Research Analyst: J-François Bertincourt

Update: DFS Milestone Clears the Path to Funding and Construction

DFS milestone: the completion of a successful Definitive Feasibility Study will assist in securing additional off-take arrangements as well as financing.

Tier 1 Asset: The Arcadia Lithium Project (87% owned by PSC) represents a globally significant hard rock lithium resource and is being aggressively developed, with a focus on near term production of petalite and spodumene concentrates.

Project Benchmarking: Using a number of different analytical charts such as grade vs. tonnage for mineral resource and potential mining inventory, capital intensity and mine life, the Arcadia Lithium Project keeps standing out as a large tonnage, relatively high grade project amenable to open pit mining with the lowest capital intensity among the most advanced hard rock lithium projects combined with a mine life in excess of 12 years. Fast Track to Production: Pre-development works at Arcadia Lithium Project site have commenced including the production of petalite and spodumene concentrates. In addition battery grade lithium carbonate (>99.5% Li₂CO₃) from Arcadia’s petalite has been produced from an established pilot plant. Earth works and the construction of the tailings storage facility are in progress. Project development is expected to commence as soon as funding is in place.

Mining & Processing: The pit design and optimisation for a conventional open cast mine (strip ratio 3:1) are completed. The mine shall use a conventional technology (density media separation, spirals and flotation) to beneficiate the ore and produce petalite and spodumene concentrates.

Tight Register: The top 20 shareholders including PSC board and management represent more than 60% of the register.

Funding: PSC is evaluating various financing options to develop the mine and concentrate plant including discussions with off-takers, including ongoing Sinomine engagement, equity and debt investors, suppliers (equipment, infrastructure & services). Financial Modelling:

**Arcadia project returns using different metal prices scenarios**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Current</th>
<th>PSC DFS</th>
<th>LT Consensus</th>
<th>Marginal Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Capex</td>
<td>US$165m</td>
<td>US$165m</td>
<td>US$165m</td>
<td>US$165m</td>
</tr>
<tr>
<td>Spodumene Price</td>
<td>US$930/t</td>
<td>US$689/t</td>
<td>US$833</td>
<td>US$520</td>
</tr>
<tr>
<td>NPV 10% (pre tax)</td>
<td>US$731m</td>
<td>US$511m</td>
<td>US$564m</td>
<td>US$29m</td>
</tr>
<tr>
<td>IRR (pre tax)</td>
<td>61%</td>
<td>44%</td>
<td>51%</td>
<td>13%</td>
</tr>
<tr>
<td>NPV 10% (post tax)</td>
<td>A$924m</td>
<td>A$636m</td>
<td>A$710m</td>
<td>A$24m</td>
</tr>
<tr>
<td>Initial Capex</td>
<td>A$229m</td>
<td>A$229m</td>
<td>A$229m</td>
<td>A$229m</td>
</tr>
</tbody>
</table>

Valuation: Our risk adjusted valuation is essentially based on the NPV of the Arcadia project using lithium prices between the current prices realised by existing producers and the long-term consensus prices (PSC scenario). As the company delivers on its plan and strategy, PSC should experience a significant value uplift, towards a price target of $0.067, resulting in a market capitalisation of $317m. Those values are post-financing assumed to be US$100m in additional debt and A$62.5m (US$45m) in equity.

Peer Transaction: The resource and reserve multiples derived from the acquisition of 50% of the Wodgina Lithium Mine by Albermarle Corporation for US$1.15 billion and applied to Arcadia provide a value range of A$370 to A$500m for the project at commercial production stage after a 30% discount is considered for country risk.

The recommendations and opinions expressed in this research report accurately reflect the research analyst’s personal, independent and objective views about any and all the companies and securities that are the subject of this report discussed herein.

For important information, please see the Disclosure & Disclaimer sections at the end of this document.
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1. PSC Valuation

PSC Assets

Prospect’s flagship project is the **Arcadia** Lithium Project located on the outskirts of Harare in Zimbabwe. The Arcadia Lithium Project represents a globally significant hard rock lithium resource (see section 4. Arcadia Project Benchmarking) and is aggressively developed focusing on near term production of petalite and spodumene concentrates.

On 3rd October 2018, Prospect announced an agreement with Farvic Consolidated Mines Pvt Ltd (“Farvic”) to increase its ownership in the Arcadia Lithium Mine from 70% to 87%. The consideration is a combination of 94,976,800 PSC shares and A$1,187,210 cash (subject to shareholder approval).

On 28th Feb 2018, PSC announced it has exercised its option to acquire the **Good Days** Lithium Project. The 8 km² Good Days lithium project is located in north eastern Zimbabwe and contains numerous mineralised pegmatites, including historical workings for spodumene and tantalite (amongst other minerals) at the Good Days and Jordywyitt mines. It is currently held by the Zimbabwean company Barrington Resources Pvt Ltd, who Prospect entered into an option agreement with in June 2017 to acquire a 70% direct interest in the project following a positive outcome from due diligence.

The **Gwanda East** Project is located in the Gwanda Greenstone Belt southeast of Bulawayo in Zimbabwe and covers a number of gold mines. These mines are situated within an almost contiguous block of claims, held by Prospect Resources, which cover approximately 25 km² of the productive gold bearing Gwanda Greenstone Belt.

The **Penhalonga** Gold Project is located in the Mutare Greenstone Belt which extends eastward into Mozambique and is considered to be one of the richest greenstone belts in Zimbabwe in terms of gold production per unit area at 122kg Au/km². Historical production from the Penhalonga valley between 1897 and 1937 amounted to 1.3 Moz Au, 1.6 Moz Ag, 7,300t Pb and 5.2t Cu. The project is located opposite Metallon’s Redwing Gold Mine that has produced 3.6 Moz Au to date (remaining resources of 2.5 Moz Au) and has restarted production following a period of care and maintenance. Along strike and across the border in Mozambique several large gold projects have been developed such as Xtract Resources plc’s Manica Fair Bride Au Project that has just had a DFS completed. The proposed operation is based on total compliant resources of 14Mt grading 1.7 g/t Au.

This report is solely focused on the **Arcadia** project.
Project Financing

Prospect Resources Ltd secured a US$10 million export finance facility from the Reserve Bank of Zimbabwe through CBZ Bank Ltd.

The facility carries an annual interest rate of 7.5% and a capital repayment holiday of 12 months, following which monthly capital repayments are required to be made for 24 months until May 2021. The company can also repay the loan anytime before the final installment without penalty.

The proceeds are earmarked to fund development at the Arcadia lithium mine, including the construction of the tailings facility, pre-stripping of the mine site and building construction.

