South Australia’s 10 Economic Priorities

1. Unlocking the full potential of South Australia’s resources, energy and renewable assets
2. Premium food and wine produced in our clean environment and exported to the world
3. A globally recognised leader in health research, ageing and related services and products
4. The knowledge state – attracting a diverse student body and commercialising our research
5. South Australia – a growing destination choice for international and domestic travellers
6. Growth through innovation
7. South Australia - the best place to do business
8. Adelaide, the heart of the vibrant state
9. Promoting South Australia’s international connections and engagement
10. South Australia’s small businesses have access to capital and global markets
Premier’s foreword

The South Australian Government is pleased to provide an overview of our State’s world-class, long-life mineral assets and the opportunities they present for international investment.

South Australia has provided minerals to the world for more than 150 years. In the mid-19th century, the State’s copper and lead exports earned more than the wool and wheat exports of Australia as a whole.

Iron ore has been shipped from the State’s west since 1903 and the State’s capacity to supply minerals to international partners continued through the 20th century.

Today, with sophisticated discovery and mining technologies, we are in a better position than ever to work with global partners requiring large amounts of iron, steel, copper, gold, uranium, nickel, and mineral sands to feed the demands of growing economies.

Our State is a leader in the exploration and discovery of uranium, copper-gold and mineral sands. We are home to one of the world’s biggest copper, gold and uranium mines, Olympic Dam, and one of Australia’s significant copper-gold mines at Prominent Hill. While there have been exciting developments in recent years, there remains plenty of opportunities to make major discoveries and develop new mines.
The South Australian Government supports investors with its research capabilities and the provision of geoscience data bases to support exploration. South Australia is renowned internationally as a pro-business jurisdiction with policy and legislative frameworks that foster sustainable exploration and investment. As an economy we have a skilled workforce, and a strong mining technology and services sector that can further meet investors’ demands.

This investment guide adds to the many sources of information our Government provides to assist with the development of mining-related exploration and investment strategies and decision-making in our State. We hope you will find this to be a valuable reference tool in the ongoing endeavour to develop mutually beneficial partnerships between our regions.

Jay Weatherill
Premier of South Australia
South Australian resources industry – overview
South Australia is resource rich

- 69% Australia’s economic demonstrated resources of copper and 30% Australia’s copper production
- 80% Australia’s total known uranium resources and 60% Australia’s current uranium production
- 28% of Australia’s economic demonstrated resources of gold
- 10% world’s global resources of zircon contained within heavy mineral sands
- Australia’s second largest producer of iron ore
- World-class iron-oxide-copper-gold deposits at Olympic Dam and Prominent Hill
- Emerging developments in graphite, kaolin, manganese, tin, silver, lead and zinc
South Australia is at the centre of Australia’s road, rail and air logistics networks, providing time and cost advantages to key markets in China and across Asia.

It has a well planned supply of affordable industrial land linked to strategic infrastructure and transport corridors; an advanced manufacturing, technology and research base; and world leading companies across the defence, food and wine, resources, information and communications technology, and automotive sectors.

There is also strong collaboration and partnership between industry and three tiers of government; excellence in higher education, skills training and research; and expanding investment and trade relationships with China and India.

It is clear that there are numerous opportunities for investors across the South Australian minerals resources value chain, from exploration through project development to production and rehabilitation.

This guide outlines the investment opportunities at each of the four stages.

1. Exploration
2. Project Development
3. Production
4. Rehabilitation
Global demand for minerals and energy resources continues to grow. South Australia’s proximity to growing markets in Asia is contributing to its appeal as an attractive investment destination.

The State Government is developing relationships with targeted partners in Asia, capitalising on this proximity to and the strong demand in the region’s expanding economies. South Australia is richly endowed with minerals, oil and gas and renewable energy resources.

It has established highly regarded geoscience initiatives, an internationally respected regulatory framework and a highly skilled workforce. It also recognises that building these relationships and facilitating ongoing growth in mineral exploration, mining and resources development will create opportunities for companies in the State’s mining services and technology sector.
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Investing in the South Australian minerals sector
South Australia – a mining State. South Australia has a long history of mining a wide range of minerals, including copper, gold, silver, uranium, graphite, iron ore, lead, zinc and heavy mineral sands, as well as extractive minerals such as sand, gravel, shell, stone, shale and clay.

EXPLORATION AND MINING IN SOUTH AUSTRALIA

Mineral exploration and discovery is the lifeblood of a successful mining sector, and as one of the pillars of the South Australian economy is strongly supported by the South Australian Government.

South Australia prides itself on being an attractive destination for investment in the minerals sector, with a regulatory system and business environment that provides certainty, efficiency and effectiveness to investors and to the people of South Australia.
The South Australian Government recognises the importance of supporting investment in the minerals sector, and providing the conditions, certainty and initiatives companies need to make investment decisions.

In South Australia, minerals are the property of the government and managed on behalf of all South Australians. Access to the minerals is controlled through the South Australian Government’s Mining Act 1971 and the Mining Regulations 2011, which outline the regulatory framework for access to land, environmental management and the payment of fees and mineral royalties.

Any individual or company wishing to conduct exploration or mining activities in South Australia must obtain a mineral tenement from the Mineral Resources Division within the Department of State Development.

The Department is responsible for administering and regulating the State’s mineral resources industry.

