

VRX Silica FY21 Sustainability Report

FY21 Highlights

- Environmental Conducted carbon lifecyle analysis for estimated greenhouse gas (GHG)
 emissions at Arrowsmith North.
- Social Engaged with numerous stakeholders in the region including Indigenous groups, local government and landowners
- Governance Adopted ASX Corporate Governance Principles and Recommendations 4th Edition as the new governance standards

Development at VRX

Significant progress has been made during the past year. Some of the key achievements;

- Mining leases granted for all the company's three Silica Sand projects;
- Extensive environmental studies conducted on all the company's silica sand projects over each season
- · Comprehensively reviewed a 'proof of concept' Vegetation Direct Transfer (VDT) trial
- Lodged Project Referrals with Federal and State environmental assessment agencies for the Arrowsmith North Silica Sand project
- Continue to engage with those agencies to progress the environmental approvals for mining at Arrowsmith North
- The first 6 to 10 years of proposed mining at Arrowsmith North has been grade controlled
- Significant test work was successfully conducted in order to produce a number of specific marketable products
- Significant progress has been made on the engineering of the proposed plant by experienced engineers ProjX
- The proposed plant design was conducted with the aim to operate predominately with recycled water
- · Commencement of drilling the Borefield water supply for the plant
- Investigated opportunities for the project to be powered by gas with supporting solar
- Engaged with potential final use offtake partners and sent numerous samples of various volumes for testing
- · Completed greenhouse gas emissions estimates as part of its maiden ESG reporting this year

VRX Silica Limited is very conscious of its social licence obligations and during the year proactively engaged with the traditional owners, conducted Heritage Surveys at all projects, and engaged with stakeholders in the region.

Overview of operations

VRX Silica Limited (ASX: VRX) is an explorer and prospective producer of silica sand with a focus on exporting the commodity to meet rising demand in the Asia Pacific region. We are headquartered in Perth, Western Australia (WA) with operations at three silica sand mine sites across the State.

Our total silica sand mineral resource stands at 1,056 million tonnes (Mt) and range in grade from 96% to 99% silicon dioxide or silica (SiO₂), with low iron impurities. We also have total declared probable ore reserves of 261 Mt, ranging in grade from 99.6% to 99.9% SiO₂.

Silica sand is the primary component of a range of standard and specialty glass and is used for metal casting (foundries), metal production, chemical production, paint and coatings, ceramics, filtration and water production, and oil and gas recovery. Specifications of high-quality silica sand is also used to produce the high demand ultra-clear glass covering solar panels.



Rising global demand and prices for silica sand – coupled with an increasing shortage due to dwindling local supplies and environmental restrictions specifically on dredging – offers a significant export opportunity for VRX. The Asia Pacific region currently accounts for 47% of global demand for silica sand and, between 2021 and 2027, is predicted to grow at a compound annual growth rate (CAGR) of 7.7% or over 10 million tonnes.

VRX and our WA-based silica sand projects are well positioned to meet this need. The scale of our projects could also provide a long term opportunity for Western Australia to develop a glass manufacturing industry.

Corporate Strategy

Our strategy is to become a global producer, exporter and supplier of choice for high-quality silica sand. To achieve this, we have secured long-term mining leases at four large-scale, high-grade and low-impurity silica sand tenements in Western Australia, the first two of which are in an advanced stage of development. All three projects offer the potential for substantial mineral reserves, benefit from existing and adjacent road and rail lines to major export ports and close to established infrastructure (logistics, power, water).

VRX projects

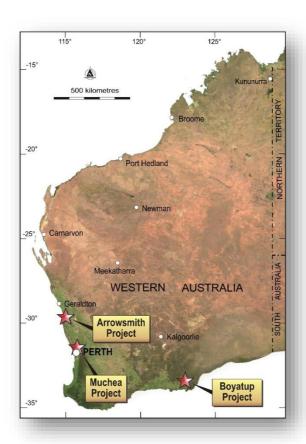


Figure 1 – VRX Projects



Arrowsmith North Silica Sand Project, Western Australia

VRX was granted our 100%-owned Arrowsmith North Mining Lease, M70/1389, on 16 November 2020. The site is located in the Geraldton Sandplain bioregion approximately 35-km north-west of Eneabba, Shire of Irwin, and some 270-kms north of Perth. It holds an estimated 771 Mt of total indicated and inferred mineral resources at 98.0% SiO₂ readily amenable to upgrading by conventional washing and screening to be suitable for industries such as glass making and foundry sand. Arrowsmith North is considered a world class deposit and estimated to hold 25 years' worth of production with potential for a 100+ year minelife. The 377-square-kilometre site lies adjacent to the Brand Highway and the Eneabba-Geraldton railway, providing a direct road and rail connection to Geraldton Port which is suitable for bulk shipping and offers a unique logistics solution.