According to the Definitive Feasibility Study (DFS), the capital development requirement amounts to US$165 million or A$229 million. We assumed that this funding requirement will be addressed as follows:

- US$100 million will be raised as additional debt
- US$10 million is available from the Sinomine prepayment (as announced on 4 April 2018)
- US$10 million is available from the export finance facility described above
- US$45 million or A$62.5 million will be raised via equity (at a price of $0.025 per share)

Capital Structure

Prospect Resources Ltd capital structure is summarised in the table below.

<table>
<thead>
<tr>
<th>Securities</th>
<th>Number</th>
<th>Price</th>
<th>Expiry</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares (19 Nov 2018)</td>
<td>2,046,114,971</td>
<td>$0.023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farvic consideration shares</td>
<td>94,976,800</td>
<td></td>
<td></td>
<td>To be issued</td>
</tr>
<tr>
<td>Unlisted Options</td>
<td>65,000,000</td>
<td>$0.050</td>
<td>31-Dec-18</td>
<td>Not considered</td>
</tr>
<tr>
<td>Unlisted Options</td>
<td>20,000,000</td>
<td>$0.100</td>
<td>2-Feb-19</td>
<td>Not considered</td>
</tr>
<tr>
<td>Unlisted Options</td>
<td>115,000,000</td>
<td>$0.015</td>
<td>15-Jun-19</td>
<td>Assumed to be exercised</td>
</tr>
<tr>
<td>Unlisted Options</td>
<td>45,000,000</td>
<td>$0.060</td>
<td>12-May-22</td>
<td>Not considered</td>
</tr>
<tr>
<td><strong>Total pre-financing</strong></td>
<td>2,256,091,771</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity financing</strong></td>
<td>2,500,000,000</td>
<td>$0.025</td>
<td></td>
<td>A$62.5m raising</td>
</tr>
<tr>
<td><strong>Total post-financing</strong></td>
<td>4,756,091,771</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PSC, Terra Studio

The Farvic consideration shares relate to the increase of interest from 70% to 87% described in the previous section.

For the valuation of PSC shares, we have considered the conversion of the 115 million unlisted options exercisable at 1.5 cents, expiring 15 June 2019.

Subject to securing the additional debt of US$100 million, we assumed an equity financing of A$62.5 million (or US$45m) at a share price of 2.5 Australian cents by issuing 2.5 billion shares.
PSC Valuation

Based on the DFS, we have derived a valuation for Prospect Resources as follows:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Value Range</th>
<th>Preferred</th>
<th>Risk Discount</th>
<th>Interest</th>
<th>Pre-Financing per share</th>
<th>Post-Financing per share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arcadia risked NPV @ 10%</td>
<td>$24-$924m</td>
<td>$636m</td>
<td>30%</td>
<td>87%</td>
<td>$0.172</td>
<td>$0.081</td>
</tr>
<tr>
<td>Other assets</td>
<td>$5m</td>
<td>-</td>
<td>100%</td>
<td></td>
<td>$0.002</td>
<td>$0.001</td>
</tr>
<tr>
<td>Cash</td>
<td>$12.8m</td>
<td>$0.3m</td>
<td></td>
<td></td>
<td>$0.000</td>
<td>$0.000</td>
</tr>
<tr>
<td>Exercised options (60m @ 0.5¢, 13 Nov 2019)</td>
<td>$0.3m</td>
<td></td>
<td></td>
<td></td>
<td>$0.006</td>
<td>$0.003</td>
</tr>
<tr>
<td>Cash from Sinomine prepayment (US$10m)</td>
<td>$13.9</td>
<td></td>
<td></td>
<td></td>
<td>$0.006</td>
<td>$0.003</td>
</tr>
<tr>
<td>Cash from export finance facility (US$10m)</td>
<td>$13.9</td>
<td></td>
<td></td>
<td></td>
<td>$0.006</td>
<td>$0.003</td>
</tr>
<tr>
<td>Conversion of options (115m @ 1.5¢, 15-Jun-19)</td>
<td>$1.7m</td>
<td></td>
<td></td>
<td></td>
<td>$0.001</td>
<td>$0.000</td>
</tr>
<tr>
<td>Exploration &amp; development</td>
<td>($5.0m)</td>
<td>($0.002)</td>
<td>($0.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for 17% additional interest in Arcadia</td>
<td>($1.2m)</td>
<td>($0.001)</td>
<td>($0.000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate costs</td>
<td>($7.8m)</td>
<td>($0.003)</td>
<td>($0.002)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity raising (US$45m)</td>
<td>$62.5m</td>
<td></td>
<td></td>
<td></td>
<td>$0.013</td>
<td></td>
</tr>
<tr>
<td>Sinomine prepayment (US$10m)</td>
<td>($13.9m)</td>
<td>($0.006)</td>
<td>($0.003)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBZ bank debt (US$10m)</td>
<td>($13.9m)</td>
<td>($0.006)</td>
<td>($0.003)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project finance debt (US$100m)</td>
<td>($138.9m)</td>
<td></td>
<td></td>
<td></td>
<td>($0.029)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$317m</strong> *</td>
<td><strong>$0.174</strong></td>
<td></td>
<td></td>
<td><strong>$0.067</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Terra Studio. *post-financing valuation. 0.72 AUD/USD assumption

Beyond the 10% discounting factor used to derive the DCF model, we have applied a risk discount of 30% to take into consideration the stage of development and risks associated with the construction and ramp-up of the Arcadia Lithium Project.

Peer Transaction

The recently announced transaction between Albermarle Corporation (NYSE: ALB) and Mineral Resources Ltd (ASX: MIN) where by ALB is acquiring a 50% interest in the Wodgina Lithium Mine for US$1.15 provides the opportunity to derive mineral resource and ore reserve transaction multiples as follows:

<table>
<thead>
<tr>
<th>Asset</th>
<th>Mineral Resource</th>
<th>Ore Reserve</th>
<th>MR multiple</th>
<th>OR Multiple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wodgina Lithium Mine @ US$2.3 billion</td>
<td>259 Mt @ 1.17% Li₂O for 3 Mt Li₂O</td>
<td>152 Mt @ 1.17% Li₂O for 1.8 Mt Li₂O</td>
<td>US$758/t Li₂O</td>
<td>US$1,294/t Li₂O</td>
</tr>
<tr>
<td>Arcadia Lithium Project</td>
<td>73 Mt @ 1.11% Li₂O for 808kt Li₂O</td>
<td>26.9 Mt @ 1.31% Li₂O for 351 kt Li₂O</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Company announcements, Terra Studio

Applying those multiples to the 87% interest of PSC in the Arcadia Lithium Project and considering a discount of 30% for country risk (A$/US$ at 0.75), we can estimate a potential transaction value in the range of A$370 million to A$500 million that PSC could attract when it has reached commercial production.
2. Recent Lithium Market Developments

Significant Transactions

This section focuses on transactions related to hard rock lithium companies and projects in Australia or listed in Australia.