The Department of State Development is committed to ensuring the sustained growth of the State’s mineral resources sector. In obtaining a tenement and undertaking exploration, the department looks to balance best-practice environmental management, economics, good science, land access and stakeholder engagement for subsequent mining development.

There are three principal investment options for entering the South Australian exploration sector:

- direct tenement ownership
- joint ventures with companies actively exploring in South Australia
- holding direct shares in Australian exploration companies.
DIRECT TENEMENT OWNERSHIP

Direct tenement ownership is generally a low-cost option for an investor but it does carry significant risk related to not making a discovery. It is advised that any potential investor consult with the South Australian Government’s Mineral Resources Division before progressing to tenement ownership. It is also recommended that an independent geological consultant is engaged to advise on areas of high mineral potential.

EXPLORATION LICENCES

The exploration licence, generally referred as an EL or tenement, is the principal title issued for exploration in South Australia. To apply for an exploration licence, the applicant must have a registered office in Australia. EL applications are treated on a first-come, first-served basis – apart from exploration release areas.

HOW TO APPLY FOR AN EXPLORATION LICENCE:

1. Application is submitted online through the South Australian Government’s South Australian Resources Information Geoserver -SARIG https://sarig.pir.sa.gov.au/Map
2. Pay the application fee for each licence when lodging an application.
3. Nominate the principal mineral(s) being sought and details of the proposed exploration model.
4. Submit a proposed program of exploration with phased and costed expenditure that will effectively target the mineral(s) and exploration model(s) being sought. The proposed program must meet the minimum expenditure requirement for a licence ($30,000 plus $97/km2 a year, rounded to the nearest $5,000) unless otherwise agreed by the Minister or delegate.
5. Provide a statement of the financial resources available to the applicant supported by acceptable evidence.
6. Provide evidence of available and appropriately experienced technical personnel capable of carrying out the proposed exploration.
7. Progress of the application can be tracked online via SARIG, to ensure the investor knows the status of the application at all times.

Q&A

AS AN EXPLORATION LICENCE HOLDER WHERE CAN I EXPLORE?

An exploration licence (EL) excludes current mining tenements (mineral claims, retention leases and mining leases) and any other areas not available for exploration (wilderness areas, certain parks, Mining Act reserves, coastlines etc.).
1: Investment in the exploration stage

EXPLORATION RELEASE AREAS
Another pathway available to potential investors wishing to obtain an exploration licence is the Exploration Release Area (ERA). An ERA is an area of mineral land in South Australia that has recently become available because the previous tenement holder surrendered it.


This is to ensure all companies and investors have equal and adequate opportunity to consider the areas on offer, including time to review the existing government data and exploration results from companies that have previously held the area.

Following completion of the advertising/moratorium period the Government will accept applications for an ERA. There is a required format and pre-defined assessment criteria to be addressed when applying for an ERA – see: http://minerals.pir.sa.gov.au/licensing_and_regulation/exploration#era


New exploration licenses or available Exploration Release Areas can be viewed and applied for in SARIG www.minerals.Statedevelopment.sa.gov.au/sarig

Another option available to a potential investor is to negotiate to buy an exploration licence from an existing tenement holder, subject to government approval.
Q&A

AS AN EL HOLDER WHAT MINERALS CAN I EXPLORE FOR?

Subject to the Act, regulations and conditions of the licence, an EL authorises the licensee to explore for all minerals and/or opal other than extractive minerals (i.e. building construction materials).

Iron Road’s Central Eyre Iron Project (CEIP) operations, Eyre Peninsula, South Australia (Photograph courtesy Iron Road)
1: Investment in the exploration stage

Q&A WHAT ARE THE BENEFITS OF AN EXPLORATION JOINT VENTURE?
The investor can capitalise on the exploration partner’s:
- understanding of local laws and regulations
- knowledge of local geology and exploration techniques
- understanding of local cultural and environmental requirements
- existing technical expertise
- access to existing and competitive supply chains
- awareness of potential sources of capital
- established corporate offices
- established relationships with Government and key decision makers
JOINT VENTURES WITH COMPANIES EXPLORING IN SOUTH AUSTRALIA

A potential investor may look to invest in South Australia’s exploration sector by forming a joint venture with a company that is actively exploring in the State. By joining with an existing exploration company a potential investor has the opportunity to benefit from the resources and skill set of the local exploration company, thus reducing the risk of the investment.

HOLDING DIRECT SHARES IN AUSTRALIAN EXPLORATION COMPANIES

Many exploration companies that are active in South Australia are publicly listed on the Australian Securities Exchange, the ASX (www.asx.com.au). By investing directly in an ASX-listed company a potential investor can have exposure to the South Australian exploration sector and the specific projects of that company.

An investor can purchase existing shares in the exploration company by trading through its licensed broker or, at the company’s discretion, participate in a public or private new share placement.

By investing in direct shares in a listed company the investor has all the benefits of the joint venture method but also has increased liquidity given the tradeable nature of the securities. However, investing directly in the shares of a company may not provide the desired control an investor seeks in or over a project or company.

To acquire shares in an unlisted exploration company, a potential investor would need to negotiate directly with that company.

The South Australian Government can introduce potential investors to suitable exploration companies or advisors, to assist with due diligence and acquisition processes.