Arrowsmith Central Silica Sand Project, Western Australia

VRX was granted our 100%-owned Arrowsmith Central Mining Lease, M70/1392, in November 2020. As with the Arrowsmith North project the site is located in the Geraldton Sandplain bioregion approximately 35-km north-west of Eneabba, Shire of Irwin, and some 270-kms north of Perth. It holds an estimated 76.5 Mt of total indicated and inferred mineral resources at 96.8% SiO₂ readily amenable to upgrading by conventional washing and screening to be suitable for industries such as glass making and foundry sand. Arrowsmith Central is considered a world class deposit and estimated to hold 75 years' worth of production. The 19-square-kilometre site lies adjacent to the Brand Highway and the Eneabba-Geraldton railway, providing a direct road and rail connection to Geraldton Port which is suitable for bulk shipping and offers a unique logistics solution.

Muchea Silica Sand Project, Western Australia

Our 100%-owned Muchea lease is located 50-km north of Perth and is estimated to hold a total 208 Mt of indicated and inferred mineral resources at 99.6% SiO₂. Muchea's sand grain size and quality is suitable for the ultra-clear glass market for use in solar panels. The 74.4-square-kilometre site lies adjacent to the Brand Highway and the Moora-Kwinana railway, providing a direct road and rail connection to Perth's main industrial port, the Kwinana Bulk Terminal.

Boyatup Silica Sand Project, Western Australia

VRX acquired our 100%-owned Boyatup lease in early 2019. Located 100-km east of Esperance, this 124-square-kilometre exploration site has the potential to produce silica sand for export that is subtly different from our two other projects. The site is connected by sealed road to Esperance Port for bulk commodity shipping.

Development

VRX is planning a staggered and disciplined development timetable across our projects beginning with Arrowsmith North, followed by Muchea and Arrowsmith Central. Permitting is well advanced with environmental approvals, native title work, offtake agreements, engineering and other development activities underway.

Construction of the 2mtpa processing plant is expected, subject to approvals, to begin at Arrowsmith North mid 2022, followed by first production later in 2022. Permitting for a 2mtpa processing plant and production at Muchea is forecast to be late-2022.

Biranup gold project divestment, Western Australia

To refocus our development strategy more directly on silica sand production and export, we sold our Biranup Gold and Base Metals Project to Nickel X Limited in July 2020. We have retained a 9.1% stake in this ASX-listed business which is exploring promising gold and copper-nickel prospects to the north of AngloGold Ashanti and Regis Resources Tropicana Gold Mine in WA's Albany-Fraser Gold Belt.



Sustainability at VRX

Our approach to sustainability

VRX recognises that expectations of corporate behaviour are changing and that investment capital is increasingly being redirected towards socially and environmentally-responsible businesses. This has transformed the environment in which we operate to one which prioritises climate risk, biodiversity loss, social impacts and, more recently, COVID-19 and its associated public health challenges in their portfolios.

While we are in the early stages of developing our world-class silica sand projects, VRX has a unique opportunity to incorporate forward-thinking approaches to sustainability into our operations to ensure we leverage the opportunities associated with the transition to a low carbon future.

By committing to operating our business in a low carbon manner and in accordance with high standards of environmental, social and governance (ESG), we aim to reduce risk, build resilience into our operations and drive long-term, sustainable value for our stakeholders.

The VRX Sustainability Report will annually capture and report publicly on the Company's economic, environmental and social impacts, and hence its contributions, both positive and negative, towards the goal of sustainable development. It covers all projects owned and operated by VRX and all monetary values in this Report are in Australian dollars (\$).

VRX sustainability ecosystem

Sustainability vision: We are committed to creating a sustainable, low-impact environmental legacy and positive benefits for our communities.

ESG Pillar	ESG Material Topic
Environment	 Rehabilitation Emissions and GHGs Water management Endangered species, flora and fauna Waste Feral animal control
Social	 Health and safety, wellbeing Economic performance Indigenous engagement & training Local employment Employment practices Local businesses Contractor engagement Diversity Supporting community organisations Employee development & training
Governance	 Customer risk & production quality Business ethics Sustainable products Supply chain management Infrastructure Innovation and technical improvements

Table 1 – VRX Material Topics



Policies

Current relevant sustainability policies are on the VRX website

- Indigenous Community Policy
- Environmental Policy
- OH&S Policy
- Whistle-blower Policy

Reporting our sustainability performance

Following global best-practice, a materiality process has been followed with VRX stakeholders engaged and a list of material ESG topics developed alongside a materiality matrix to prioritise the most critical issues that we will prioritise in our sustainability journey. Focus areas include mine-site rehabilitation, health, safety and wellbeing, endangered species, emissions, greenhouse gases and business ethics.

VRX has also adopted a 'think global, act local' approach to selecting frameworks against which to inform our sustainability planning and against which to measure our progress. We commit to regularly updating our stakeholders on our ESG performance to ensure we remain a responsible investment opportunity.

Whilst we are in project development phase, we have chosen to benchmark our performance against the recommendations of the following two organisations.