- On 21st November 2018, Mineral Resources Ltd (ASX: MIN) announced an agreement with Albemarle Corporation (NYSE: ALB) for the potential sale of a 50% interest in the Wodgina Lithium Project and the formation of the 50:50 joint venture. The Purchase price for the sale interest is US$1.15 billion, based on a US$2.3 billion enterprise value for the Wodgina Lithium Project on a 100% basis.

- On 9th November 2018, Altura Mining Ltd announced a new binding offtake arrangement with Ganfeng Lithium. Ganfeng Lithium is a leading global battery materials producer that is continuing to expand both its lithium carbonate and lithium hydroxide production capacity. Some of the key terms of the agreement include: US$11m pre-payment on 2019 shipments; minimum SC6.0 price of US$550/dmt FOB and maximum price of US$950/dmt until the end of 2020.

- On 1st November 2018, Kidman Resources Ltd announced a binding offtake agreement with Mitsui & Co. Ltd in relation to the supply of lithium hydroxide. The Heads of Agreement is for an initial term of two years, plus 2 further two-year extension options. Agreed volumes to be supplied by Kidman will gradually increase and equate to less than 15% of Kidman’s share of nameplate production from the Refinery of 22.6kt per annum. Pricing will be variable and based on the price Mitsui achieves from its customers and prevailing international prices. There is a floor price for the duration of the initial term and any extension terms.

- On 11th September 2018, Altura Mining Ltd raised an additional US$15 million from its existing Loan Note Holders. The uses of the additional funds are the efficient ramp-up of the existing operation and to advance the plans for the Stage 2 expansion of the Altura Lithium Project to 440,000tpa.

- On 30th July 2018, Core Exploration Ltd announced a US$35 million pre-payment and concentrate offtake in non-binding term sheet with Shandong Ruifu Lithium. This is in addition to US$20M pre-payment and binding offtake agreement with Yahua (announced 1st Dec 2017), expected to provide a non-dilutive finance solution to develop the proposed Grants mine and build the DMS concentrate plant.

- On 5th April 2018, Tawana Resources NL and Alliance Mineral Assets Ltd announced their merger. The implied offer value of A$0.37 per Tawana share at the time of announcement, for a equity value of A$216m. The mineral resource of the Bald Hill project stands at 18.9 Mt at 1.18% Li₂O and 149ppm Ta₂O₅ at a 0.5% Li₂O cut-off.

- On 28th February 2018, Pilbara Minerals executed a landmark agreement with POSCO taking a A$79.6 million direct equity investment into PLS to accelerate Stage 2 of the Pilgangoora project. The agreement includes a binding life-of-mine off-take for an initial...
Prospect Resources Ltd (ASX:PSC)

DFS Milestone Clears the Path to Funding and Construction

80,000 tpa of chemical grade spodumene concentrate (SC6.0 basis). In addition, a Convertible Bond Agreement was executed on attractive terms with POSCO for the provision of A$79.6 million in unsecured convertible bonds to fund Pilbara’s 30% participation in the Downstream Joint Venture.

- On 5th February 2018, Tawana Resources through its subsidiary Lithco No.2 Pty Ltd (Lithco), which holds Tawana’s 50% interest in the Bald Hill lithium mine executed a binding A$5 million loan agreement with Red Coast Investment Ltd, an investment company nominated by German company Weier Antriebe und Energietechnik GmbH (Weier). The loan agreement is part of the A$25 million funding package to support works at the Bald Hill project, initially announced on 20th October 2017. Weier is a 100%-owned subsidiary of lithium industry specialist Jiangte Special Electric Motor Co. Ltd (JSMC), a company listed on the Shenzhen Stock Exchange.

Lithium Carbonate and Spodumene Concentrate Prices

Here are some the publicly announced lithium prices realised by market participants:

- Average Free on Board (FOB) realised price received for the September quarter was US$14,699/tonne up 8% from the June quarter and 31% year-on-year. Received average prices are expected to be softer in the December quarter. Gross cash margins increased 2% QoQ to a record US$10,059/tonne. Source: Orocobre Ltd September 2018 quarterly report. Those prices are realised at the Olaroz Lithium Facility, generating gross cash margins in excess of US$6,000/t.

- The Mt Cattlin spodumene mine achieved an average margin per tonne of concentrate sold of US$411/dmt down 23% from the previous quarter (after including royalties and marketing fees). Source: Galaxy Resources Ltd September 2018 quarterly report.

- On 15 November 2018, Reed Industrial Minerals Pty Ltd (RIM) (the incorporated entity that is held 43.1% MRL, 43.1% GFL & 13.8% Neometals and which owns Mt Marion) announced the SC 6.0 prices for the two quarters post 1 July 2018 had been agreed as follows:
  - For shipments departing 1 July 2018 to 30 September 2018, the SC 6.0 price is US$1,070.85/dmt (CIF).
  - For shipments departing 1 October 2018 to 31 December 2018, the SC 6.0 Price is US$930.80/dmt (CIF).

The recent evolution of spodumene concentrate over the past 18 months is summarised below:

<table>
<thead>
<tr>
<th>Spodumene Pricing Realised by the Mt Marion Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/ Price in US$/dmt</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Spodumene Concentrate 6% Li₂O</td>
</tr>
<tr>
<td>Spodumene Concentrate 4% Li₂O</td>
</tr>
</tbody>
</table>

Source: Mineral Resources Ltd
3. PSC Company Benchmarking

Figure 3.1 below compares the market capitalisation of a number of ASX & TSX-listed companies with hardrock lithium assets. The companies are grouped according to the stage of development.

**Figure 3.1 – PSC Company Benchmarking**

Source: Terra Studio.

We placed PSC among the companies in development considering its fast track timeline towards production. All the companies in this group have defined an ore reserve. We note the following points:

- The Arcadia project from PSC will have twice the throughput of Bald Hill (A40) at 1.2 mtpa now in operation
- In terms of initial ore reserves and mine life, the Arcadia project is close to the Pilgangoora project of Altura Mining (AJM)

Even if a discount for country risk (Zimbabwe vs. Australia) is considered, milestones such as securing development funding, off-take and construction of the Arcadia project should bring significant value uplift to PSC.

4. Arcadia Project Benchmarking

Mineral Resource

Figure 4.1 indicates that the Arcadia mineral resource sit well within the range of projects currently operating or in construction both in terms of size and lithium grade.
Figure 4.1 – Arcadia Mineral Resource Benchmarking

Source: Terra Studio

Ore Reserves

Similarly, Figure 4.2 indicates that the ore reserves defined at Arcadia sit well within the range of projects operating or in construction both in terms of size and lithium grade.