SOME COMPANIES SPECIALISE IN PROJECT DEVELOPMENT, AND ADDING VALUE TO MINERAL DISCOVERIES. WHETHER COMPANIES ARE INTERESTED IN THE WHOLE VALUE CHAIN FROM DISCOVERY TO DEVELOPMENT, OR JUST A PART OF THE EXPLORATION OR MINING PROCESS, THE SOUTH AUSTRALIAN GOVERNMENT IS COMMITTED TO ASSISTING COMPANIES TO SUCCEED.
2: Investment in project development stage

Progressing from exploration through advanced exploration to project development represents a major financial commitment for a company. If the company is a large, well-established mining company it will usually have greater access to capital. Smaller exploration and mining companies may seek investors or project partners to provide funding to develop their mines, so that a potential investor has a range of investment opportunities during the development stage.

These options include:
- joint venture with a company owning a development project
- holding direct shares in a company with a development project
- key infrastructure and supply opportunities.

*Investment options*

- Acquire a development project in full
- Joint venture with a company owning a development project
- Holding direct shares in a company with a development project
- Key infrastructure, supply and off take opportunities
Geologist examining core sample at Carrapateena
(photo courtesy of OZ Minerals)
2: Investment in project development stage

PURCHASE OF A DEVELOPMENT PROJECT IN SOUTH AUSTRALIA
An investor looking to purchase a development project in full would need to negotiate directly with the current owner of that project, subject to government approvals.

JOINT VENTURES WITH COMPANIES ACTIVELY DEVELOPING MINING PROJECTS IN SOUTH AUSTRALIA
A potential investor may look to invest in South Australia’s mining sector by forming a joint venture with a company that is actively developing a project in the State. By joining with an existing company a potential investor has the opportunity to make a variety of investments, from a contribution to the project’s overall capital expenditure to funding specific activities such as feasibility studies, mine-site construction, or associated mine and transport infrastructure.

Q&A WHAT ARE ADVANCED EXPLORATION PROJECTS?
Advanced exploration projects have clearly defined mineral reserves with reasonable prospects for being developed as mines. In the mine life cycle, these projects are generally positioned between the near pre-feasibility stage and the near bankable feasibility stage.
HOLDING DIRECT SHARES IN A COMPANY WITH A DEVELOPMENT PROJECT

Similar to exploration companies, many development companies are publically listed on the Australian Securities Exchange, the ASX (www.asx.com.au).

By investing in a company listed on the ASX (or other public exchange), investors receive greater liquidity in their investments and have the benefit of the reporting requirements of a listed entity. For development companies this can be an important aspect of additional fundraising requirements.

An investor can purchase existing shares in the development company by trading through their licensed broker or at the discretion of the company participate in a public or private new share placement.

INVESTING IN KEY INFRASTRUCTURE, SUPPLY AND OFFTAKE OPPORTUNITIES

Mining projects generally involve significant capital expenditure and require a wide range of infrastructure and supply arrangements. Opportunities exist for potential investors to provide ongoing investment in new infrastructure that both services the mining industry and supports future growth. An investor may consider investing in or supplying a mining project through a specific piece of infrastructure, service or contract (such as offtake) as a contribution to project equity.

In South Australia, most infrastructure is owned and operated by the private sector, with access arrangements negotiated on a commercial basis.

The South Australian Government can introduce potential investors to suitable project development companies or advisors, to assist with due diligence and acquisition processes.
3. Investment in the production stage

Similar to the previous stages in the project life cycle, a potential investor has a range of options to invest at the production stage. The investor may:

• acquire a producing mine from an existing operator
• enter a joint venture with a company owning a producing mine
• acquire holding direct shares in a company with a producing mine
• invest in supply opportunities.

As most mining companies are listed on stock exchanges such as the ASX, a potential investor can identify potential opportunities from the published reports from company websites and the stock exchange. Miners listed on the ASX must report to the exchange on a quarterly basis and show a summary of their production and development activities during that quarter.

The South Australian Government can introduce potential investors to suitable mining companies or advisors, to assist with due diligence processes.
JOINT VENTURE WITH A COMPANY OWNING A PRODUCING MINE

To gain direct exposure to a producing mine, a potential investor can look to form a joint venture with a company with an active producing asset in South Australia.

A joint venture with expansion plans for the mine may be formed at this stage to assist the mining company with expansions plans of the mine or to free up capital for other purposes.

Negotiations between the investor and mining company are made on commercial terms between the two parties.

The South Australian Government can assist potential investors with introductions to relevant mining companies or advisors to assist with their due diligence process.

HOLDING DIRECT SHARES IN A COMPANY WITH A PRODUCING MINE

Similar to the companies in the other parts of the project life cycle, many mining companies with producing assets are publically listed on the Australian Securities Exchange, the ASX (www.asx.com.au).

An investor can purchase existing shares in a mining company by trading through their licensed broker or at the discretion of the company participate in a public or private new share placement.

KEY INFRASTRUCTURE, SUPPLY AND OFFTAKE OPPORTUNITIES

Mining projects generally involve significant capital expenditures and require a wide range of infrastructure and supply arrangements. Ongoing investment in new infrastructure to service the mining industry will also support future growth. An investor may wish to consider investing in or supplying the mining project via a specific piece of infrastructure, service or contract (e.g. offtake) as a contribution to the equity of the project.

In South Australia, most infrastructure is owned and operated by the private sector with access arrangements negotiated on a commercial basis.
4. The rehabilitation stage

MINING PROPOSAL APPROVALS
There is a two-stage authorisation process for mining in South Australia.

