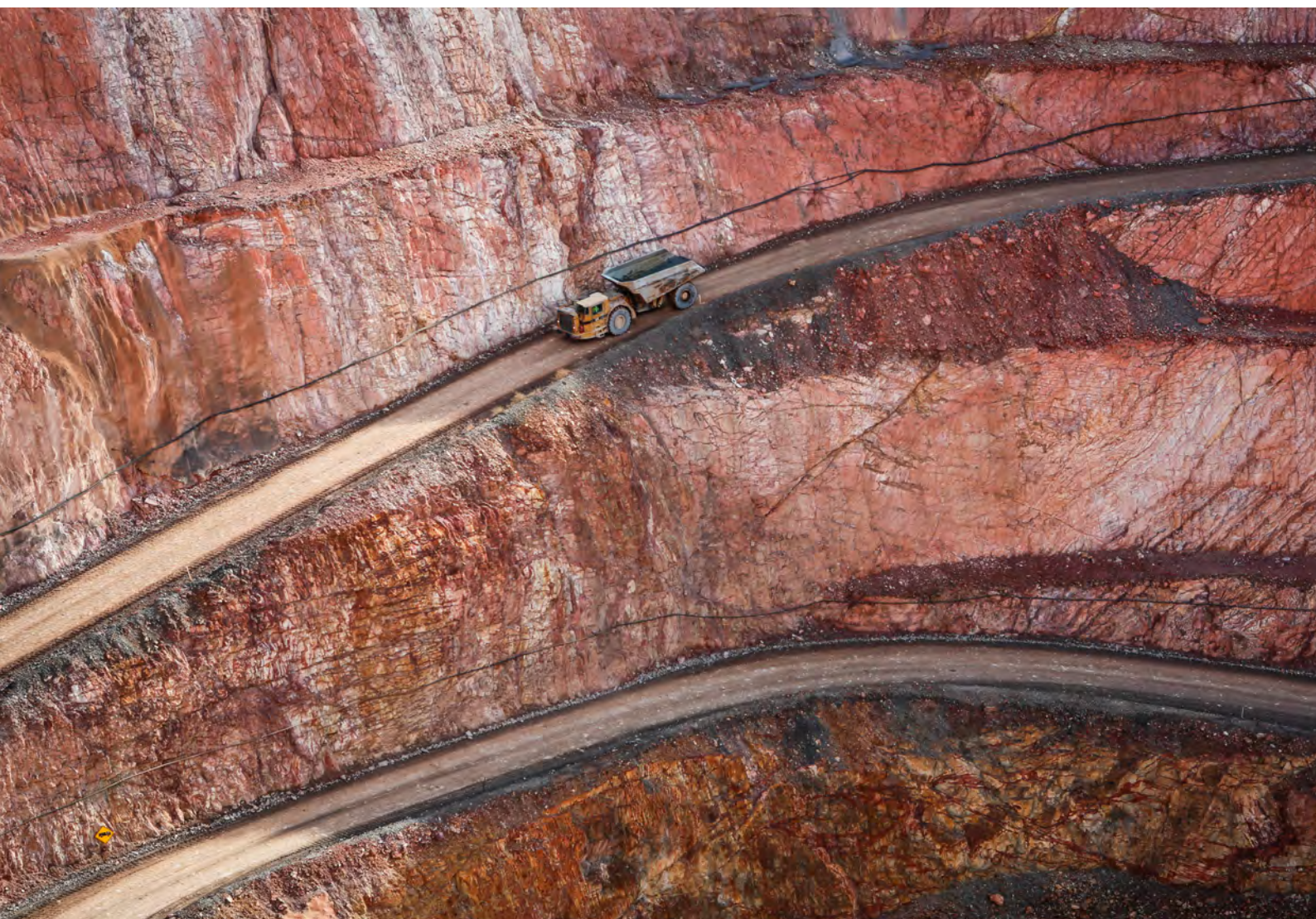




New Cobar Complex Project, State Significant Development (SSD10419) Environmental Impact Assessment