Figure 4.2 – Arcadia Ore Reserves Benchmarking

Source: Terra Studio
Arcadia has the lowest capital intensity among the new advanced project peers, with a completed DFS.

Capital Intensity - Mine Life

Considering that both Bald Hill and Mt Cattlin are brownfield re-start projects, Figure 4.3 highlights that Arcadia has the lowest capital intensity among the new project peers with a completed DFS.

Figure 4.3 – Arcadia Capital Intensity Benchmarking

![Graph showing capital intensity vs. mine life for various projects with Arcadia's data highlighted.]

Source: Terra Studio. Post beneficiation capex has been deducted when present. Projects with a DFS completed are in solid colour.

Core Lithium has completed a PFS on the Finniss project. The project currently has a very limited mine life. While additional resources have been delineated, those will require significant ore trucking to be processed.

AVZ Resources has recently completed a Scoping Study on the Manono project. The capital costs estimates are +/-35% accurate and the project development is about a couple of years behind Arcadia.

Arcadia’s low capital intensity is combined with a reasonable initial mine life. We note that the mineral resource currently includes 5.8 Mt at 1.45% Li₂O in the inferred category. Should the confidence of this additional resource increase to the indicated or measured category and satisfy the ore reserves criteria, the mine life would increase by 2 to 3 years.
5. Arcadia Lithium Project

Definitive Feasibility Study Summary

On 19 November 2018, PSC released the results of its DFS based on twice the throughput envisaged by the Pre-Feasibility Study released in March 2018. The results of the DFS confirm the project’s technical and financial viability to become a significant producer of spodumene, petalite and tantalite concentrates. Highlights of the DFS include:

- Anticipated production of 212,000t spodumene concentrates/year (6% Li2O) and 216,000t petalite concentrates/year (4% Li2O) and 188,000 lb/year tantalite (>25% Ta2O5) concentrates over the life of mine.
- JORC compliant ore reserves declared of 26.9Mt @ 1.31% Li2O and 128 ppm Ta2O5.
- The Ore Reserves support a Life of Mine of 12 years at an average strip ratio of 3.0 : 1.
- Comprehensive metallurgical testwork completed confirms ability to produce battery grade 6% Li2O (spodumene) and glass & ceramics grade 4% Li2O (petalite) concentrates with an average Lithia recovery of 68%.
- The Arcadia development schedule envisages completion in Q3 2020 with plant commissioning from November 2020.
- LoM Revenue US$2.93 Billion at a Cash Operating Cost of US$285 per tonne concentrate.
- Capital Expenditure of US$165 million.
- Net Present Value (pre-tax) at 10% discount rate: US$511 million.
- Internal Rate of Return: 44%.
- Using the following price assumptions (LOM averages):
  - Spodumene price (SC 6.0) FOB Beira: US$689/t
  - Petalite price (PC 4.0) FOB Beira: US$457/t
  - Tantalite by-product credit FOB Arcadia: US$75/t.

Location and Infrastructure

Figure 5.1 – Arcadia Project Location Map

The Arcadia Lithium Project is located approximately 38 km east of Harare, Zimbabwe and occupies an area of more than 9 km² of granted Mining Rights and consists of several historical lithium and beryl workings within an existing...
agricultural area. The Project is located close to major highways and railheads, with the Beira Port being less than 450 km away by rail/road transport (Figure 5.1).

The proximity to Harare as a source of skilled and semi-skilled labour, engineering skills and its location as a regional transport hub serves the project’s infrastructure and logistics needs very well. The Project area has access to sufficient ground and surface water resources to service the Project’s development and operational needs. Grid power (33 kVA) is located less than 3 km away from the Project, although onsite generation will initially be used.

Arcadia’s products may be transported to Beira via the main Harare-Mozambique road, with a section of road approximately 20 km long being upgraded for the haulage of concentrate through Goromonzi district to the Harare Mutare/Mozambique road. The road system to Beira is currently used by many trucking companies and thus very few problems are foreseen in the trucking of the concentrate to Beira.

Historical Work

The Arcadia Lithium Camp includes the Winston, Takashi, Green Mamba, Bing, Tourit and the Oribi Li-Be claims. Between 1962 and 1978, the Arcadia mine was sporadically worked as a small-scale open cast operation, where approximately 10,000 tonnes of lithium minerals were produced, in addition to some limited amounts of beryl. Economic sanctions forced the closure of the mine in 1978.

The concrete foundations of a small crushing plant, and dual milling circuit are all that remain of the old Arcadia plant. A few rails are testament to the short loading and hauling system employing hand pushed cocopan, that was probably in place from the pit to the plant site and rock dump.

Geology

Figure 5.2 – Regional Geological Map of Arcadia Lithium Project

Source: PSC
The geology of the greater Arcadia area is dominated by greenstone lithologies of the Arcturus formation of the Harare Greenstone Belt (HGB). These greenstones are encircled and intruded by a variable suite of granitic rocks.

The Arcadia Lithium deposit is hosted within a series of stacked, sub-parallel petalite-spodumene bearing pegmatites that intrude the local Archaean age Harare Greenstone Belt. Dimensions of the pegmatites defined by drilling to date are 3.5 km along strike (SW-NE), with an average thickness of 15 m and dipping 15 degrees to the NW.

**Figure 5.3 – Main Pegmatite outcrop in Arcadia Pit – looking North**

Source: PSC

The Main Pegmatite is exposed in the historical pit, and the deposit is open along strike to the southwest, where drilling is ongoing. The deposit is cut by the NNE-SSW trending Mashonganyika Fault zone, as well as a regional SW-NE trending dolerite dyke that appears to truncate the pegmatite to the NW. Continuation of the Lower Main Pegmatite has been identified and tested to the north-east of the Mashonganyika Fault Zone.

A package of up to 14 significant (>1m thick) stacked, sub-parallel pegmatites has been identified during the current phases of drilling. From youngest to oldest these are the Upper Pegmatite (U3), U2, U1, Main Pegmatite (MP), Lower Pegmatite (L1), L2, L3, L4/ LMP (Lower Main Pegmatite), L5, L6, L7 and L8.

The most significant bodies both in terms of thickness, lithium grade and lateral consistency are the Main Pegmatite and Lower Main Pegmatite, whose maximum thicknesses are 7-10 m and 25-50 m respectively. The other pegmatites are much thinner, bifurcate and coalesce along strike and down-dip, but are also mineralised.

The drilling programmes undertaken by Prospect Resources have proved that the package of stacked pegmatites extends for over 3 km of strike length, while surface mapping and trenching has shown the total strike length to be almost 4.5 km.