Before any mining can be undertaken, a company must first apply to the government for a mining lease (ML).

Once the lease is granted the tenement holder must then prepare a program for environment protection and rehabilitation (PEPR). This document provides a comprehensive and detailed description of environmental, social and economic risks and benefits of the proposed operation so that the government can make an informed, risk-based and balanced judgement about the proposed operation.

The PEPR includes detailed plans relating to mine management and control, mine closure and rehabilitation.

Only when the PEPR is approved by the government can mining operations begin.

The bond is assessed and determined by the government based on the approved rehabilitation plan provided in the PEPR.

The government requires that a bond (usually in the form of a bank guarantee) be lodged to cover the full cost of rehabilitation before mining begins. This is to ensure that the community is not left with costs of rehabilitation should the leaseholder forfeit the lease.

ALL MINING TENEMENTS ARE SUBJECT TO A BOND UNDER SECTION 62 OF THE MINING ACT.
CAN I GET HELP TO PREPARE A MINING APPLICATION?

The Department of State Development has Minerals Regulatory Guidelines to help mining companies understand the approvals process, environmental responsibilities and native title issues. All guidelines can be downloaded from the Mineral website http://minerals.Statedevelopment.sa.gov.au/licensing_and_regulation/mining_operations

Consultants specialising in assisting mining companies with documentation are listed in the department’s ‘South Australia Minerals Service Directory’ at http://minerals.Statedevelopment.sa.gov.au/home/services

Minerals Regulatory Guidelines MG1, Guidelines for miners: mining approval processes in South Australia and native title issues involved in a mining application.
32 Support
The South Australian Government recognises the importance of supporting investment in the minerals sector, and providing the conditions, certainty and initiatives companies need to make investment decisions.

The Government supports investment through the opening new exploration areas, providing access to geoscientific data, and co-funding exploration drilling.
1. Technical and pre-competitive information

The South Australian Government provides support in identifying exploration investment opportunities, principally through South Australia’s world-renowned SARIG online geographic information service. SARIG, the South Australian Resource Information Geoserver, is the portal to South Australia’s geoscientific, tenement and infrastructure data and information.

SARIG provides up-to-date views of mineral, petroleum and geothermal tenements and other geoscientific data. Visitors to the site can search, view and download information relating to minerals and mining in South Australia including:

- tenement details
- mines, advanced exploration projects and mineral deposits
- geological and geophysical data
- publications and reports (including company reports)

SARIG helps companies undertake due diligence in identifying investment targets, prospective ground and land available for exploration, and in connecting companies already active in areas of interest.

SARIG, THROUGH THE PROVISION OF SPATIALLY-ENABLED WORLD-CLASS GEOSCIENCE AND A WEALTH OF UP-TO-DATE SUPPORTING INFORMATION, ASSISTS COMPANIES TO UNDERTAKE DUE DILIGENCE IN IDENTIFYING INVESTMENT TARGETS, TO IDENTIFY PROSPECTIVE GROUND, LAND AVAILABLE FOR EXPLORATION, AND TO CONNECT WITH COMPANIES ALREADY ACTIVE IN AREAS OF INTEREST.

**SOUTH AUSTRALIAN MINING APP**

A free, downloadable app, produced by the South Australian Government that highlights real time investment opportunities with the State's mineral and energy resources sector. It covers key sectors of the South Australian economy, statistics and export data, and information on the State's major mineral and petroleum project locations and key infrastructure elements.

Download the app for iPad and iPhone to access geospatial map interfaces, and real time information and data on the major commodities by current mines, live Australian Stock Exchange (ASX) links, company websites and resource estimates.

**DRILL CORE LIBRARY**

The South Australian Government retains drill hole samples obtained from mineral and petroleum exploration in South Australia to provide essential information in the search for ore deposits and petroleum reserves, for re-interpretation of structural and stratigraphic relationships, and for geoscientific research.

Core and chip samples are particularly useful in providing information about those areas of South Australia where potentially metalliferous basement rocks are covered by younger, less prospective sediments or where rock units of interest extend offshore.

A new Drill Core Reference Library is being established at Tonsley. Bringing together more than 7.5 million metres of drill core material, the new library will be at the heart of the expanding resources precinct. The new library will have the capacity to store additional drillcore and cuttings samples from the next 20 years of exploration.
PLAN FOR ACCELERATING EXPLORATION (PACE)


PACE supports exploration in South Australia by:

• providing free to resources and energy companies detailed pre-competitive exploration geoscientific data and information
• investing in new research to increase the success of resources discovery attempts
• directly co-funding company exploration programs (through the Discovery Drilling collaborative program).

The South Australian Government launched the PACE initiative in 2004 and it quickly gained worldwide recognition as a valuable support tool for advancing resource exploration and mining developments in the State. PACE is managed by the Geological Survey of South Australia (part of the Department of State Development).

PACE informs new products for investors such as the South Australian Mining App and the ongoing development of SARIG.

It provides co-funding to exploration companies to target greenfield exploration projects that are considered of strategic importance to South Australia.

2. Funding Support
3. Facilitation services

SUPPORTING INTERNATIONAL INVESTMENT
The South Australian Government supports international investment through a wide range of programs and services relating to all aspects of a project’s life cycle.

INVEST IN SOUTH AUSTRALIA
Invest in South Australia helps investors discover and pursue opportunities in South Australia. It has well-established networks in the State’s business community, including with local project leaders, to connect investors to significant investment-ready opportunities. Invest in South Australia can also link companies to domestic and international sources of capital.