United Nations: Sustainable Development Goals (SDGs)

The SDGs promote action in areas that are critical to ending poverty, protecting the environment and improving the prosperity of all people through economic, social and technological progress. The goals are relevant for all countries and sectors of society, including business, and will enable VRX to tailor its approach to best serve the Company's stakeholders.

Below are the actions that our Board and Leadership Team are taking to make a positive contribution to the 17 SDGs and the way in which we plan to measure the meaningful progress being made towards them.



VRX is aligning our activities with seven SDGs SUSTAINABLE GOALS INDUSTRY REHABILITATION CLEAN ENERGY **ECONOMIC** SUSTAINABLE RESPONSIBLE CHMATE GROWTH INNOVATION COMMUNITIES **PRODUCTION** ACTION PLAN Utilising reliable. Enhancing Building Respecting **Employing** Reducing **Employing direct** renewable economic and resilient heritage values sustainable emissions from vegetation modern energy mining productive infrastructure production transfer as employment and fostering methods a unique rehabilitation innovation method

Figure 2 – VRX SDG contributions

World Economic Forum (WEF): Stakeholder Capitalism Framework

In partnership with global accounting firms, the WEF has identified a set of global, cross-industry baseline disclosures and metrics for companies to use to analyse their ESG performance and regularly communicate this to their stakeholders.

Disclosures are drawn from existing voluntary standards including the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB) and the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCRD). They are grouped under four pillars that are considered the most critical for business, society and the planet. The WEF framework is a logical and appropriate starting point for VRX as we begin our ESG journey.

Our adoption of the WEF framework has already highlighted a number of ESG opportunities across our operations, including the integration of solar panels and battery storage capacity into power generation and a purpose-built Vegetation Direct Transfer (VDT) method to rapidly and continuously regenerate vegetation that is disturbed during our operations (see below). These two initiatives reflect VRX's commitment to reducing our environmental footprint and building sustainable outcomes for our stakeholders.

Our performance against the framework in FY21 can be found in Appendix 1 at the end of this report.

Risk management

Risk is managed at VRX by the full Board of Directors as, due to the size and limited resources, the Company does not have a separately constituted Audit and Risk Committee. More information can be found in Corporate Governance Plan 4th edition, found on the VRX website. The full Board undertakes the duties which would normally fall to such a Committee. The Board oversees the Company's risk management systems, practices and procedures to ensure effective risk identification and management and compliance with internal guidelines and external requirements. Other statutory and fiduciary responsibilities include:

- Compliance with all applicable laws, regulations and company policy;
- Monitor the effectiveness and adequacy of internal control processes;
- Identification and management of business, economic, environmental and social sustainability risks



- Review of the Company's risk management framework at least annually to satisfy itself that it
 continues to be sound and to determine whether there have been any changes in the material
 business risks the Company faces and to ensure that they remain within the risk appetite set
 by the Board.
- Review reports by management on the efficiency and effectiveness of the Company's risk management framework and associated internal compliance and control procedures.

The Company's process of risk management and internal compliance and control includes:

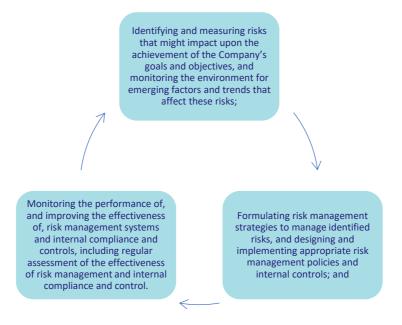


Figure 3 – Risk management process

VRX Supply Chain

VRX engages a variety or suppliers and contractors (as both businesses and individuals) to provide various services at our operations, exploration projects and offices. A breakdown of this is outlined below.

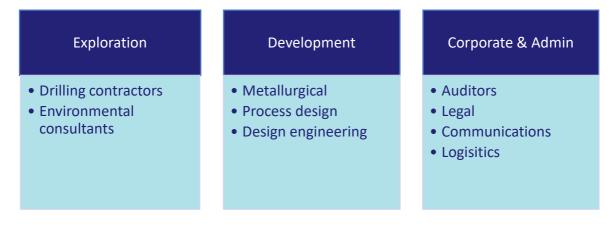


Figure 4 – VRX supply chain



Stakeholders and Materiality

VRX strives for open and transparent dialogue with our stakeholders with whom we seek to engage early and in a timely manner. We recognise such an approach is central to building our reputation and the way in which we are perceived by our investors, indigenous communities and others. During the materiality process, a map of VRX stakeholders was produced and is displayed below.

