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## **Overview**

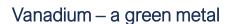
#### Vanadium producer in Kazakhstan

#### Corporate

- Listed on London Stock Exchange and Astana International Exchange
- Operations: Kazakhstan

#### **Activities**

- Producing vanadium, molybdenum and nickel from purchased concentrates
- Feasibility study Balasausqandiq project targeting 22,400 tonnes
   of vanadium pentoxide plus by-products per year



- Traditional use for micro-alloying steel reduces world steel requirements
- A huge new market as a battery metal



## **Strategic Investment**

Led by Sir Mick Davis, former Xstrata CEO, Vision Blue has made a multi-stage strategic investment into FAR:

• \$15.5m already invested (including \$1.1m by co-investors and \$5.4m subscription during September 2022 equity fundraise

#### Further options:

- \$2.5m option to subscribe within two months of announcement of feasibility study for Phase 1 of the Balasausqandiq project for Convertible Loan Notes (which, subject to certain conditions and any adjustment events occurring, are convertible into 19,952,433 shares at 9p\* per share)
- \$10m option to subscribe for up to 28,731,504 shares at 25p\*\* per share, exercisable when FAR raises funds for construction of Phase 1 of the Balasausgandig project, subject to consents
- \$20m option to subscribe for up to18,417,630 shares at 78p\*\*\* per share, exercisable at any time until two years after the completion date under the investment agreement or when FAR raises money for construction of Phase 1 of Balasausqandiq project, subject to consents

<sup>\* 12.5298</sup> cents (USD) per share using the agreed exchange rate

<sup>\*\* 34.805</sup> cents (USD) per share using the agreed exchange rate and subject to any adjustment events occurring

<sup>\*\*\*</sup> US\$1.085916 per share using the agreed exchange rate and subject to any adjustment events occurring

## Share capital

### Major shareholders

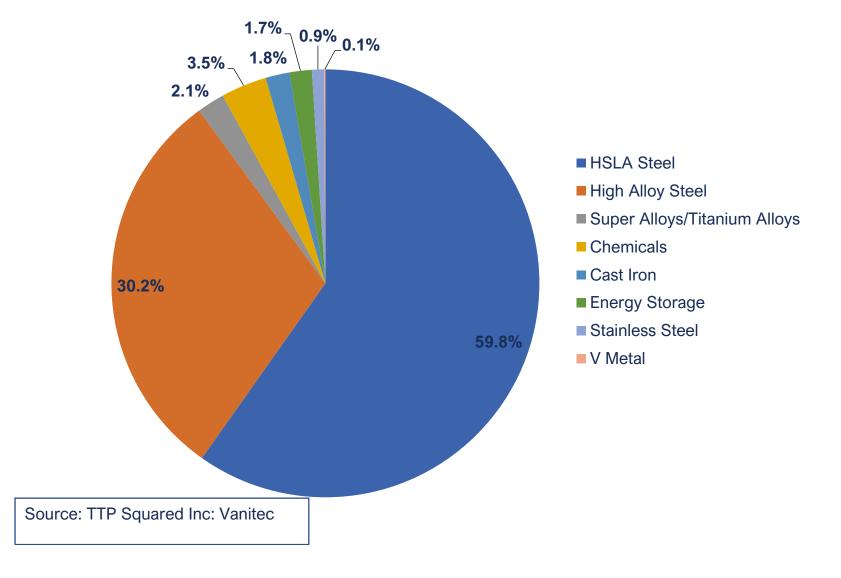
Shareholder	Current shares (m)	After conversion of VBR loan notes (m)
Vision Blue Resources	77.6 (17.3%)	111.1 (23.0%)
Andrey Kuznetsov	68.5 (15.2%)	68.5 (14.2%)
Nicholas Bridgen	53.1 (11.8%)	53.1 (11.0%)
Other shareholders	250.5	250.5
Total	449.7	483.2

Vision Blue Resources holds US\$4,200,000 of loan notes which are convertible into 33,520,088 shares at the preagreed issue price of 9p per share (12.5298 cents (USD) per share using the agreed exchange rate and subject to any adjustment events occurring)