Invest in South Australia works with investment banks, corporate advisory firms, asset management firms, private equity firms, sovereign wealth funds, State-owned enterprises, multinational companies and high net-worth individuals.

It can provide investors with:
• information about key sectors of the South Australian economy
• details of investment opportunities in the resources, energy, renewables, infrastructure and agricultural sectors
• access to South Australian Government expertise in key sectors
• links to South Australia’s case management team
• access to South Australia’s professional services industry and supply chains.
3. Facilitation services

CASE MANAGEMENT
The South Australian Government provides a dedicated ‘case manager’ for each significant project being pursued within the State. Case managers are senior, experienced government employees, each responsible for providing a single point of contact to a company or investor for all government support and communication requirements.

Case management for mining projects is provided by the Department of State Development’s Mineral Resources Division. The Major Mining Projects team provides a comprehensive, informed, and coordinated approach to assisting proponents to ensure that projects are planned and developed:

• in consultation with all relevant stakeholders, to achieve a ‘social licence to operate’
• in a manner that balances environmental, economic and social impacts and benefits
• in a form that supports profitable operations that are sustainable over the long term and position the State’s broader minerals industry for sustained growth.

To achieve this, the Major Mining Projects team:

• coordinates interaction between the project proponent or investor and relevant government agencies
• works to identify and eliminate potential delays in government processes
• identifies and supports resolution of emerging risks.

SOUTH AUSTRALIA WORKS WITH COMPANIES TO DELIVER MINING PROJECTS WITH MINIMUM RISK, IN MINIMUM TIME.
THE MINING INDUSTRY PARTICIPATION OFFICE

The Mining Industry Participation Office helps build South Australia’s mineral and energy resources supply chain capability and assists local companies to capture opportunities from major resources projects.

It is focused on supporting the development of capabilities and capacity to service elements of a typical resources-sector value chain, such as mineral and energy exploration, construction, mining, processing, energy production, transport and logistics and support services.

The South Australian Government has committed $10 million over five years towards the development of strategically important capabilities in areas such as:

• deep-resource exploration and deep mining
• next-generation minerals processing
• leading practice in mine rehabilitation and environmental protection
• mine-to-mill optimisation, ore selection and pre-concentration, and mine logistics
• automating the resource sector through ICT applications across the mining lifecycle
• leading practice in multiple land-use policy and community engagement
• deep gas well operations and training.

For more information visit:
ICT ROADMAP
Adelaide is being developed as a national Information and Communications Technology (ICT) hub to service the mineral and energy resources sector.

The ICT Roadmap for Minerals and Energy Resources Project is industry-led and driven by the Australian Information Industries Association (AIIA) in partnership with the Department of State Development.

The roadmap identifies ICT approaches that can decrease costs and improve productivity, supply chain management, occupational health and safety, data collection and management, environmental management and global competitiveness. It focuses on current ICT use in mining

• future trends and opportunities
• gaps
• ICT research capabilities
• immediate requirements.

3. Facilitation services
TONSLEY

Tonsley is a collaborative and innovative industry, education and residential precinct taking shape in southern Adelaide. Located 10 km south of Adelaide’s central business district, Tonsley is focused on developing products and services for four industry sectors, including minerals and resources.

The project represents a $253 million State Government investment and integrates industry, research, education, training, retail, residential living and the community within a 61-hectare former automotive manufacturing site.

It has already attracted significant investment from companies such as global technology giant Siemens. With the opening in March 2015 of Flinders University’s $120 million flagship Flinders at Tonsley building, Tonsley is expanding its innovation and commercial potential for mining and resources project development.

TAFE SA’s Tonsley campus houses the new Onshore Petroleum Centre of Excellence, where workers in the oil and gas industry can earn formal qualifications in a fully immersive, simulated oil and gas production environment. The new State Drill Core Reference Library is due to open at Tonsley in early 2016.

Tonsley presents a unique opportunity to invest in a district designed to inspire collaboration, innovation and the commercialisation of new products and services.

For more information visit: www.tonsley.com
South Australia’s mining industry is supported by world-renowned research and development initiatives and support services.

**MINING AND PETROLEUM SERVICES CENTRE OF EXCELLENCE**

The South Australian Government has committed $10 million over five years as innovation seed funding towards the development of capabilities in areas such as:

- deep resource exploration and deep mining
- next-generation minerals processing
- leading practice in mine rehabilitation and environmental protection
- mine-to-mill optimisation, ore selection and pre-concentration, and mine logistics
- automating the resource sector through innovative ICT applications through the mining life-cycle
- leading practice in multiple land-use policy and community engagement
- deep gas well operations and training.

**REMOTE OPERATIONS CENTRE (ROC)**

The Remote Operations Centre (ROC) is a collaboration between OZ Minerals, the University of South Australia, IPACS Power and the State Government that provides an information and communications technology (ICT) platform for remote applications. It examines how vibration analysis of equipment at a distant mine site can indicate impending problems and failures. This enables equipment to be repaired before issues arise and used more intensively for longer periods.
DEEP EXPLORATION TECHNOLOGIES COOPERATIVE RESEARCH CENTRE (DET CRC)

Established in 2010, the DET CRC is the world’s best-supported independent research initiative in mineral exploration, with $145 million funding from the Commonwealth Government and partners.