Prepared for Peak Gold Mines
February 2021





Part D Justification and conclusion



24 Justification

24.1 Introduction

The New Cobar Complex Project is proposed as a positive economic opportunity based on the extraction and sale of gold, silver and base metals. The EIS, and specifically this chapter, has been prepared to allow key stakeholders to make an informed decision as to whether this project should be approved. Should the project go ahead, it will achieve the following objectives:

- maintain continuity of operations at the New Cobar Complex through development of ore bodies that are economic and safe to mine by proven underground methods;
- the extraction further gold, silver and base metals not accessible by current underground operations;
- continued production at the processing plant at the Peak Complex beyond 2023;
- provision of ongoing stability, secure employment for PGM's workforce and economic stimulation for local, regional and State communities; and
- deliver net production benefits to the region, NSW and Australia, including additional contributions to local, regional and NSW household income.

The project design includes the implementation of mitigation and management measures to reduce potential adverse impacts and maximise potential positive impacts on the environment and community. Contributions to the regional economy will include direct economic activity (eg direct employment and wages), expenditure on inputs to production that can be sourced from the region such as repairs and maintenance etc, and expenditure of employee wages in the local and regional economy.

At its most fundamental level, the development of the project is proposed as a beneficial economic opportunity based on an optimised mine design to enable extraction and sale of gold, silver and base metals from the New Cobar Complex. This EIS has described the potential impacts of the project – their location, duration, severity and significance – to arrive at, in this chapter, a reasoned justification for the project. This chapter therefore addresses the environmental assessment requirements relating to the reasons why the project should be approved, with regard to:

- relevant matters for consideration under the EP&A Act, including how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the project;
- the biophysical, economic and social costs and benefits of the project; and
- the suitability of the site.

A detailed review of how the project accords with the objects of the EP&A Act is provided in Section 4.2 of this EIS. All dollar values presented are in Australian dollar terms unless otherwise specified.

24.2 Global resource context

The project will facilitate the production of approximately 6 Mt of ore that will be processed to produce lead, zinc, gold, silver and copper. PGM will develop valuable resources by providing the necessary capital and skills, without which the resource would remain in-situ. If the resource remains un-mined, the social benefits (see Chapter 20) and economic benefits (see Chapter 21) of the project will not be realised.

The New Cobar Complex is located in a geological zone of polymetallic high-grade ore bodies dominated by gold, silver, copper, lead and zinc, with a long history of stable, large-scale, low-cost production. Mining in the area has occurred since 1870, producing more than 200,000 t of copper and 3,000,000 oz of gold since mining began. PGM has been operational since modern mining commenced at the Peak Complex in 1991.

The *Resources and Energy Quarterly September 2020* (Department of Industry, Science, Energy and Resources, Office of the Chief Economist (OCE) 2020) reports that the COVID-19 pandemic, and subsequent containment measures, have significantly affected world industrial production and economic growth, which has in turn affected demand for, and stocks of resources including gold, silver, copper, lead and zinc. The International Monetary Fund assumes that the largest impacts occurred in the June quarter, and the recovery is expected to be unsteady and uneven across nations. Growth in world economic activity is expected to increase during 2021, with a forecast growth of around 5.4%, following a contraction of 4.9% expected in 2020.

The following sections provide an overview of demand for, and production of, the key commodities produced by the project. Information has been sourced from the Commonwealth OCE quarterly publication *Resources and Energy Quarterly Report September 2020* (OCE 2020) unless otherwise stated.

24.2.1 Gold

Globally, gold is used for jewellery (48%), coins and gold bars (20%), as an investment instrument for central banks (15%), global backed exchange traded funds (9%), and for a range of applications in the electronics, industrial, medical and dentistry industries (8%) (OCE 2020). Australia is the second largest producer of gold in the world, and therefore plays an essential part in meeting the global demand for gold.

Due to the COVID-19 pandemic and its impacts, the gold price is forecast to reach an annual record high in 2020, with a 27% increase on 2019 prices. Australian gold prices reached record highs in August 2020. Record prices are expected to drive expansion in gold mine production, with Australia expected to reach record production levels in 2021–22. It is anticipated that that a global economic rebound will see a slight decrease in gold prices by 2022 (OCE 2020).