**Mineralogy**

The potentially economic lithium mineralisation in the Arcadia pegmatites is dominated by petalite and spodumene. Petalite appears to have crystallised prior or co-genetically with primary spodumene. Secondary mineralisation resulted from the alteration of primary petalite and spodumene to SQI (spodumene-quartz intergrowth) and eucryptite respectively.
Prospect has embarked on a detailed mineralogical study utilising XRD on >800 samples drawn from both the Main Pegmatite as well as the Lower Pegmatite, and from within the conceptual pit design.

The XRD results completed to date on the Lower Pegmatite show a broad mineralogical zonation through the Lower Pegmatite based on the spodumene-petelite ratio and quartz content. Sampled holes located within the modeled Lower Pegmatite display higher spodumene-petelite ratios along the edges and towards the upper contacts and a higher spodumene-petelite ratio in the central and lower portions of the Lower Pegmatite. The quartz content tends to be higher in the high spodumene zones; this can be ascribed to the re-equilibration post crystallization of the petelite to form spodumene-quartz intergrowths (SQI) in the slower cooling central, and to a lesser extent in the lower portions, of the pegmatite.

**Mineral Resource**

Since acquisition of the project in June 2016, Prospect has embarked on an aggressive, phased drilling program in order to delineate JORC compliant Mineral Resource estimates. The work has included diamond and reverse circulation drilling, geological mapping and channel sampling, topographic, geophysical as well as hydrographical surveys.

To date a total of 14 mineralised stacked pegmatites have been identified covering almost 100m vertical distance, with a strike of almost 4.5km SW-NE, by over 1km down dip.

Following announcement of a maiden JORC-compliant mineral resource estimate in October 2016, the mineral resource estimate was updated again in July 2017 and again in October 2017.

As announced on 25th October 2017, the JORC compliant Mineral Resource estimates for the Arcadia Lithium Project amount to:

**Arcadia Mineral Resource Estimate**

<table>
<thead>
<tr>
<th>Category</th>
<th>Tonnes</th>
<th>Li₂O (%)</th>
<th>Ta₂O₅ ppm</th>
<th>Li₂O t</th>
<th>Ta₂O₅ t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Resource 0.2% Li₂O cut-off</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured</td>
<td>15,900,000</td>
<td>1.17</td>
<td>121 ppm</td>
<td>184,900 t</td>
<td>4,200,000 lb</td>
</tr>
<tr>
<td>Indicated</td>
<td>45,400,000</td>
<td>1.10</td>
<td>121 ppm</td>
<td>501,500 t</td>
<td>12,100,000 lb</td>
</tr>
<tr>
<td>Inferred</td>
<td>11,400,000</td>
<td>1.06</td>
<td>111 ppm</td>
<td>121,400 t</td>
<td>2,800,000 lb</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>72,700,000</td>
<td>1.11</td>
<td>119 ppm</td>
<td>807,800 t</td>
<td>19,100,000 lb</td>
</tr>
<tr>
<td><strong>High Grade Zone 1.0% Li₂O cut-off</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measured</td>
<td>10,200,000</td>
<td>1.45</td>
<td>132 ppm</td>
<td>148,100 t</td>
<td>3,000,000 lb</td>
</tr>
<tr>
<td>Indicated</td>
<td>27,200,000</td>
<td>1.39</td>
<td>119 ppm</td>
<td>378,400 t</td>
<td>7,100,000 lb</td>
</tr>
<tr>
<td>Inferred</td>
<td>5,800,000</td>
<td>1.45</td>
<td>97 ppm</td>
<td>84,000 t</td>
<td>1,200,000 lb</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43,200,000</td>
<td>1.41</td>
<td>119 ppm</td>
<td>610,500 t</td>
<td>11,300,000 lb</td>
</tr>
</tbody>
</table>

*Source: PSC*
Ore Reserve

On 6th Dec 2017, Prospect announced a significant increase to Arcadia’s maiden Ore Reserve estimate amounting to 26.9 Mt (+70%) at 1.31% Li₂O and 128ppm Ta₂O₅ for 351,000 tonnes Li₂O (+66%). The ore reserves supports a mine life in excess of 12 years.

<table>
<thead>
<tr>
<th>Category</th>
<th>Tonnes</th>
<th>Li₂O</th>
<th>Ta₂O₅</th>
<th>Li₂O</th>
<th>Ta₂O₅</th>
<th>Fe₂O₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proven</td>
<td>8.0 Mt</td>
<td>1.36%</td>
<td>128 ppm</td>
<td>109,000 t</td>
<td>2.2 Mlb</td>
<td>0.93%</td>
</tr>
<tr>
<td>Probable</td>
<td>18.9 Mt</td>
<td>1.28%</td>
<td>127 ppm</td>
<td>242,000 t</td>
<td>5.3 Mlb</td>
<td>1.25%</td>
</tr>
<tr>
<td>Total</td>
<td>26.9 Mt</td>
<td>1.31%</td>
<td>128 ppm</td>
<td>351,000 t</td>
<td>7.6 Mlb</td>
<td>1.15%</td>
</tr>
</tbody>
</table>

Source: PSC

Mining

Conventional open pit mining is proposed for the delivery of 200,000 t/month or 2.4 Mtpa of ROM material to the comminution and processing facilities. The mining method is based on five nested sequential open pits. The final pit, (5) will measure some 1.1 km by 750 m, with a maximum depth of 130 m on the final high-wall.

Mining is anticipated to commence from the location of the historical open pit where the Main Pegmatite is exposed (Figures 5.4 and 5.5). Pit slope parameters were designed based on recommendations made by Geotechnical Consultants (Practara) with overall slope angles planned to be 54°-56°, with a batter angle of 80°. 10 m high benches are planned, with an operating berm width of 15 m, and a final width of 5 m.
Mining operations will be conducted utilising a contracted fleet for key equipment with some ancillary vehicles being supplied by the Company. Ore and waste will be handled by diesel hydraulic excavators and articulated dump trucks. Ore will be trucked to the crushing station where it will be directly dumped to the primary crusher, or stockpiled prior to front-end loader feeding. Waste material comprising meta basalt and some pegmatites will require blasting except for some of the very upper weathered rocks.

The mining dilution was estimated at 5%, and the total ore losses have also been estimated at 5%. Those values appear reasonable considering the characteristics of the ore and the shallow dipping geometry of the deposit. The grade of the dilution material, added to the ore stream is taken to have an average value of 0% Li₂O. This conservative approach does not make any allowance for Li₂O values which are likely to be contained in the diluting material. This scenario maximises the recovery of ore during mining, hence the mining recovery of the open pit minable resource is considered to be 95%.