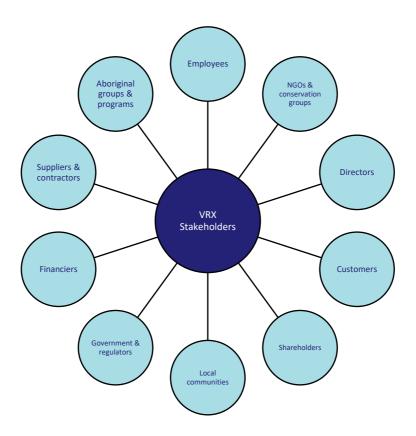


Figure 5 – VRX stakeholders

Material topics are those that reflect VRX's economic, environmental or social impacts and can substantially influence stakeholder decisions. In this report, VRX addresses the material matters that enable ongoing assessment of our sustainability performance. These topics include both environmental, social and governance risks and opportunities, and have potentially significant negative or positive impact on our business and our stakeholders. The materiality assessment process identified 23 ESG topics. In alignment with the Global Reporting Initiative (GRI) Standards, an initial ranking of material issues based on those that were of most importance to our stakeholders. Senior VRX leaders then reviewed the ranking of the material issues to ensure that our purpose and strategic imperatives were also considered. This process and the listing of material issues has informed our strategic thinking on ESG priorities and dictated the structure and content of this report.



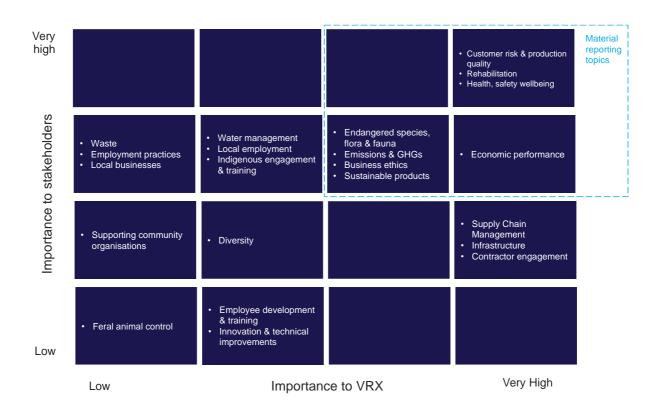


Figure 6 - VRX Materiality Matrix

Governance

High standards of corporate governance are an essential prerequisite for creating sustainable value for stakeholders.

Corporate Governance

The <u>Corporate Governance Statement</u> sets out the Company's main corporate governance policies and practices. All VRX policies and practices are reported against the 4th Edition of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations.

Summary of policies and responsibilities:

Pillar	Policies	Board/Committee	Executive/Manager responsible
Environmental	Environmental Policy	Board	Managing Director
Social	Diversity Policy	Board	Managing Director
	Indigenous Community Policy	Board	Managing Director
Governance	Corporate Code of Conduct	Board	Chairman
	Shareholder Communication	Board	Managing Director
	Trading Policy	Board	Company Secretary
	Disclosure Policy	Board	Managing Director

There has been no breach of regulations or compliance by VRX during 2021.



Business ethics

The Company will uphold the highest standard of business ethics and ensure adequate training for all staff and contractors.

Ethical behaviour at VRX is guided by our <u>Corporate Code of Conduct</u>. The purpose of the Code is to provide a framework for decisions and actions in relation to ethical conduct in employment. It underpins the Company's commitment to integrity and fair dealing in its business affairs and to a duty of care to all employees, clients and stakeholders. The Code sets out the principles covering appropriate conduct in a variety of contexts and outlines the minimum standard of behaviour expected from employees.

Corrupt conduct involves the dishonest or partial use of power or position which results in one person/group being advantaged over another. Corruption can take many forms including, but not limited to official misconduct, bribery and blackmail, unauthorised use of confidential information, fraud and theft. Corrupt conduct will not be tolerated at VRX and disciplinary action up to and including dismissal will be taken in the event of any employee participating in corrupt conduct.

Customer risk & production quality

The Company is cognisant that the quality of the products will determine the selling price and future contracts. The Company approach is to provide a better quality product than the specification requires for sales without compromising yield and operating costs. This will avoid quality disputes, compromised contracts and general branding in the industry.

The Company will also undertake adequate metallurgical testwork to ensure that the process circuit design will provide the quality of product that the customer requires



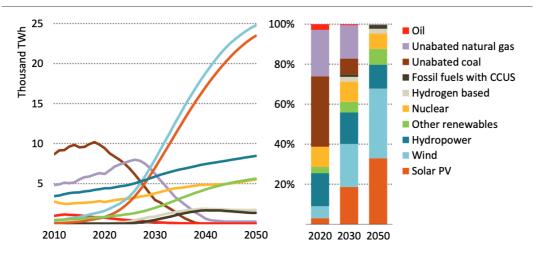
Sustainable products

Although VRX will sell silica for a variety of different uses, a key priority will be contributing to a net-zero future through supply of the ultra-clear glass market for use in solar panels. Reaching net-zero will require rapid scale-up of already commercial clean energy technologies, such as wind and solar.