The *Resources and Energy Quarterly Report September 2020* reports that global gold demand decreased by 5.9% year-on-year in the first-half of 2020, led by a reduction in both jewellery consumption and central banks' purchases. This was attributed to the COVID-19 pandemic, and higher gold prices adversely impacting global gold jewellery demand in the first half of 2020. Jewellery demand dropped by 46% year-on-year, led by a substantial drop (53%) in consumption from the world's largest gold jewellery consuming nation, China (OCE 2020). Official sector gold buying fell by 40% year-on-year to 233 t, with the world's largest gold buyer, Russia's central bank, suspending gold buying on 1 April 2020 due the COVID-19 pandemic.

Offsetting the fall in gold jewellery demand and official sector gold buying was a 517% increase year-on-year in inflows into gold-backed exchange traded funds in the first half of 2020. Demand for gold-backed exchange traded funds has been driven by the global COVID-19 pandemic, a low interest rate environment and record gold prices.

While world gold demand is forecast to fall by 16% in 2020 driven by reduced personal incomes which is deterring gold jewellery consumption in many parts of the world, demand is forecast to rebound and grow at an average annual rate of 2.8% in 2021 and 2022.

The *Resources and Energy Quarterly Report September 2020* reports that world gold supply fell by 6% year on year in the first half of 2020 due to decreased gold mine production and recycling. Mining activities were affected in the world's largest gold-producing country, China, with production decreasing 9% overall in the first half of 2020. Significant reductions in production were reported for Mexico (62% decline), South Africa (59% decline) and Peru (35% decline) due to the COVID-19 pandemic. However, production in Australia, the world's second largest gold-producing nation, increased by 4.4% in the first half of 2020, due to no disruptions associated with COVID-19. The second half of 2020 is expected to see increased production encouraged by record US dollar gold prices. Australian gold mine production is forecast to rise by 13% in 2020-21 and 4.1% in 2021-22, to 369 t and 384 t respectively, with production driven by new mines and higher output from existing gold mines (OCE 2020).

Overall, world gold supply is estimated to fall by 1.3% on global production and recycling in 2020, but it is expected that production and supply will increase during 2021 and 2022.

24.2.2 Copper

The *Resources and Energy Quarterly Report September 2020* (OCE 2020) reported that globally, copper consumption has fallen slightly in 2020, attributed to COVID-19 related consumption losses. Consumption is forecast to fall 1% in 2020, to 24 Mt, however recovery is expected in-line with world GDP growth and industrial production expectations.

The world's largest consumer, China, has recorded an annual growth of 5% each year over the last five years. Demand is expected to continue despite a decrease in the first half of 2020. A fall in consumption was noted in other regions including the US and EU, Japan and South Korea over the same period, however consumption is now recovering, partly attributed to sectors and infrastructure which have been the target of some economic stimulus plans which could boost short-term consumption (OCE 2020).

Copper prices for 2020 are forecast to be slightly lower than 2019, due to the economic downturn, however prices are expected to increase during 2021 and 2022.

Australia's copper exports are forecast to rise from 928,000 t in 2019-20 to 942,000 t in 2021-22, as a result of output from existing mines, expansions and new mines. Australia's export earnings are forecast to rise 4% a year to \$11 billion in 2021-22 (OCE 2020).

24.2.3 Zinc

Infrastructure stimulus packages are assumed to spur zinc consumption in the second half of 2020 after a global 8.5% year-on-year decline in zinc imports in the first half of 2020, associated with an expected contraction in world GDP in 2020, before growth in 2021. Zinc consumption typically moves in sync with world industrial production, which is expected to rebound after a decline in the first half of 2020 associated with the COVID-19 pandemic (OCE 2020).