Processing

The mineralogy of the Arcadia deposit lithium minerals shows petalite to be dominant, at up to 24% by weight, averaging 17% and spodumene to 10% by weight, averaging about 7%. Ta₂O₅ averages 128 ppm throughout the Ore Reserve.

Mineral processing will be based on use of conventional beneficiation techniques including gravity-based processes of DMS and spirals to recover petalite and tantalite, and froth flotation to recover spodumene.

The ore is hard, brittle and abrasive and 4-stage crushing has been selected to achieve the sub-3 mm crush size required to achieve adequate liberation of petalite for primary recovery by DMS. Secondary recovery of petalite finer than 0.6 mm is provided for by the use of multi-stage spirals. The target grade for petalite products is 4% Li₂O; i.e. 82% petalite.
The spodumene grain size is substantially finer than the petalite at sub-millimetre size, and together with the presence of spodumene-quartz intergrowth in the MP in particular results in limited recovery of spodumene by DMS and spirals. Consequently, all ore post gravity recovery will report to the flotation circuit where spodumene is effectively recovered at a grind size P100 of 212 μm. The target grade for spodumene concentrate is 6% Li₂O; i.e. 75% spodumene.

Tantalite will be recovered as rough concentrate by the application of wet high intensity magnetics separation (WHIMS) to reject streams from the DMS and spiral circuits. The rough tantalite will be upgraded to a saleable product containing approximately 25% Ta₂O₅ by the use of conventional wet shaking tables.

The petalite products will be stacked to allow drainage and partial air-drying prior to being packed into bulk bags and weighed.

Spodumene concentrate will be filtered, dried, packed into bulk bags, sealed and weighed.

Tantalite product will be dried and packed into 200 litre steel drums and sealed. As this product will contain radionuclides in excess of 0.1%, it will be stored, handled and shipped as a Class 7 dangerous good.

**Figure 5.6 – Arcadia Process Flowsheet**

Source: PSC

Process tailings will be disposed of to an engineered tailings storage facility.

Process water reclaimed within the process flowsheet will be augmented by process water returned from the tailings storage facility (TSF) for reuse in the processing plant.
Capital Expenditure

**Capital Expenditure Estimate**

<table>
<thead>
<tr>
<th>Capital Item</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine Development Cost</td>
<td>$5.0m</td>
</tr>
<tr>
<td>Process Plant</td>
<td>$112.8m</td>
</tr>
<tr>
<td>Earthworks and Civil works</td>
<td>$10.5m</td>
</tr>
<tr>
<td>Mechanical Equipment</td>
<td>$41.2m</td>
</tr>
<tr>
<td>Structural Steel, Plate Work and Piping</td>
<td>$16.3m</td>
</tr>
<tr>
<td>Electrical, C&amp;I</td>
<td>$14.4m</td>
</tr>
<tr>
<td>Spares and Consumables</td>
<td>$2.2m</td>
</tr>
<tr>
<td>Transport and Installation</td>
<td>$26.0m</td>
</tr>
<tr>
<td>Tantalum Recovery</td>
<td>$2.1m</td>
</tr>
<tr>
<td>Owners Cost</td>
<td>$47.4m</td>
</tr>
<tr>
<td>7 months mining</td>
<td>$2.6m</td>
</tr>
<tr>
<td>Owners Cost Operations</td>
<td>$9.6m</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$24.2m</td>
</tr>
<tr>
<td>Engineering and Services</td>
<td>$11.1m</td>
</tr>
<tr>
<td><strong>Total (including Contingency)</strong></td>
<td><strong>$165.2m</strong></td>
</tr>
</tbody>
</table>

Source: PSC

The costs have been estimated using firm prices, budget prices, list prices and current industry costs. Ongoing discussions continue with suppliers on pricing to confirm no material change. The capital estimate is established at an accuracy of +20/-10%. The project assumes the services of a mining contractor.

Operating Costs

Below is a table detailing the difference in unit OPEX between the PFS and DFS.

<table>
<thead>
<tr>
<th>Item</th>
<th>PFS</th>
<th>Updated PFS</th>
<th>DFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$69/t conc.</td>
<td>$74/t conc.</td>
<td>$60/t conc.</td>
</tr>
<tr>
<td>Processing</td>
<td>$153/t conc.</td>
<td>$150/t conc.</td>
<td>$120/t conc.</td>
</tr>
<tr>
<td>Administration</td>
<td>$25/t conc.</td>
<td>$26/t conc.</td>
<td>$20/t conc.</td>
</tr>
<tr>
<td>Freight and loading</td>
<td>$94/t conc.</td>
<td>$62/t conc.</td>
<td>$70/t conc.</td>
</tr>
<tr>
<td>Operating costs</td>
<td>$342/t conc.</td>
<td>$311/t conc.</td>
<td>$270/t conc.</td>
</tr>
<tr>
<td>with tantalum credits</td>
<td>$320/t conc.</td>
<td>$287/t conc.</td>
<td>$237/t conc.</td>
</tr>
<tr>
<td>Royalties and government marketing costs</td>
<td></td>
<td></td>
<td>$48/t conc.</td>
</tr>
<tr>
<td><strong>Total cash operating costs FOB</strong></td>
<td></td>
<td></td>
<td>$285/t conc.</td>
</tr>
</tbody>
</table>

Source: PSC

Operating costs for each of the activities within the project have not substantially varied on a unit basis between the PFS and DFS. The two areas that have changed are:

- Mining as a result of the increase of mining rate
- Processing as the result of the larger throughput
- Transport with the lithium concentrates in the Updated PFS being sold on a FOB African port rather than CFR China basis

The latter has a material impact on the overall unit cost of concentrate.
Operating costs disclosed by some of PSC peers are as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>Ticker</th>
<th>Throughput</th>
<th>Opex US$/t conc.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whabouchi, Canada</td>
<td>NMX</td>
<td>1.0 Mtpa</td>
<td>US$244/t</td>
<td>OP ex works mine</td>
</tr>
<tr>
<td>Pilgangoora, Australia</td>
<td>PLS</td>
<td>2.0 Mtpa</td>
<td>US$263/t</td>
<td>CIF</td>
</tr>
<tr>
<td>Pilgangoora, Australia</td>
<td>AJM</td>
<td>1.4 Mtpa</td>
<td>US$267/t</td>
<td>FOB Port Hedland</td>
</tr>
<tr>
<td>Goulamina, Mali</td>
<td>BGS</td>
<td>2.0 Mtpa</td>
<td>US$281/t</td>
<td>C1 cost</td>
</tr>
<tr>
<td>Arcadia, Zimbabwe</td>
<td>PSC</td>
<td>2.4 Mtpa</td>
<td>US$285/t</td>
<td>FOB Port of Beira, incl. royalties</td>
</tr>
<tr>
<td>Mt Holland, Australia</td>
<td>KDR</td>
<td>2.0 Mtpa</td>
<td>US$293/t</td>
<td>C1 cost</td>
</tr>
<tr>
<td>Authier, Canada</td>
<td>SYA</td>
<td>0.7 Mtpa</td>
<td>US$327/t</td>
<td>FOB Port of Montreal</td>
</tr>
<tr>
<td>Bald Hill, Australia</td>
<td>TAW</td>
<td>1.2 Mtpa</td>
<td>US$381/t</td>
<td>FOB Port of Esperance</td>
</tr>
</tbody>
</table>

Source: company announcements, Terra Studio

Among the projects included in the cost curve, Arcadia is the only project having completed a DFS.