In its Net-Zero Emissions by 2050 Scenario (NZE), the International Energy Agency (IEA) outlines that to reach net-zero by 2050, the global energy sector will need to be based largely on renewables, with solar the single largest source of supply. Solar technologies – solar photovoltaic (PV) electricity and concentrating solar power (CSP) - need to contribute over 30% of global energy to reach net-zero (see Figure 7 below). As competitiveness continues to improve, solar technology will require average annual growth of 15% between 2020 and 2030. The pathway calls for annual additions of solar PV to reach 630 gigawatts by 2030 (134GW was added in 2020), the equivalent to installing the world's current largest solar park roughly every day. Achieving this cleaner, healthier future will rely on quality, reliable and affordable sources of silica and glass for solar panel production.



Figure 3.10 ► Global electricity generation by source in the NZE



IEA. All rights reserved.

Solar and wind power race ahead, raising the share of renewables in total generation from 29% in 2020 to nearly 90% in 2050, complemented by nuclear, hydrogen and CCUS

Figure 7 - Contributions by energy source in Net-Zero Emissions by 2050 Scenario (NZE) (Source: IEA - 2021)

Social pillar

The Company will endeavour to engage with regional stakeholders and beneficiaries to ensure a fluid line of communication.

Where possible employees and contractors will be sourced locally to support local communities.

Health and safety, wellbeing

The Company will adopt the highest industry standards when planning and operating to ensure the safety and wellbeing of its employees and contractors.

The Company will use experienced management and contractors and ensure adequate training for employees to operate in a safe and efficient manner.

Training manuals for mining and processing will be developed with regular updates and education.

Fatalities	Lost time injuries	LTIFR	Total recordable injuries	TRIFR
0	0	0	0	0

Economic performance

At all times the Company will endeavour to maintain a product yield, quality and quantity and operating cost that will maximise the economic potential of the sales of product from the projects.

FY21 contribution

Goods and service supplier purchases = \$3,191,175



- Wage spend = \$592,110
- Taxes = \$12,426
- Royalties = Nil
- State and Shire Rent = \$55,858

Indigenous relations

A number of Aboriginal groups are the custodians for the land on which our projects are located in Western Australia. We are committed to engaging with these communities and their representatives to ensure they are kept fully informed about our developing operations and have the opportunity to be involved in our plans and benefit from our success. This is guided by our <u>Indigenous Community Policy</u>.

As part of our commitment to local and indigenous employment, we anticipate offering employment and contract opportunities to local indigenous communities in the vicinity of our projects and to support the ranger programs associated with our project areas.

Aboriginal heritage

VRX is committed to understanding the Aboriginal heritage values and significance of the land on which we operate. This helps us ensure we respect and protect the land and that our operations have as minimal impact and disruption as possible.

To date, VRX has undertaken a number of comprehensive archaeological and ethnographic heritage surveys at our operations in accordance with requirements set out in Western Australia's *Environmental Protection Act 1986* and *Aboriginal Heritage Act 1972*.

For example, at our Arrowsmith project, VRX has conducted Aboriginal heritage and ethnographic surveys with no significant sites recorded in the proposed mining area but a number of verbal accounts of the region's significance for hunting and fishing, especially along the natural waterways.

In November 2020, the Amangu representatives of Yamatji Nation and Yamatji Marlpa Aboriginal Corporation produced a <u>final report</u> regarding the archaeological and ethnographic, work area clearance, heritage survey undertaken over our Arrowsmith North and Arrowsmith Central project areas. This concluded that:

- no isolated artefacts have been identified in the project areas;
- the Arrowsmith North Access Road, Arrowsmith North Services Corridor, Arrowsmith North Production Area and Arrowsmith Central Infrastructure Area are clear for the stated works to proceed:
- The Arrowsmith Central Production Area is partially clear for the stated works to proceed; and
- If work is proposed on a section of L70-208 Access Route that intersects the Arrowsmith River, further consultation with the Southern Yamatji Corporation is required.

In July 2021, we commissioned Horizon Heritage Management to undertake a comprehensive assessment of known and likely Aboriginal heritage values and traditional uses within our Arrowsmith North Project area. This identified registered Aboriginal heritage sites (including those of high value for bush



Heritage surveying at Arrowsmith Central



tucker and bush medicine and those of ethnographical or archaeological value), provided a contextual assessment of the general Aboriginal heritage values of the area, and made recommendations on ways of minimising our impacts on Aboriginal heritage.

The assessment identified one registered Aboriginal site located within the area with three other heritage places within Yamatji country surrounding the Arrowsmith North Project assessment area. Based on the assessment, VRX understands that any future development within our Arrowsmith North Project assessment area should include project consultation, Aboriginal traditional uses consultation and full and detailed Aboriginal heritage ethnographic and archaeological surveys with the Yamatji Nation people.

Native title - Yamatji Nation Agreement

At our Arrowsmith Silica Sand Project, we have built up a strong and supportive relationship with the Southern Yamatji people through the Yamatji Marlpa Aboriginal Corporation (YMAC), the Native Title Representative Body for the Yamatji and Marlpa people.

In October 2020, conclusive registration of the Yamatji Nation Indigenous Land Use Agreement (ILUA) occurred.

The ILUA is an alternative settlement by the Western Australian Government of Native Title claims covering a significant portion of land in the Mid West, including the Southern Yamatji People's claim covering the Arrowsmith Projects.