Australia's zinc mine production is forecast to increase from 1.4 Mt (metallic content) in 2019-20 to 1.6 Mt in 2021-22, with zinc export earnings forecast to decline from \$3.6 billion in 2019-20 to around \$3.1 billion in 2020-21 and \$3.2 billion in 2021-22, as the Australian dollar appreciates, and prices ease slightly (OCE 2020).

24.2.4 Lead

The largest present-day use for lead is in batteries for vehicles, which accounts for 80% of current lead usage, while the remainder includes underwater cable sheathing, solder, casting alloys, chemical compounds, ammunition, weighting, glassware and radiation protection (Houston 2020). Uses for lead could increase in the future in large storage Statista batteries used for load-levelling of electrical power and in electric vehicles, including e-bikes (Huston 2020).

Huston (2020) reports that global lead consumption for 2020 has significantly reduced, with a reported 11,888,000 t consumed in 2019, and only 2,695,000 t being consumed in the first half of 2020. As reported for other resources, it is anticipated that world industrial production is likely to have slowed consumption of lead.

24.2.5 Silver

Demand for silver includes industrial applications, notably photovoltaics, photography (which has experienced a steady decline with the advent of digital photography), jewellery and silverware. The Silver Institute's *World Silver Survey 2020* (The Silver Institute 2020) reports that global mine production of silver fell for the fourth consecutive year in 2019, primarily due to declining grades at several large primary silver mines, lower silver production from copper mines and notable disruption losses at some major silver producers. World silver demand rose 0.4% in 2019 associated with higher retail investment being offset by lower jewellery and silverware demand. Australia was listed as the fourth highest silver producing country in 2018 and 2019, with 6% growth in 2019 year-on-year.

The Silver Institute reports that around 80% of silver's demand comes from areas likely to suffer as a result of the COVID-19 pandemic, and speculates that while physical investment is expected to grow, all other demand areas including industrial, photography, jewellery and silverware are forecast to suffer losses in 2020. Supply is also expected to decline associated with restricted mining operations in many locations (The Silver Institute 2020).

24.2.6 Demand summary

High demand for gold and copper drives mining focus by PGM and this focus make the extraction of other base metals economically viable. Ore produced by the project is likely to be copper-rich, with gold, silver lead and zinc also present in the ore body. Recent upgrades of the processing plant at the Peak Complex allow production of gold doré and greater efficiency in the recovery and production of copper, lead and zinc concentrates, diverting these metals away from tailings streams.

Overall demand for the metals produced by the project has been mixed in recent years, and in particular as a result of COVID-19 reduced consumer demand. Australia as a producer has not been affected by COVID-19 to the same extent as other nations, and stands to benefit from maintaining / increasing existing production levels to fill international production shortfalls.

The concurrent decreases in production for gold, silver and base metals from other producing nations affected by COVID-19, and international post-COVID-19 economic stimulus packages, is likely to lift demand for gold, silver, copper and zinc in coming years. Although international demand for lead has declined, demand rises and falls with industrial activity, and industrial production is anticipated to upswing in coming years on the back of economic stimulus flowing from post COVID-19 recovery packages. Lead continues to be in demand for a range of essential applications and separate concentrates produced cost effectively will have a market edge.

24.3 Economic justification

The project has strong economic justifications due to the net economic benefits and the economic stimulus it will provide locally, regionally and to NSW and Australia as a whole. Importantly, the project involves a mining operation that will, consistent with the objects of the Mining Act, extract a State-owned resource for the benefit of the State of NSW. Key beneficial impacts arising from the project are outlined below and discussed in further detail in Chapter 21 and Appendix R. Beneficial impacts are examined in consideration of what would otherwise occur if the project does not proceed.

24.3.1 Economic growth

Over three phases (construction, operation and decommissioning/rehabilitation) the project will contribute to economic growth of both the region and NSW more broadly through increased GRP and GSP. Through direct and indirect (flow-on) impacts, the project is estimated to support:

- a total of approximately \$32.8 M in GRP for the economic catchment (made up of the 10 local LGAs) and an additional \$19.7 M in GSP in the rest of NSW over the four-year construction phase;
- an annual average of \$73.4 M in GRP in the economic catchment, and an additional \$18.2 M in GSP annually in the rest of NSW during operation; and
- a total of approximately \$3.3 M in GRP in the economic catchment, and an additional \$0.2 M in GSP in the rest of NSW during decommissioning / rehabilitation activities.