The DET CRC provides safe and cost-effective research programs into drilling, analysing and targeting deep mineral deposits.

THE IAN WARK RESEARCH INSTITUTE

Established in 1994, the Ian Wark Research Institute at the University of South Australia holds a prominent place in the Australian research landscape with high-end research facilities and instrumentation.

Applied research focuses on chemistry and physics at interfaces, covering a wide range of mineral processing applications.

Areas of research include energy materials, minerals processing, functional coatings, lubrication and nanomedicine and biopharmaceuticals.
Considerations for investors
Significant lessons have been learned from international ventures undertaken over the past decade. The South Australian Government is committed to supporting the success of overseas investors looking to enter the South Australian minerals industry.

Investment decisions are resolved on an entirely commercial basis in Australia, with the role of governments to regulate rather than guide international investment. As a result, perhaps the most important influence on investment success has been the development of relationships between overseas investors and high-calibre local specialist providers. These relationships underpin due diligence processes through establishing an understanding of the effects of the local regulatory frameworks and in overcoming cultural and language differences between investors, joint venture partners and government.

For companies looking to invest in greenfields mineral exploration or mining projects it is critical that the due diligence process provides a clear understanding of both the opportunities and the challenges inherent in a particular prospect or project – from environmental challenges to mining and labour laws to taxation.

The South Australian Government can provide contacts for a range of local legal, investment, geology and project development specialists to assist with understanding the South Australian business environment.
In South Australia the regulation and technical procedures relating to mineral exploration and mine development are led by a senior Cabinet Minister, the Minister for Mineral Resources and Energy, and administered by a dedicated Minerals Resources Division within the South Australian Government's Department of State Development.

The right to explore and mine on any piece of land is controlled under law, principally the South Australian Mining Act 1971 and the Mining Regulations 2011. These documents establish a process for mineral investment. The Department of State Development has a series of guidelines and dedicated staff to work with investors, explorers and miners to progress through this process.

Exploration and mining projects are assessed under the Mining Act, with complementary secondary permits also assessed in relation to issues like water supply, environment and infrastructure.

The underlying mining and environmental regulatory approach is risk-based, focused on what the company should achieve, not how it should be achieved; allowing the flexibility to design, develop and deliver efficient mining operations.

The required approvals process identifies any environmental, social and economic risks associated with exploration and mining proposals, and leads to outcomes acceptable to the proponent, the Government and the community. It requires that, in addition to the economic and technical viability of a project, a company must address land access, environmental and community considerations.
As a first step, any individual or company wishing to conduct exploration or mining activities in South Australia must obtain a mineral ‘tenement’ from the Department of State Development.

A ‘tenement’ gives the holder rights to conduct certain activities on a parcel of land, ranging from exploration to project development to mining. As is the case across Australia, minerals in the ground are the property of the Government in South Australia, and are managed by the Government on behalf of all South Australians.

A Mining Lease – the tenement that gives companies the right to mine in South Australia – represents the transition of ownership of minerals to a company.

Prior to entering land to carry out operations companies are required to notify land owners. Some owners have a right to object to access and all have a right to compensation for the economic loss, hardship and inconvenience caused to them by the operations. In some cases (exempt land and native title land) an agreement is required with the owner or native title owners before access is permitted.

Native title is a form of land title that recognises the unique ties some Aboriginal groups have to land. Australian law recognises that native title exists where Aboriginal people have maintained a traditional connection to their land and waters, since sovereignty, and where acts of government have not removed it. Native title claims exist over most of the land in South Australia including the majority of pastoral leases.

Most, but not all land in South Australia is open to mineral exploration. Areas where there is no access for mineral exploration and mining activities or is restricted can be identified using the South Australian Resources Information Geoserver (SARIG) www.statedevelopment.sa.gov.au/sarig
Excellence in environmental performance is critical to the success of individual projects and to the long-term sustainability of South Australia’s exploration and mining sector.

All explorers and miners in South Australia operate under a comprehensive set of government acts and regulations that control the impacts they may have on the State’s natural resources and heritage. These include the Environmental Protection Act, National Parks and Wildlife Act, Native Vegetation Act, Natural Resources Management Act and the Commonwealth Environment Protection and Biodiversity Conservation Act.

The environmental approvals required for exploration and mining are centred on the company undertaking an expert assessment of any risks associated with their proposed exploration and mining activities. In order to gain approvals, companies must demonstrate that their proposed approach will not result in unacceptable impacts to the environment over both the short and long term.

To ensure that the South Australian community is not adversely affected by long-term impacts of mining, mine developers are required to invest in establishing, up-front, effective solutions for mine closure, and for working progressively toward mine closure from the start of mining operations. Miners are required to pay bonds for the rehabilitation liability associated with their operation, which is reduced and finally refunded as mine closure programs are completed.

Experts from the South Australian Government will work closely with both explorers and miners to manage the specific technical challenges relevant to each project.
Community engagement

Effective engagement with all stakeholders has long been a key part of best practice in exploration and mining. In South Australia, the industry as a whole, and at an individual project level, must build and maintain a ‘social licence to operate’. Failure to achieve this ‘licence’ may lead to delays in Government approving a project, result in expensive conditions, or lead to outright rejection of the proposal.

Even where a proposal succeeds, failure to adequately engage the community throughout the development and operational phases of a project may lead to subsequent difficulties, and the need for higher than normal resources to be expended by the company on reacting to community complaints and concerns.