This Government-led ILUA settled all Native Title claims over the Arrowsmith Projects area.

The strong and supportive relationships established with the Southern Yamatji People will continue to benefit all parties as the Arrowsmith Projects are developed, and the Company intends to continue to consult and work closely with the Southern Yamatji People; and

Native title - Noongar South West Native Title State Agreement

In November 2020, the Government of Western Australia implemented the South West Native Title Settlement which, in January 2021, led to the registration of six Indigenous Land Use Agreements (ILUA).

All native title claims in WA's south-west region must now be negotiated in accordance with the terms of the ILUAs which supersede all previous legislation and title negotiations. Native title claims at our projects will now reference terms in the following ILUAs:

- Muchea Silica Sand Project: ILUA Whadjuk People Indigenous Land Use Agreement;
- Boyatup Silica Sand Project: ILUA Wagyl Kaip and Southern Noongar Indigenous Land Use Agreement.

Prior to the implementation of WA's South West Native Title Settlement, VRX proactively engaged with a number of local Aboriginal groups overseeing the land on which our projects are located:

• At our Muchea Silica Sand Project, we worked constructively with the South West Aboriginal Land and Sea Council (SWALSC) to finalise a Mining Agreement with the Whadjuk People.





Figure 7 – Map showing Western Australia's South West Native Title Settlement and six Indigenous Land Use Agreements (<u>ILUA</u>)

Environnment pillar

The project area has been selected for its minimal impact on the native vegetation, landforms and fauna. The mining of sand will be undertaken to leave an undulating landform with the vegetation and habitat lower than originally encountered but largely intact. Processing will use recycled water and few non-toxic chemicals. The resource is relatively consistent in its attributes over a resource which may be mined for up to 100 years.

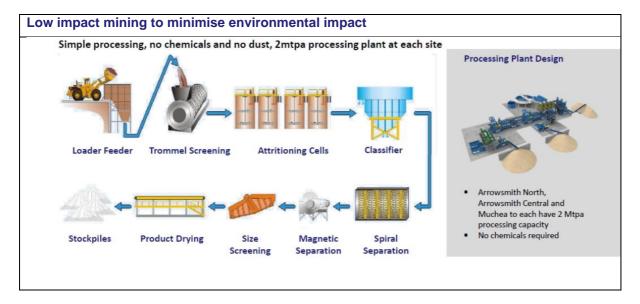


Figure 8 – Process Flow Diagram

Environmental permitting

In March 2021, we submitted our Environment Protection Agency (EPA) referral for the Arrowsmith North Silica Sand Project to WA's EPA. It followed a series of wide-ranging environmental studies undertaken by and for us over the past three years and extensive pre-referral consultation with the EPA.



This EPA referral incorporates pre-referral feedback received from the EPA in December 2020 and concludes that Arrowsmith North can be developed without significant residual impacts on the environment. The EPA's Environmental Impact Assessment will be conducted as an accredited assessment that will also involve assessing the proposal on behalf of the Federal Department of Agriculture, Water and Environment.

Documentation provided to the WA EPA on our Arrowsmith North project is available at: epa.wa.gov.au/proposals/arrowsmith-north-silica-sand-project

Rehabilitation

The Company has developed and tested a unique method for translocating topsoil to ensure the best possible outcome in restoring the native vegetation.

At our Arrowsmith North project over the initial 30-year lifetime of the project, we expect to disturb a total 360 hectares of native vegetation as a result of sequential mining of sand 8-15 metres below the soil surface.

Minimising vegetation disturbance, maximising rehabilitation



To ensure we have a minimal impact on the vegetation at our mine sites, VRX has developed a unique and progressive made-for-purpose method to rehabilitate disturbed flora. Known as Vegetation Direct Transfer (VDT), it involves carefully lifting and removing a 400-millimetre deep sod from areas that are set to be mined for silica sand.

With the root structures in the loose sand relatively shallow at 200-300 millimetres in depth, the VDT methods enables the topsoil containing the vast majority of native flora and invertebrate fauna preserved and near-surface humus and its microbial contents to remain intact. The technique lends itself to rapid and extensive regeneration of affected areas based on continuous rehabilitation as silica sand mining progresses. A video of the VDT method is available at: wrxs.lica.com.au/miningandrehabilitationmethodology

We will strive to minimise our impact on vegetation and topsoil by relocating it to rehabilitation areas using our Vegetation Direct Transfer method (see case study above). We will also undertake mining in sections by removing blocks (typically 150 x 150 metres) with an estimated five blocks mined per year.

VRX's low-impact approach to silica sand mining means that no chemicals will be used in our production process and minimal dust will be produced during mining activities. We are also deploying innovative new measures to ensure that any vegetation removed during our mining activities can be used for continuous rehabilitation (see case study above).

Greenhouse gas emissions

The Company will use all available opportunities to reduce emissions and greenhouse gases produced from operating the projects. VRX will endeavour to reduce net greenhouse gas emissions in order to



minimise the risk of environmental harm associated with climate change and maintain air quality and minimise emissions so that local environmental values are protected.