24.3.2 Employment and incomes

The project will result in benefits for employment and incomes during all phases, compared to what would occur without the project.

- a total of \$604 M in wages and salaries is estimated to be paid to workers in NSW (directly and flow-on) between 2020-21 and 2032-33, including:
 - \$507 M of total wages and salaries for jobs within the economic catchment; and
 - \$97 M for wages and salaries in the rest of NSW.

Including both direct and flow-on (supply chain) activity, the project is estimated to support:

- a total of 159 FTE jobs in the economic catchment and an additional 108 FTE jobs in the rest of NSW during construction;
- an annual average of 342 FTE jobs in the economic catchment and an additional 112 FTE jobs per annum in the rest of NSW during operation; and
- a total of 19 FTE jobs in the economic catchment and one additional FTE job in the rest of NSW during decommissioning and rehabilitation.

24.3.3 Support for local businesses

PGM has an extensive supply chain for their existing operations in the Peak and New Cobar complexes. The project will extend the mining and processing activities at these complexes and thereby enable continued

support and opportunities for suppliers in the economic catchment and NSW that otherwise would be lost, providing additional security and longevity of business incomes (and employment). The project will also create opportunities to secure new contracts and increase sales to supply and service the needs of the project through flow-on impacts in the supply chain, during all phases of the project.

The project is expected to generate revenues for local businesses within the economic catchment and businesses in the rest of NSW, including:

- \$58.8 M in total within the economic catchment and \$37.4 M in the rest of NSW through direct and flow-on activity during construction; and
- \$18.4 M per annum within the economic catchment and \$39.5 M per annum in the rest of NSW through direct and flow-on activity during peak production.

24.3.4 Strategic context at a local level

The project is within the area covered by the FWR Plan, discussed in Section 4.5.3. The FWR Plan guides the land use planning priorities and decision making in the Far West up to 2036, and encompasses Cobar LGA as well as Broken Hill, Walgett, Central Darling, Wentworth, Balranald, Brewarrina and Bourke LGAs. The objectives of the FWR Plan are discussed in Section 4.5.3, however in relation to mining, it is notable that the plan highlights that the mining sector in the region continues to generate direct employment and provides flow-on benefits to communities.

Mining is noted as one of Cobar LGA's biggest economic opportunities, which, together with agriculture, contributes to almost 40% of the Far West's GRP. The plan acknowledges that competing land uses can restrict the ability for the region to take advantage of mineral resources. A key direction of the plan is the sustainable management and protection of mineral resources through local land use strategies and LEPs. The project is consistent with the regional planning strategic planning framework and directions of the plan relating to mineral resources.

24.3.5 Government revenue

The project will generate State and Australian government taxation revenues through a variety of taxes and duties, compared to what would occur if the project did not proceed. Overall, the project is estimated to deliver a total of:

- \$183 M in additional revenue to the Australian Government, through personal income tax and fringe benefits tax.
- \$59.8 M in additional revenue to the NSW Government, primarily through royalty payments.

These additional revenues can be used by government to provide additional infrastructure and services to support business and households in NSW and throughout Australia.

24.3.6 Cost benefit analysis

The net present value of the project has been estimated as the difference between the present value of future benefits and present value of future costs. A CBA for the project shows that, assuming a discount rate of 7%, the net present value of the project to the NSW economy is estimated at \$281.4 M. Even at a discount rate of 10%, the project is estimated to result in a net benefit to NSW of \$214.9 M. The benefit cost ratio is estimated at 1.59, highlighting that the project is estimated to return \$1.59 for every dollar cost. From an

economic perspective, the project is therefore clearly justified on economic grounds. The net present value (discount rate of 7%) includes the following costs totalling \$475.1 M:

- Construction costs \$53.3 M
- Operating and closure costs \$409.5 M
- Greenhouse gas emissions \$4.3 M
- Traffic / transport \$7.9 M

The net present value (discount rate of 7%) includes the following benefits totalling \$756.6 M:

- The value of production (including royalties and company tax) \$694.5 M
- Benefits to labour \$62.1 M

The net producer surplus of the project (value of production less operating and closure costs) totals \$285 M.