Considering all current hard rock lithium producers and assuming all projects for which there is either a scoping study or some feasibility study are getting developed, the cost curve could look similar to the chart in Figure 5.7 below.

At this time, Arcadia is the only project (outside the projects in operation) with a completed DFS.

Figure 5.7 – Hard Rock Lithium Concentrate Cost Curve

Source: Terra Studio. Operating mines are highlighted in green, project in construction in grey.

According to this chart, Arcadia sits in the second quartile. It is important to note that from the end of the first quartile to most of the third quartile the cost curve is quite flat with all projects and mines within a US$60/t operating costs range. So as those projects progress through construction and ramp-up towards commercial production, the positions of those are likely to be interchangeable.
Metal Prices

Figure 5.8 displays historical lithium carbonate prices as well as consensus forecast prices as presented by Pilbara Minerals Ltd in August 2018. The consensus forecast is an average between leading investment banks and brokers.

We have selected the following metal prices scenarios:

- “Current”: current price realised by spodumene producers
- “PSC”: price scenario selected by Prospect Resources
- “Long-Term Consensus”: average of leading investment banks and brokers
- “Marginal Price”: possible floor price, similar to the US$550/dmt floor price agreed between Altura Mining and Ganfeng Lithium

For each scenario, the metal prices are set flat over the life of mine, except for the PSC scenario which hovers around $10,000/t in the early years before increasing to $11,000/t in FY2023 and plateauing at $12,000/t from FY2024.

<table>
<thead>
<tr>
<th>Metal prices assumptions</th>
<th>Current</th>
<th>PSC DFS</th>
<th>LT Consensus</th>
<th>Marginal Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Carbonate</td>
<td>$13,406/t</td>
<td>$10k-&gt;12k</td>
<td>$12,000/t</td>
<td>$7,500/t</td>
</tr>
<tr>
<td>Spodumene (6% Li$_2$O)</td>
<td>$930/t</td>
<td>$900/t</td>
<td>$833/t</td>
<td>$520/t</td>
</tr>
<tr>
<td>Petalite (4.1% Li$_2$O)</td>
<td>$620/t</td>
<td>$550/t</td>
<td>$555/t</td>
<td>$347/t</td>
</tr>
<tr>
<td>Tantalite (25% Ta$_2$O$_5$)</td>
<td>$75/lb</td>
<td>$75/lb</td>
<td>$75/lb</td>
<td>$75/lb</td>
</tr>
</tbody>
</table>

Source: PSC, Terra Studio
Off-take with Sinomine or other parties

Prospect signed a conditional Placement and Framework Agreement with Sinomine in November 2017. At that time, the pool of potential financiers and off-take partners was limited. This dynamic changed on 24 November 2017, when the new Government of Zimbabwe was sworn in.

With the new Government of Zimbabwe and its promotion to the international community that it is ‘open for business’ Prospect has received numerous enquiries from investors, financiers, commodity traders and off-take partners. Prospect intends to pursue discussions with these parties in parallel with continuing negotiations with Sinomine.

The current off-take agreement with Sinomine is a conditional, long-term (7 year) agreement with a spodumene and petalite concentrate formulae based on the price of lithium carbonate imported into China and concentrate prices sold on an FOB Port of Beira basis.

Sinomine

Founded in 1999, Sinomine Resource Exploration Co., Ltd., (Sinomine) was spun out from China Nonferrous Metal Mining (Group) Co., Ltd and is now a modern integrated geo-tech services company with head offices in Beijing, China.

The company is listed on the Shenzhen Stock Exchange (002738) since December 2014 with a market capitalisation of ~A$800 million.

Sinomine has the technical and financial resources to help Prospect fast track the development of Arcadia.

The company employs over 300 senior professional technicians and managers and its main business lines include solid mineral prospecting services, mining investment, resource evaluation services and international trade and logistics services.

Sinomine has carried out exploration and mining activities in over 20 different countries around the world including Zimbabwe, Zambia, Congo (DRC) and has subsidiaries in each of these jurisdictions.

Sinomine has ambition to become a leading battery minerals company. Sinomine has recently acquired Jiangxi Dongpeng New Materials Co., Ltd (Dongpeng) for some 1.8 billion Yuan (approximately US$280m) settled in shares and cash. Dongpeng is one of the main suppliers of lithium fluoride, which is a key raw material of lithium-ion electrolyte in China, as well as the largest manufacturer and supplier of caesium salt and rubidium salt in China.

Taxation and Royalties

The project has been awarded National Project Status meaning it is eligible to claim exemption from import duties and VAT on the value of imported capital goods to be used on the project.

The Company has applied for Special Economic Zone (SEZ) status. The key features of the SEZ status are that the Company will be taxed at zero percent (0%) for the first five years of its operations, and at a flat rate of fifteen percent (15%) thereafter.
All sales are subject to a 2% government royalty and a 5% marketing fee payable to the Minerals Marketing Corporation Zimbabwe (MMCZ).

The company could obtain concessions which would improve the financial outcomes from the project.

**Cashflow Model**

A cashflow model was built using the final assumptions as follows:

- Discount rate of 10% per annum
- AUD/USD exchange rate of 0.72

Results for the different scenarios are summarised below:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Current</th>
<th>PSC DFS</th>
<th>LT Consensus</th>
<th>Marginal Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Capex</td>
<td>US$165m</td>
<td>US$165m</td>
<td>US$165m</td>
<td>US$165m</td>
</tr>
<tr>
<td>Spodumene Price</td>
<td>US$930/t</td>
<td>US$689/t</td>
<td>US$833</td>
<td>US$520</td>
</tr>
<tr>
<td>NPV 10% (pre tax)</td>
<td>US$731m</td>
<td>US$511m</td>
<td>US$564m</td>
<td>US$29m</td>
</tr>
<tr>
<td>IRR (pre tax)</td>
<td>61%</td>
<td>44%</td>
<td>51%</td>
<td>13%</td>
</tr>
<tr>
<td>NPV 10% (post tax)</td>
<td>US$665m</td>
<td>US$458m</td>
<td>US$511m</td>
<td>US$17m</td>
</tr>
<tr>
<td>IRR (post tax)</td>
<td>60%</td>
<td>42%</td>
<td>50%</td>
<td>12%</td>
</tr>
<tr>
<td>NPV 10% (post tax)</td>
<td>A$924m</td>
<td>A$636m</td>
<td>A$710m</td>
<td>A$24m</td>
</tr>
<tr>
<td>Initial Capex</td>
<td>A$229m</td>
<td>A$229m</td>
<td>A$229m</td>
<td>A$229m</td>
</tr>
</tbody>
</table>

Source: Terra Studio.