Approvals processes are likely to proceed more smoothly where companies have effectively engaged with all of their stakeholders and, as far as practical and appropriate, addressed stakeholder concerns prior to submission. Again, the South Australian Government will work closely with all proponents to ensure that requirements are clear, and that the process is effective and efficient.

Reporting

Companies are legally required to report regularly to the South Australian and Australian Governments (for example the environmental regulators, the Australian Securities Exchange and the Australian Tax Office), and are expected to establish ongoing communication channels with stakeholders as part of good practice.
Investments by foreign persons in Australia are regulated under the Foreign Acquisitions and Takeovers Act 1975 (Cth) (FATA). The Foreign Investment Review Board (FIRB) examines foreign investment proposals to ensure the investment is in Australia’s interest and makes recommendations to the Commonwealth Treasurer on those subject to the Act and Australia’s foreign investment policy.

FIRB must be notified on certain acquisitions, irrespective of the value or nationality of the investor. Different exemptions and thresholds apply depending on the nature and value of investment as well as the country of origin.

As an example, all direct investments by any foreign government or State owned enterprise requires FIRB approval, regardless of the transaction value. Similarly for foreign non-government investors FIRB approval must be obtained when acquiring 15% or more (or 40% or more in aggregate with other foreign companies) in an Australian business or corporation with a value exceeding certain specified thresholds.

Investors should seek independent legal advice regarding the complex nature of the foreign investment rules.
In South Australia, mineral resources (below ground) are owned by the people of the State. Miners pay the State a royalty on the resources they extract and sell. The applicable royalty rate depends on the mineral being produced.

South Australia has one of the most competitive royalty regimes in Australia. Miners are attracted to the State’s new mine rate, which is fixed at 2 per cent of the value of the mineral sold for the first five years of production.

The South Australian royalty regime also allows for some mining operation costs to be deducted as part of the value of the mineral sold. Such costs may include transportation, loading and insurance expenses.

### Mineral type | Applicable royalty rate
---|---
Refined mineral products | 3.5% of the value of the mineral – examples include iron ore and uranium
Mineral ores and concentrates | 5% of the value of the mineral – examples include refined copper, gold and silver
Industrial minerals | 3.5% of the value of the mineral – examples include silica sand, gypsum and dolomite
Extractive minerals | 55 cents per tonne – examples include sand, gravel, stone, shell or clay (usually for construction).
CONSIDERATIONS FOR INVESTORS

Taxation

There are several direct and indirect taxes in Australia that investors should consider before making investment decisions. For full details and how they may apply to the investor’s situation the investor should seek appropriate independent financial and legal advice.

INCOME TAX
WWW.ATO.GOV.AU
An Australian resident company is subject to company tax, at a rate of 30 per cent of assessable income that is set by the Australian Government. A non-resident company is taxed on its Australian source income at the same rate as a resident company. Taxable income and the tax rate may vary under limited circumstances, such as industry or business structure.

CAPITAL GAINS TAX
WWW.ATO.GOV.AU
Capital assets held by an Australian resident company will generally incur tax payable on any capital gain on their disposal at the corporate tax rate.

GOODS & SERVICES TAX
WWW.ATO.GOV.AU
The Goods and Services Tax (GST) is a national, broad-based consumer tax on most goods and services sold or consumed in Australia.

Most businesses are required to register for GST with the Australian Taxation Office. Businesses that have paid for business supplies inclusive of GST are entitled to claim an equivalent input tax credit. Certain businesses may also be eligible for GST concessions.

PAYROLL TAX
WWW.REVENUESA.SA.GOV.AU
Payroll tax is a State tax levied on employers on payments made to employees. It may also be levied on payments made to contractors.

A payroll tax liability arises in South Australia when an employer (or a group of employers) has an annual wages bill in excess of $600,000 for services rendered by employees anywhere in Australia if any of those services are rendered or performed in South Australia.

The payroll tax payable is calculated as the gross taxable wages less allowable deductions multiplied by the payroll tax rate of 4.95 per cent.
OTHER TAXES AND DUTIES
Other taxes and duties may apply (such as land tax, fringe benefits tax and stamp duty on transfer of assets). Investors should seek appropriate independent legal and financial advice about these taxes.

RESEARCH AND DEVELOPMENT TAX INCENTIVE - WWW.ATO.GOV.AU
Exploration and mining companies may be eligible for Federal Government Research and Development (R&D) tax incentives. The R&D tax incentive provides a tax offset for expenditure on eligible R&D activities undertaken during the year. R&D activities conducted overseas are eligible under certain circumstances.
South Australia has three universities offering degrees in mining-related areas and other fields that link to minerals and resources development. Specific programs include:

• Bachelor of Engineering (Mining)
• Bachelor of Science (Mineral Geoscience)
• Bachelor of Science (Petroleum Geoscience)

The South Australian Government undertakes a range of programs and initiatives to support the development of a workforce that meets the demands of industry sectors such as minerals and resources development and infrastructure planning and development.

Training pathways to support the mining and resources area include vocational training and university study.

The vocational education and training (VET) sector provides people with the skills and knowledge to enter the workforce, train or retrain for a new job, upgrade their skills, or move into further study in the vocational sector or university.

TAFE SA and some Registered Training Organisations offer qualifications in mining and resources.

