that cover the full life-cycle (exploration through to development/production and de-commissioning) of regulated activities.

South Australia attained (to our knowledge) one of the first conjunctive petroleum indigenous land use agreements (ILUA) in a productive province in Australia in 2007. By executing the ILUA acceptance contract, any prospective new licensee in the relevant part of the Cooper-Eromanga basins can agree to the established ILUA terms without a costly and time-consuming additional negotiation process. To date, 12 separate *P&GE Act* licences have been granted following the proponent signing on to the conjunctive ILUA with the Yandruwandha/Yawarrawarrka People. A second conjunctive ILUA with the Wangkangurru/Yarluyandi People was also established in 2011. South Australia hopes to agree to further conjunctive ILUAs for petroleum activities.

Native Title Mineral Resources Exploration: Stronger Partners, Stronger Futures

The Stronger Partners Stronger Futures program is an action within the South Australian Government *Aboriginal Affairs Action Plan 2019-2020*. The objective of

the program is to improve the operation of the native title system for mineral exploration in South Australia in Part 9B of the *Mining Act*. These improvements are expected to increase opportunities for Aboriginal economic participation in the mineral resources sector.

In South Australia, Part 9B replaces the 'right to negotiate' scheme in the Commonwealth *Native Title Act 1993*, and largely replicates that scheme with three key differences: the government is not involved in the negotiation process, exploration rights can be granted without the need for an up-front agreement and native title matters are referred to the Environment, Resources and Development Court for determination, instead of the National Native Title Tribunal.

Key areas of focus in the current stage of the Stronger Partners Stronger Futures program identified through consultation with stakeholders are: early engagement and 'low impact'/'early' exploration, relationship building, cultural heritage management, Part 9B and the Commonwealth 'right to negotiate' scheme; and economic development.

A clear priority expressed by stakeholders is for improvements to the operation of the native title system for mineral exploration to address as a minimum native title groups' request for early engagement and agreement making, industry's request for transparent regulation, structure and economically viable transaction costs, and greater clarity for all parties as to when exploration activities affect native title and Aboriginal heritage.

Cooper-Eromanga Basins Aboriginal Conferences

In 2015, the South Australian Government hosted the first annual Cooper-Eromanga Basins Aboriginal Conference (CEBAC). CEBAC brings together the entire spectrum of industry participants undertaking upstream petroleum operations in South Australia's Cooper and Eromanga Basins with the three key Aboriginal Groups of the region – the Dieri People, the Yandruwandha/Yawarrawarrka People and the Wangkangurru/Yarluyandi People. To progress CEBAC goals and aspirations, an Aboriginal Participation Manager, jointly funded by DEM, Beach Energy, Santos and Senex, was recruited in 2018. The key aspirations are secure employment of Aboriginal people and the contracting of services from Aboriginal enterprises in the oil and gas sector.

Mining and Resources Industry Land Access Dispute Resolution Code

The South Australian Small Business Commissioner is tasked by the South Australian Government with developing prescribed industry codes of conduct under the *Fair Trading Act 1987*. These codes of conduct include the [Fair Trading \(Mining and Resources Industry Land Access Dispute Resolution Code\) Regulations 2018](#) known as the Mining and Resources Industry Land Access Dispute Resolution Code. This Code covers disputes between a farmer and one or more mining or resource operators over access to land used by the farmer for the business of primary production. The powers of the Small Business Commissioner enables both farmers and resource companies to access an enforceable mandatory dispute resolution

framework. This independent process is designed to resolve farming land access disputes in a timely and mutually beneficial manner.

Royalties for Regions

The Regional Roads and Infrastructure Fund (the fund), was established in 2018-19, to create a dedicated funding stream for projects aimed at improving roads and other important public infrastructure for regional communities. An estimated \$341 million will be paid into the fund over the next four years (\$90 million in 2019-20), based on 30 percent of mineral and petroleum royalty revenues over the same period.

Industry-led initiatives

Companies operating in South Australia are demonstrating leading practice community engagement and benefit-sharing practices. Case studies are provided (see **Attachment A**) relating to the following areas:

- supporting local communities through purchasing decisions;
- future land use planning and rehabilitation;
- working with Indigenous communities; and
- connecting with the local community.

Further details

For further information in relation to this submission, please contact the Department for Energy and Mining at +61 8 8463 3000 or DEM.minerals@sa.gov.au.

Attachment A: Industry case studies

Supporting local communities through purchasing decisions

Local buying by mine operators supports the prosperity of local businesses and regional and rural communities in South Australia. Alongside the direct jobs on the mine site, mining projects can offer significant economic opportunities through all stages of the cycle – from construction, operation, through to closure and rehabilitation.

A local procurement focus by mining operators can lead to increased local employment, training and upskilling prospects, development of new skills and a more diverse local economy.

Mining companies can offer additional support to help local businesses effectively compete for procurement contracts. Some ideas include:

- early engagement with local community and business representatives;
- set minimum local procurement targets;
- publish a local procurement policy;
- hold workshops or information sessions to help businesses find out about opportunities and complete procurement processes effectively and efficiently;
- establish a partnership with local organisations;
- consider different procurement mechanisms; and
- help businesses to secure and maintain any necessary standards or accreditations.

Companies in the South Australian resources and equipment, technology and services sectors are working with local communities to provide economic opportunities through local procurement.

BHP Olympic Dam and C-Res' Local Buying Program

BHP Olympic Dam has partnered with C-Res, a non-profit organisation, which runs a website portal where local businesses can register.