24.4 Social justification

The project will directly benefit the area of social influence, as outlined in the Chapter 20 (Social) and the SIA (Appendix Q). While the project has some potential negative impacts, it is considered that these can all be managed to acceptably low levels. PGM is building strong relationships with key stakeholders in the community and strengthening its 'social licence to operate' from those communities. The following key social benefits are expected to arise from this project:

- the extended life of mine will increase certainty for the future of the local community and reduce the decline in Cobar's population, allowing its residents to make long term decisions to live and work in the town;
- longer term stability for the existing workforce at PGM through to approximately 2035;
- increased spending on local private services and businesses, and increase in demand will stimulate local economic activity and services expansion, in turn generating improved social and commercial benefit; and
- PGM will continue to invest in and support local communities. These shared value schemes and community programs will increase levels of community wellbeing, cohesion and social capital, particularly for vulnerable community groups.

Recognising its important role in the local community, PGM acts as a member of that community to avoid or manage all potentially negative impacts as a result of its operations. This will continue as it extends mining and processing activities, while maximising the benefits and opportunities it creates for the people of Cobar.

24.5 Environmental justification

A summary of the key findings of the environmental assessment are detailed in Chapters 6 to 22 and the mitigation and management measures committed to is provided in Chapter 23: Summary of management measures. The EIS demonstrates that the project has been designed such that impacts are either avoided, or

appropriate mitigation measures identified so that the residual impacts are reduced, and on balance, the project can be justifiable.

24.6 Suitability of the site

The New Cobar Complex is an existing mining operation with an established disturbance footprint and substantial existing surface infrastructure. The suitability of the site is demonstrated by the following key benefits:

- the project maximises the use of existing infrastructure at the site, having operated as a modern mining operation since 2000, which has the effect of reducing unit costs of production;
- the use of existing infrastructure minimises the surface disturbance required to support the extraction of the resource, that may not otherwise be viable due to various economic, social and/or environmental considerations if new or additional infrastructure was required to be developed;
- the project will not result in significant residual impacts beyond the existing operations, and residual impacts that are predicted can be adequately managed; and
- the site has an existing loyal and predominantly locally-based workforce, and well established supply chains with the region and state of NSW to service the project.

The suitability of the site in relation to relevant objectives of the EP&A Act is discussed in Section 4.2.4; primarily the orderly and economic use and development of land. The project is a permissible development under the relevant planning regime, and is in accordance with the prevailing planning controls, which does not unduly restrict other beneficial uses around the project site. The project will recover valuable mineral resources without significant residual impacts and will bring significant social and economic benefits to the region, and NSW more broadly.

The site's suitability is also attributed to its existing loyal and predominantly locally-based workforce, as well as its established supply lines to key service centres of Dubbo and Orange. Wages for labour will contribute to the regional economy, as well as regional spending for production related inputs. Furthermore, with a net benefit to NSW of between \$214.9 M to \$371.3 M, the project represents a high value land use.

The project is responsive to its surroundings, with the project design having been optimised throughout the environmental assessment process in response to findings of technical studies so as to minimise impacts on people and surrounding land uses. Where impacts are still predicted to occur, mitigation measures have been proposed to reduce these impacts, so that the project will not displace other beneficial uses in the locality.

24.7 Ecologically sustainable development

The Commonwealth Government's National Strategy for Ecologically Sustainable Development (ESD) defines ESD as 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased'. The NSW EP&A Act adds to this by providing a set of ESD principles. The project's compatibility with each of the above (State and Commonwealth) principles is considered below.