Figure for Vision Blue Resources excludes 8,779,073 shares held by co-investors

## **The Vanadium Market**

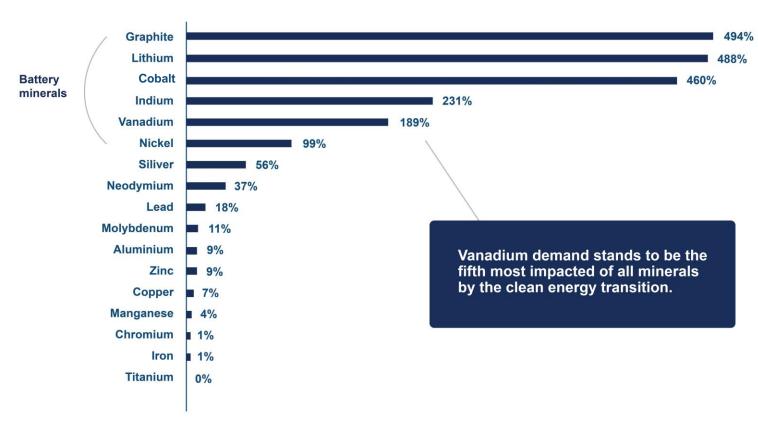
## Vanadium consumption by application 2021



## Vanadium is a battery metal

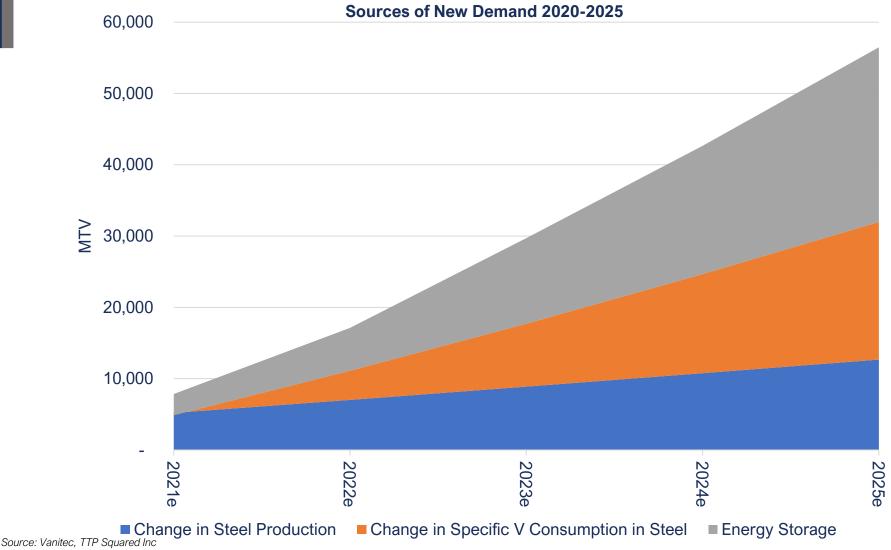
An entirely new major market for vanadium

Projected annual demand in 2050 for Energy Technologies as a percentage of 2018 Production Levels under 2DS



Source: presentation to Vanitec 2020

## World market for vanadium is growing strongly



## **Two operations**

A: Balasausqandiq project – approximately 96% of NPV

B: Existing processing operation – approximately 4% of NPV Balasausqandiq

## Balasausqandiq deposit

(96% of FAR's NPV)

## Balasausqandiq deposit: An unusual type of ore





Nearly all the vanadium produced in the world is from titano-vanadiferous magnetite, a form of iron ore. Extraction of vanadium from this material is energy intensive and expensive.

The ore at Balasausqandiq is different. It is a sedimentary deposit, with a high grade of vanadium and negligible iron – a significant advantage

# Balasausqandiq – why a huge cost advantage over other producers and projects?

Crucially **not** a titano-vanadiferous magnetite deposit

#### WHY THIS MATTERS:

- No need for high temperature roasting
- No need to pre-concentrate ore
- High recovery
- Valuable by-products

- Significantly reduces capital costs
- Significantly reduces operating costs
- Negative cost of vanadium production after by-product credits



## Balasausqandiq – other advantages

#### FAVOURABLE GEOLOGY

- Outcrops at surface, open pit,
- Very large deposit
- Total resource plus exploration potential 115m tonnes (middle of estimated range)
- Visible geological cut-off, low stripping ratio