VRX is focused on reducing our carbon footprint by cutting emissions at our mine sites. We are investigating a number of ways of doing this to ensure we can reduce Scope 1, 2 and 3 emissions where possible.

In 2021, we engaged Preston Consulting Pty Ltd to assist with project approval processes at our Arrowsmith North Silica Sand project. In August 2021, Preston commissioned Kewan Bond Pty Ltd to calculate the estimated greenhouse gas (GHG) emissions associated with the project.

The assessment showed that during Arrowsmith's 30-year lifespan - assuming it will produce 1 million tonnes of silica per annum (Mtpa) for the first three years rising to 2 Mtpa thereafter – the project will generate a total 583,330 tonnes of carbon dioxide equivalent (tCO₂-e) of Scope 1 emissions, equating to an average of 19,444 tonnes annually. Estimated Scope 3 emissions total 1,701,255 tCO₂-e, predominately from shipping product to Asia, equates to an average of 56,708 tonnes annually. No Scope 2 emissions are anticipated from the consumption of grid-sourced electricity.

The primary sources of Scope 1 GHG emissions for the project will be the consumption of electricity and diesel to operate the plant and machinery. Electricity will be generated on site through the construction of a gas-fired power station. To reduce emissions further, VRX is investigating the potential for deploying a hybrid on-site gas-fired, solar and wind power plant and short-term battery storage.

Priority, threatened and endangered species (flora and fauna)

The Company will undertake detailed surveys of all areas to be disturbed and identify any areas that that may encounter any endangered or threatened species and can be avoided.

VRX has undertaken a wide-ranging review of available technical reports, relevant databases and spatial data to identify the potential flora and vegetation that may be present at each of the projects.

At the Arrowsmith Project a flora and vegetation survey has been undertaken in accordance with DAWE and EPA guidance.

This will enable the assessment of the potential direct and indirect impacts of the construction and operational elements of the Projects on identified environmental values and assess the extent of cumulative impacts as appropriate.

VRX will manage the application of the mitigation hierarchy in the proposal design, construction, operation and closure. Specific, measurable, achievable, realistic and time-bound actions will be actioned to minimise and mitigate Project impacts.

Where significant residual impacts remain, propose an appropriate offsets package that is consistent with the WA Environmental Offsets Policy and Guidelines and the EPBC Act Environmental Offsets Policy.

In accordance with EPA guidelines VRX will identify and describe the fauna assemblages present and likely





to be present within the areas that may be impacted by the projects. VRX will endeavour protect terrestrial fauna so that biological diversity and ecological integrity are maintained.

VRX will endeavour to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.

Results from studies performed to date

No threatened flora pursuant to Part 2, Division 1, and Subdivision 2 of the Biodiversity Conservation Act 2016 were recorded in the survey area.

Overall eleven priority taxa, as listed by the Western Australian Herbarium have been recorded in the survey area from 2018 to 2020 (see Table 1 below) and five of these priority flora species were recorded within the targeted survey area in the spring months of 2020.

Overall, it is likely that the five priority species in the targeted area will be impacted to some extent by clearing within the Arrowsmith North targeted area. However, impacts to these species can be minimised by avoiding priority taxa locations where applicable.

The project area has a rich fauna assemblage but incomplete with some locally extinct mammal and bird species. Assemblage is typical of the Lesueur Sandplains subregion. It is notable for high reptile species richness and a high proportion of non-resident birds, many of which are seasonal visitors to exploit seasonal nectar resources.

Few species of high conservation significance are present or expected, but the Carnaby's Black-Cockatoo is important and likely to forage in the area. There are foraging and roosting records for the species from nearby sites. Vegetation within the project area represents foraging habitat of at least moderate value for the species, but there is no breeding habitat within the project area.