As discussed in Section 4.2.4 and Chapter 5, a comprehensive stakeholder engagement, planning and environmental assessment process has ensured that the principles of ESD are addressed by the project. Notably, an extensive baseline monitoring program and previous assessments at the site have ensured that

impacts can be confidently predicted as outlined in this EIS. A range of mitigation and management measures have been identified to reduce the impacts of the project, which addresses the 'precautionary principle'.

The project will enhance community resources by generating employment and public revenues through royalties and taxes, contributing to improvements to local, State and National economies.

24.7.1 The precautionary principle

The precautionary principle holds that where there are threats of serious or irreversible environmental damage, a lack of full scientific certainty should not be used as a reason for postponing measures to prevent such damage.

The proposed mine plan and overall project design has been developed through an ongoing program of optimisation. This has included detailed investigations of geological, environmental, engineering and economic considerations. The conceptual design considered in this EIS and supporting assessments represents the current optimisation of the project, taking into consideration all physical, environmental, social, cultural heritage and economic considerations that are required to be addressed.

The engineering and geological assessments were used to optimise the most economic method of extracting the gold, silver, copper, lead and zinc resources while the social, cultural and biophysical studies are aimed at reducing areas of scientific uncertainty where there was the potential for serious or irreversible damage to environmental, social or cultural heritage values. These studies have helped to minimise risks to both the investment decision and the surrounding environmental, social or cultural values if they had not been identified (where they exist) and specifically addressed in the design and operational plans.

Within the constraint of the fixed location of the orebody and the economic and environmental drivers to use existing mining infrastructure, a lesser range of options were viable compared to perhaps, a 'greenfield' site in a similar setting. Nevertheless, as explained in Section 1.2.2, project planning included multiple rounds of design, assessment and refinement to avoid or reduce impacts. Importantly, the principle of minimising direct and indirect impacts on the surrounding environment include:

- the use of underground mining rather than open-cut methods;
- the use of stoping versus other underground mining methods;
- heavy reliance on the reuse of water;
- the refinement of proposed infrastructure locations (e.g. exhaust air outlet and fan) further away from Cobar township; and
- the siting of new facilities within the footprint of previous ground disturbance.

The result is that for all potential impacts no serious or irreversible harm will occur in the local environment. Therefore, the project addresses the precautionary principle because there will be no serious or irreversible environmental damage.

Further, in relation to uncertainty, the technical assessments prepared in support of this EIS have been prepared by technical experts in each relevant field. The engagement of suitably qualified and experienced consultants has ensured that the planning, design and environmental assessment phases of the project have been transparent. The contents of this EIS and accompanying appendices has enabled the potential implications of the project to be understood, and the management strategies, mitigation measures and monitoring activities required to ensure potential impacts are appropriately minimised, to be identified.

24.7.2 Inter-generational equity

Inter-generational equity is the concept that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. In considering this concept, it is important to acknowledge that most human activities have some impact on the natural environment, whether it is the construction of a new housing estate, food production or taking an international plane flight; all entail either consumption of a natural resource or an emission to the environment. This then means that intergenerational equity does not infer no impact to the environment but rather, acceptable impacts when considered on balance with the costs and benefits of the impact.

The environmental, social, cultural and economic impacts of the project are described in this EIS. The project will not result in significant residual impacts beyond the existing operations, and residual impacts that are predicted can be adequately managed.

The revenue generated by the project will be used to maintain employment of the workforce which will generate direct and flow-on benefits for the region and state. This will allow natural capital (the resource) to be transformed into economic (through wages and income) and human capital (a skilled and wealthier workforce). Contributions to governments in the form of royalties and payment of taxes will enable greater investment in public goods and services available for future generations, contributing to intergenerational equity.

24.7.3 Conservation of biological diversity and maintenance of ecological integrity

This principle holds that the conservation of biological diversity and the maintenance of ecological integrity should be a fundamental consideration for development proposals. The potential impacts of the project have been described in this EIS, including the negligible impact of the project on biodiversity as discussed in Chapter 12.

24.7.4 Improved valuation and pricing of environmental resources

The principle of improved valuation and pricing of environmental resources is based on environmental factors being included in the valuation of assets and services. The cost associated with causing an impact on the environment or an environmental resource is seen as a cost incurred for the use of that resource.