The Government recently launched a new ‘WorkReady’ strategy to help people gain higher-level skills for jobs in areas of strategic industry need.

www.workready.statedevelopment.sa.gov.au
**TAFE SA MINING, ENGINEERING AND TRANSPORT CENTRE**

The Mining, Engineering and Transport Centre (MET) located at TAFE SA's Regency Campus is a training facility purpose built to support the mining, civil and mechanical engineering, advanced manufacturing, transport and defence industries in South Australia.

**LABOUR REGULATIONS**

Australia’s employment system provides flexibility and certainty to both employers and their employees. It includes national standards of employment for all Australian employees, occupational health and safety regulations, and superannuation (pension) payments.

**EMPLOYMENT VISAS**

The Australian Government provides visas for businesses to sponsor and employ skilled workers who have recognised qualifications and skills or experience in particular occupations required in Australia.

For more information about skilled migrant requirements visit www.migration.sa.gov.au
58 Case Studies
MINERAL SANDS A MODEL OF INTERNATIONAL COLLABORATION

The re-opening of the Mindarie Mineral Sands Project has highlighted the emerging opportunities for increased international investment in South Australia’s growth industries and the continued relationship between South Australia and China.

Approximately 150 km east of Adelaide in South Australia’s Murray Mallee region, the Mindarie Project is operated by Murray Zircon Pty Ltd, under majority ownership by parent company Guangdong Orient Zirconic Industry Science and Technology Co. Ltd (Orient Zirconic or OZC) of China.

The export of minerals to China supports the manufacture of zirconium-based products for the ceramics, electronics, aviation and other industries.

Murray Zircon was formed in 2011 as a joint venture between Orient Zirconic and Australian Zircon NL. Under this joint venture Murray Zircon acquired the assets of Australian Zircon, including the Mindarie Project.

Murray Zircon
OZ Minerals

OZ MINERALS PARTNERSHIP SHOWCASES PROACTIVE GOVERNMENT INVOLVEMENT

Realising the full potential of the State’s copper assets is a key economic imperative for the South Australian Government.

In January 2015, the South Australian Government announced that it had entered into a research partnership with OZ Minerals that aims to improve the quality of copper concentrates produced in the State.

In November 2014, the South Australian Government released an economic priority aimed at unlocking the full potential of South Australia’s resources, energy and renewable assets. This included a target of attracting three resources companies with a head office in Adelaide - OZ Minerals is the first company to move to SA after this target was set.

In its February 2015 ASX announcement, OZ Minerals said that one of its early decisions in undertaking its strategic review was the relocation of its corporate office to Adelaide. It did so to reorganise the corporate function and reduce costs, and be closer to the company’s strategic assets. In addition, it is working with the South Australian Government on technical and infrastructure projects.

The research partnership will also involve collaboration to develop infrastructure in the State’s Far North that could further improve the economic case for opening up copper assets in the eastern Gawler Craton.
CASE STUDIES

Olympic Dam Domain

RICH LONG-LIFE ASSETS DEVELOP INTO MINES

The Gawler Craton in South Australia is a world-class mineral province and host to a cluster of iron oxide copper gold deposits, giving rise to lucrative multi-commodity ore bodies.

About 1,590 million years ago, the Gawler Craton - the major geological structure underpinning more than a third of South Australia - was the site of one of the world’s most spectacular mineralisation events. Magma either erupted or rose to the earth’s crust, drawing with it a bounty of minerals.

This event brought copper, uranium, gold and silver into a gigantic deposit at what is now Olympic Dam. The prospect was identified in 1976. Olympic Dam has been mined since 1988, and today is one of the most high-profile, multi-ore deposits and the State’s major copper-producing mine. The string of commodities makes Olympic Dam unique in the world – it is the fourth largest in copper and the world’s largest uranium deposit, with substantial occurrences of gold and silver. Geologists are yet to find the limits of this ore body; current estimates indicate it has a mining life that extends beyond 50 years at the current rate of production.

Following the discovery of Olympic Dam, other high quality deposits have been found. Prominent Hill copper gold mine came into production in 2005, and it has been followed by discoveries further south - the Carrapateena and the nearby Khamsin deposit, and Hillside - that are ripe for development.
A body of work by geologists points to the eastern Gawler Craton as a highly prospective terrain for copper, gold and uranium and silver resources. However, the Gawler Craton remains an under-explored frontier area.

More recently the southern edge of Gawler Range volcanics in northern Eyre Peninsula has drawn interest, showing impressive signs of lead, zinc and silver deposits. Commercial explorers are also looking into the possibility of sulphide-rich metal deposits. A bold initiative is underway to understand the mineral prospectivity and unlock the mineral resources under cover, through the State Government’s Minerals Systems Drilling Program.

The Geological Survey of South Australia also continues to support exploration for Olympic Dam-style mineralisation, with recent geo releases including a new 3D model of the Eastern Gawler Craton stimulating exploration interest.
For information on South Australia’s minerals and energy resources sector visit: www.minerals.statedevelopment.sa.gov.au

The South Australian Mining App is also available for download from The App Store. The app provides information and statistics that emphasise the South Australian Government’s one-stop approach to promoting investment opportunities in South Australia.

To discuss investment opportunities in South Australia, contact:
Resource Information Centre, Resource and Energy Group, Department of State Development
Ph: 08 8463 3000
Fax: 08 8463 6518
Email: resources.customerservices@sa.gov.au
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