Appendix 1: World Economic Forum – Stakeholder Capitalism Index

WEF key data/question	Current status	Start date target	Disclosure target
The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental and social issues. Corporate purpose should create value for all stakeholders, including shareholders.	VRX's ESG commitment is We are committed to creating a sustainable, low-impact environmental legacy and positive benefits for our communities.	Completed	Disclosed FY21
Composition of the highest governance body and its committees by: competencies relating to economic, environmental and social topics; executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of underrepresented social groups; stakeholder representation	Partial. See diversity section of the VRX Corporate Governance Statement. The Company has established a Diversity Policy but because of its size and limited resources, positions are selected on the best available candidate. Outstanding disclosures: competencies relating to economic, environmental and social topics; membership of under-represented social groups; stakeholder representation.	FY22	FY23
A list of the topics that are material to key stakeholders and the company, how the topics were identified and how the stakeholders were engaged.	Disclosed in the Sustainability at VRX section of this Sustainability Report	Completed	Disclosed FY21
Total percentage of governance body members, employees and business partners who have received training on the organization's anticorruption policies and procedures, broken down by region. a) Total number and nature of incidents of corruption confirmed during the current year, but related to previous years; and b) Total number and nature of incidents of corruption	Employees are required to sign the Code of Conduct. VRX has not had any incidents of corruption in the past year or in any previous years.	Completed	Disclosed FY21
Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption.	Employees are required to sign the Code of Conduct. Operating in Australian jurisdictions there is a low risk of corruption	Completed	Disclosed FY21
A description of internal and external mechanisms for seeking advice about ethical and lawful behaviour and organizational integrity	The VRX Anti- Bribery and Corruption policy has guidance on behaviour in Section 10 of the Corporate Governance Plan. As a reasonably small business, all VRX managers and board members are available to employees and contractors to discuss any ethical concerns.	Completed	Disclosed FY21
A description of internal and external mechanisms for reporting concerns about unethical or unlawful behaviour and lack of organizational integrity.	The VRX Anti- Bribery and Corruption policy has guidance on behaviour in Sections 10 & 17 of the Corporate Governance Plan. As a reasonably small business, all VRX managers and board members are available to employees and contractors to discuss any ethical concerns.	Completed	Disclosed FY21
A description of principal material risks and opportunities facing the company specifically (as opposed to generic sector risks)	Risks are outlined in the FY21 VRX Annual Report	Completed	Disclosed FY21
A description of the company appetite in respect of these risks, how these risks and opportunities have moved over time and the response to those changes.	Risks are outlined in the FY21 VRX Annual Report	Completed	Disclosed FY21
For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F-gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO2e) GHG Protocol Scope 1 and Scope 2 emissions.	Emissions are immaterial to VRX until development and construction begins. We have forecasted our emissions in the Greenhouse Gas Emissions section of this Sustainability Report	When construction begins	Forecast disclosed FY21



Fully implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). If necessary, disclose a timeline of at most three years for full implementation	Emissions are immaterial to VRX until development and construction begins. Outstanding disclosures: Implementation or roadmap towards the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) Muchea project is in an	FY22	FY23
Report the number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA)	Environmentally Sensitive Area, the Mining Lease at Muchea M70/1390, 1,008Ha. No other projects are considered at a KBA.	Completed	Disclosed FY21
Megalitres of water withdrawn, megalitres of water consumed and the percentage of each in regions with high or extremely high baseline water stress, according to WRI Aqueduct water risk atlas tool.	Water usage is immaterial to VRX until development and construction begins.	When construction begins	When construction begins
Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g. ethnicity).	Diversity is immaterial to VRX until development and construction begins.	When construction begins	When construction begins
Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men, minor to major ethnic groups, and other relevant equality areas.	Given the minimal nature of current employment at VRX, salary and remuneration will not become material until the hiring phase of development and construction	When construction begins	When construction begins
Ratios of standard entry level wage by gender compared to local minimum wage.	Given the minimal nature of current employment at VRX, salary and remuneration will not become material until the hiring phase of development and construction	When construction begins	When construction begins
Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO.	Given the minimal nature of current employment at VRX, salary and remuneration will not become material until the hiring phase of development and construction	When construction begins	When construction begins
An explanation of the operations and suppliers considered to have significant risk for incidents of child labour, forced or compulsory labour.	As VRX only operates in Australia, there is a very low risk of incidents of child labour, forced or compulsory labour.	Completed	Disclosed FY21
The number and rate of fatalities as a result of work-related injury; high-consequence work-related injuries (excluding fatalities); recordable work-related injuries; main types of work-related injury; and the number of hours worked.	There were zero fatalities, injuries, incidents or accidents in FY21.	Completed	Disclosed FY21
An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers	VRX does not currently facilitate workers' access to non-occupational medical and healthcare services	Completed	Disclosed FY21
Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of hours of training provided to employees divided by the number of employees).	Average hours: Approximately 25 hours per employee Gender: Male Employee category: Management	Completed	Disclosed FY21
Average training and development expenditure per full time employee (total cost of training provided to employees divided by the number of employees).	Average training expenditure in FY21 was approximately \$10,000 per employee	Completed	Disclosed FY21
Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region.	There were no new employees hired in FY21	Completed	Disclosed FY21
Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.	There was zero employee turnover in FY21	Completed	Disclosed FY21
Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations	Disclosed in Economic Performance section of this Sustainability Report	Completed	Disclosed FY21



Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period.	Financial assistance received from the government was approximately \$50,000 (Covid cashflow payment).	Completed	Disclosed FY21
Total capital expenditures (Capex) minus depreciation, supported by narrative to describe the company's investment strategy	VRX did not have any material capital expenditure in FY21	Completed	Disclosed FY21
Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders.	Given there was no revenue generate or dividends paid and there are not likely to until production begins, a supporting strategy will not become material until then	Completed	Disclosed FY21
Total costs related to research and development.	No R&D during FY21	Completed	Disclosed FY21
The total global tax borne by the company	Total tax paid was \$12,426 (Payroll and FBT)	Completed	Disclosed FY21