The Arcadia project is highly leveraged to lithium prices. In the first three scenarios, the project generates some excellent cash flows. The first three scenarios show some good returns with NPVs generated equal to more than twice the initial capital expenditure and close or in excess of three times. The last scenario indicates the robustness of the project should lithium prices seen before the step change be repeated and recorded over 12 year mine life. In this extreme adverse case, the NPV remains positive.

**Development Timeline**

The DFS should lead to additional off-take arrangements (in addition to its existing off-take agreement with Sinomine), and securing project financing in anticipation of construction.

Construction and mine development are to be managed by Prospect Lithium Zimbabwe (PLZ), and are scheduled to be completed in Q3 2020, with commissioning from November 2020.

6. **Zimbabwe Mining Revival**

The long awaited resignation of President Mugabe represents a highly significant turn-around for the country. Zimbabwe, under its new Government is “open for business” and the country is again a focus for international investors and off-takers.
As such, Prospect Resources is receiving significant domestic support for its plans and operations from all relevant government departments.

Zimbabwe offers truly a once in a lifetime opportunity. The country’s 800 mines have capacity to earn US$18 billion per annum, but were only turning out about US$2 billion annually since 2009. This represents about a tenth of the sector’s full potential and translates to an incredible opportunity for investors, and the government is fully committed to create an enabling environment for investors. Zimbabwe plans to become a US$10 billion per annum mineral exporter by 2023.

Figure 6.1 – Zimbabwe Mineral Exports in US$ billions

Zimbabwe plans to become a US$10 billion per annum mineral exporter by 2023.

Source: RBZ, Chamber of Mines (2018)

7. Directors & Management Team

Hugh Warner, Chairman

Mr Warner holds a Bachelor of Economics from the University of Western Australia. He has broad experience as a public company director, having been a director of a number of publicly listed companies involved in the mining, oil and gas, biotechnology and service industries.

Sam Hosack, Managing Director

Mr Hosack is a third generation Zimbabwean, residing in Western Australia. He holds a Bachelor of Engineering Degree (Hons) from Essex University in UK, MBA from Ashcroft Business School (UK) and respective professional registrations. He has hands-on experience in the delivery of large scale mining, power and port projects to market, as well as their operations. For the past 12 years he has been employed by First Quantum Minerals Ltd, primarily in their Projects team, where most recently he has project managed the building of a port (coal offloading and copper loading), 120km 230kV transmission line and a 300MW coal fired power station for the Minera Panama Project in Panama. His mining and operations experience in North and Southern Africa, Europe, Australia and Central America will be central in delivering the Arcadia Project and in building Prospect into a diversified mining business.
Duncan (Harry) Greaves, Executive Director

Mr Greaves is a fourth generation Zimbabwean. He holds a B. Sc. (Agriculture) from University of Natal (in South Africa). He is the founding shareholder of Farvic Consolidated Mines (Pvt) Ltd which operates the Prince Olaf, Farvic and Nicolson gold mines in southern Zimbabwe all of which he brought back into production over the last 10 years including the design and construction of two milling facilities. He was also the driving force behind the acquisition of the Penhalonga Gold Project. He is a well respected and well known member of the Zimbabwe mining fraternity.

Gerry Fahey, Non-Executive Director

Mr Fahey has over 40 years’ experience in both the international and local minerals industry. He is a specialist in mining geology, mine development and training and worked for 10 years as Chief Geologist Mining for Delta Gold where he was actively involved with the development of the Eureka, Chaka, Globe and Phoenix gold mines and the following Australian gold projects: Kanowna Belle, Golden Feather, Sunrise and Wallaby. Mr Fahey is currently a Director of Focus Minerals Ltd and formerly a Director of CSA Global Pty Ltd, and member of the Joint Ore Reserve Committee (JORC).

Zed Rusike, Non-Executive Director

Mr Rusike is a qualified accountant and resident of Zimbabwe. He was previously the Managing Director of United Builders Merchant before being promoted to Group Managing Director for Radar Holdings Limited, a large quoted company on the Zimbabwe Stock Exchange. He retired from the Radar Group of companies to pursue personal interests and currently sits on the board of Cairns Holdings, TSL Limited, Dulux Paints Limited and Halsted Brothers (Pvt) Limited to name a few. Mr Rusike is a former President of and current Chairman of the board of the Confederation of Zimbabwe Industries.

HeNian Chen, Non Executive Director

Mr Chen has served as the Chairman of Changshu Yuhua Property Co. Ltd since 2003, and has served as the Deputy Chairman of Afore New Energy Technology (Shanghai) Co. Ltd since 2007.

8. Investment Risks

PSC is exposed to a number of risks including:

- **Geological risk**: the actual characteristics of an ore deposit may differ significantly from initial interpretations.

- **Resource risk**: all resource estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates, which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate.

- **Commodity price risk**: the revenues PSC will derive through the sale of lithium and tantalum concentrates expose the potential income to metals price risk. The prices of lithium and tantalum fluctuate and are affected by many factors beyond the control of
PSC. Such factors include supply and demand fluctuations, technological advancements and macro-economic factors.

- **Exchange Rate risk**: The revenue PSC derives from the sale of metal products exposes the potential income to exchange rate risk. International prices of various commodities are denominated in United States dollars, whereas the costs base is in Rand and the financial reporting currency of PSC is the Australian dollar, exposing the company to the fluctuations and volatility of the rate of exchange between the USD and the AUD as determined by international markets.

- **Mining risk**: A reduction in mine production would result in reduced revenue.

- **Processing risks**: A reduction in plant throughput would result in reduced revenue. In all processing plants, some metal is lost rather than reporting to the valuable product. If the recovery of metal is less than forecast, then revenue will be reduced.

- **Operational cost risk**: An increase in operating costs will reduce the profitability and free cash generation of the project.

- **Management and labour risk**: An experienced and skilled management team is essential to the successful development and operation of mining projects.

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