A C-Res business engagement adviser in Roxby Downs offers direct support to local businesses, backed by a program administration team. Since opening in October 2017, the program has delivered over 379 new work opportunities involving 85 approved businesses. Total spending is over \$3.2 million (to April 2019), with an average payment time of 12 days. Local businesses have provided services and goods including freight and logistics, maintenance and repair hardware, training, office supplies and other consumables.

OZ Minerals and GMUSG Carrapateena Local Participation Partnership

The Carrapateena Local Participation Partnership, formalised between OZ Minerals and Global Maintenance Upper Spencer Gulf (GMUSG) supports local procurement

targets by OZ Minerals' \$916 million Carrapateena copper–gold project, currently under construction 160 km north of Port Augusta.

Carrapateena is a new copper mine with a mine life of at least 20 years, and will have up to 750 contractors on site building the mine over the next few years. OZ Minerals and GMUSG have partnered to establish the contracting and manufacturing capability in the Upper Spencer Gulf to support the project and provide these businesses with direct contact with new business opportunities.

More than 40 businesses locally are already involved, with more than \$15 million worth of local expenditure. A community and supplier forum held in Port Augusta on 22 May 2019 saw over 95 organisations and businesses in attendance. Lead contractors, alongside OZ Minerals and GMUSG personnel, networked with local contractors and community members and discussed the opportunities presented by OZ Minerals' projects.

Future land use planning

South Australia is a pioneer of multiple land use and sequential land use outcomes across a variety of land uses, including our multiple use regional reserves and marine park systems and success in opening the Woomera Prohibited Area.

Early land use planning, including engagement activities with key stakeholders, can help properly balance different interests and build long-term wealth for the common good, which is critical to South Australia's long-term sustainability and international competitiveness.

A focus on future planning and a strong commitment to environmental rehabilitation in the South Australian resources sector is delivering sustainable futures in partnership with local communities.

Hillgrove Resources and the K4C Regional Master Plan

Hillgrove Resources and the local communities of Callington and Kanmantoo, through the Kanmantoo Callington Community Consultative Committee, have established a regional master plan to deliver positive long-term benefit to the community that hosts the Kanmantoo copper mine.

With large-scale mining coming to a close, and the successful sale of the pumped hydro energy storage project rights to AGL Energy Limited, the plan has also built community capability as it transitions to a future after mining.

Developed over four years, the plan has empowered the community to strive collectively for the best results for the local region, and will have long-term impact when integration with existing local government planning is finalised.

The community-led process to produce the master plan identified projects including heritage, arts, economy and environment. A unique collaboration grew with the University of South Australia's Match Studio that gave the community access to affordable expertise in design, architecture and project planning.

The community's vision is that this process will be held up as a model for mining companies across Australia to positively engage with their host communities for the collective betterment of regions, the mining industry and government into the future.

Progressive rehabilitation of Rowland Flat Quarry

The Rowland Flat Quarry lies in the heart of the Barossa Valley, and is a strategic source of construction materials, including bricklaying, concrete and plaster sands, all essential for the development of infrastructure.

By progressively rehabilitating the Rowland Flat Quarry, through structured pit planning and optimising the use of all materials on site, Hanson has minimised visual impact, regenerated local native vegetation using existing seed, returned land to a state where it ties into the surrounding environment immediately, and reduced dust impacts. Building good relationships with the local community has also been vital to supporting co-existence of different land uses in the area.

Working with Indigenous communities

Iluka Resources' Jacinth-Ambrosia mine operates in the Yellabinna Regional Reserve on the northern Eyre Peninsula, northwest of Ceduna. The reserve has very important cultural heritage and environmental values.

Rehabilitation research programs

One of the biggest challenges of working in an arid landscape is that so little is known about the native species. Iluka partnered with the University of Adelaide to look at the genetic variability of the important dryland species pearl bluebush (*Maireana sedifolia*) across the Eyre Peninsula to build a detailed bank of knowledge.

That work investigated and identified holistic methods to generate pearl bluebush seed and propagate with minimal water input. Associated rehabilitation work seeks to reinstate the landform as close as possible to the original to honour the cultural and environmental heritage values of the area.

Knowledge sharing between research and teaching institutions, the local community and the Far West Coast Aboriginal Corporation has led to broader positive impacts for land management in the region.

This program is a great example of local Aboriginal knowledge combining with science to achieve innovative solutions for local South Australian conditions.

Increasing employment and training opportunities

Iluka Resources has worked in partnership with the Far West Coast Aboriginal Corporation to increase employment of Indigenous people at the Jacinth-Ambrosia Mine.

Implementation of the Native Title Mining Agreement (NTMA) and a strong relationship with the Far West Coast Aboriginal Corporation has resulted in the achievement and maintenance of a 20 percent aspirational employment target of Indigenous people throughout mining operations, including a recent 18 month idle period in 2016 and 2017. The program of in-house environmental rehabilitation

implemented during that idle period achieved multiple benefits including the ongoing employment of the local and Indigenous workforce.

Connecting with the local community

Beach Energy's Otway Basin (SA) Project

Beach Energy has implemented a local community approach to consultation regarding its operations in the South East of South Australia. Beach Energy has a Regional Manager based in Penola, who is committed to ongoing engagement with landholders, stakeholders and community members.

A dedicated and engaged local company presence and office location provides the community with the opportunity to drop in and ask the Regional Manager questions about the program, while community sessions also provide face-to-face access to Beach Energy's drilling engineers, environmental experts and other project leads.

This approach is paired with Beach Energy's commitment to collaborating with local clubs and organisations and supporting community development.