The EIS provides estimates of the monetary value of all material costs and benefits associated with the project (see Appendix R). It includes estimates of the value of intangible factors, such as noise and visual amenity impacts. The costs and benefits have been compared transparently to provide an estimate of the project's net benefit. The result is a reliable estimate of the project's economic value that provides useful guidance to decision-makers and other interested parties about the project's overall merit.

25 Conclusion

PGM is a wholly owned and operated subsidiary of Aurelia and owns and operates the Peak Gold Mines operation south-east of Cobar, in far western NSW. The project, known as the New Cobar Complex Project, proposes an amalgamation of the underground mining of the New Cobar, Chesney and Jubilee deposits and the development of new underground workings at the Great Cobar and Gladstone deposits.

Key aspects of the project include:

- Development of underground mining operations to access and mine the Great Cobar and Gladstone deposits using underground stope mining methods.
- Extension of the life of mine by 12 years from 2023 to 2035 (based on current market assumptions).
- Continued use of the underground mining fleet and associated workforce.
- Increase of the number of ore haulage trucks between the New Cobar Complex and Peak Complex from 25 loaded trips per day (50 movements in and out) to 50 loaded trips (100 movements in and out) per day (daylight hours only) averaged over a calendar year. The increase of daily truck movements will provide flexibility to PGM if there are unforeseen production disruptions (eg bad weather, haulage of waste rock for construction activities or similar (TSF lifts)).
- Continued use of the existing power supply, and construction of a new power line spur between an existing 22 kV power line and underground ventilation shafts to be developed under existing approvals for the Great Cobar exploration decline.
- Continued use of the existing water supply.
- No additional surface disturbance outside of surface disturbance areas permitted under the current approval, with the exception of the power line spur.

EMM, on behalf of PGM has prepared this EIS to support an SSD application for development consent under section 4.12 of the EP&A Act. It has been prepared to specifically address the SEARS, which were issued by DPIE on 13 February 2020 and amended on 29 October 2020.

The project has been studied from many perspectives and its final design is considered the most sustainable response to economic, social, environmental and cultural values that exist in the area. It is considered that the predicted economic and social benefits will strongly outweigh, primarily minor and manageable adverse impacts in the region. The EIS demonstrates that the project has been designed such that impacts are either avoided, or appropriate mitigation measures identified so that the residual impacts are reduced and, on balance, the project is justifiable.

The project has strong economic justifications due to the net economic benefits and the economic stimulus it will provide locally, regionally and to NSW and Australia as a whole. Importantly, the project involves a mining operation that will, consistent with the objects of the Mining Act, extract a State-owned resource for the benefit of the State of NSW. Contributions to the regional economy will include direct economic activity (eg direct employment and wages), expenditure on inputs to production that can be sourced from the region such as repairs and maintenance etc, and expenditure of employee wages in the local and regional economy.

A CBA for the project shows that, assuming a discount rate of 7%, the net present value of the project to the NSW economy is estimated at \$281.4 million.

The New Cobar Complex Project is proposed as a positive economic opportunity based on the extraction and sale of gold, silver and base metals. The EIS has been prepared to allow key stakeholders to make an informed decision as to whether this project should be approved. Should the project go ahead, it will achieve the following objectives:

- maintain continuity of operations at the New Cobar Complex through development of ore bodies that are economic and safe to mine by proven underground methods;
- the extraction further gold, silver and base metals not accessible by current underground operations;
- continued production at the processing plant at the Peak Complex beyond 2023 through to 2035;
- provision of ongoing stability, secure employment for PGM's workforce and economic stimulation for local, regional and State communities; and
- deliver net production benefits to the region, NSW and Australia, including additional contributions to local, regional and NSW household income.

PGM will continue to invest in and support local communities. These shared value schemes and community programs will increase levels of community wellbeing, cohesion and social capital, particularly for vulnerable community groups.

The project has been assessed in accordance with the principles of ecologically sustainable development in order for it to be considered for approval.