#### EXISTING INFRASTRUCTURE AND TRANSPORT LINKS

- Surfaced road already existing to site from town of Shieli (70 km)
- Shieli lies on the route of the motorway and rail links connecting Western Europe with East-Coast China
- High voltage (110kV) power line already connected
- Water and land readily available

#### ENVIRONMENTAL AND SOCIAL

- All the constituents of the ore and recycling operations can be sold as products
- No arable land will be disturbed
- The site is 16 km from the nearest habitation no people will be moved or disturbed
- Lower CO2e than other primary vanadium suppliers

## Balasausqandiq – economics

#### LOWEST COST PRODUCER

Balasausgandig forecast cash cost of production:

- \$1.54/lb expected (costs apportioned between products)
- \$(1.20) if by-product revenues are deducted from costs

#### EXCEPTIONAL FINANCIAL STATISTICS (Phases 1 and 2 combined)

- NPV of \$2 billion (10% discount rate, after tax cash flows)
- 79% operating margin
- 89% IRR
- Annual operating cash flow \$430m per year after tax (at 2018 assumed V2O5 price of \$7.50/lb)

Source: Competent Person's Report, 2018

## Feasibility study highlights

#### Resource

- Around 18,500m out of the total drilling programme of 22,850 metres completed
- Ore Body 1 infill drilling completed. Drilling of OB2-4 ongoing
- Early semi-quantitative results of infill drilling of three new sections at 200m intervals within an 800m strike length of OB1 potentially indicated thicker sections compared with the original modelling. Full assays are awaited

#### Metallurgy

- Vanadium recovery into leach at 97% (higher than pilot plant results)
- Test-work on sorption and final recovery ongoing

#### Carbon

- Testwork on producing a carbon-silica concentrate and suitability for making tyres as substitute for carbon black successful
- Based on substitution price, carbon could be a co-product of value greater than vanadium
- Significantly lower CO2 (e) output than traditional carbon black
- Further tests and negotiations with tyre manufacturers planned

#### Expanded scope

 Scope previously expanded to include Phase 2. Now potentially including sulphuric acid plant and carbon concentrator plant

## **Existing operation**

(4% of FAR's NPV)

## **Existing process plant - today**



- Recovers vanadium, molybdenum and nickel from recycled raw-materials
- Based on expanded pilot/test plant for the Balasausqandiq project

## Existing operation – completion of development in Q4:

#### Existing operation (Q1 - Q3):

- Recovery of vanadium in ammonium metavanadate
- Recovery of molybdenum
- Nickel, comprising a low-grade concentrate, is currently being stockpiled

#### New developments in Q4:

- New molybdenum sorption circuit to significantly increase ferro-molybdenum production
- Filter press to allow repulpation of tailings to recover additional vanadium
- Nickel roasting and leach circuit to upgrade the nickel concentrate
- A second dissociation oven to convert AMV into vanadium pentoxide

#### At the conclusion of these steps

- All the valuable materials contained in the raw materials will be recovered.
- No tailings are expected to be retained on site
- ☐ Significant increase in profitability

## Existing operation – target production

	Jan-June 2022 (average per month) Tonnes	Projected 2023 (average per month) Tonnes	Projected monthly sales revenue 2023 at current prices and discounts \$m (% of total)
Tonnes treated	196	275 - 325	
Production:			
Vanadium pentoxide	29	55 - 62	\$1.0m - \$1.15m (50%)
Molybdenum in FeMo	4	13 - 15	\$0.7m - \$0.8m (35%)
Nickel in concentrate	Stockpiled	14 - 16	\$0.3m - \$0.35m (15%)
Total			\$2.0m - \$2.3m (100%)

The metal content of raw-materials varies considerably and high-grade materials are more expensive to buy. The above projected figures are based on a typical mix of raw-materials but the actual materials treated may be different. Figures are approximate

## Existing process plant – why?

#### Advantages:

- Useful cash flow targeting \$10m free cash flow per year
- An experienced management team
  - Technical experience
  - Four PhD's within technical team
  - Enables informed input to design of Balasausqandiq project
  - Capability in-house to develop needed technology
- Operating management ready for operations

Operating the existing process plant significantly de-risks the implementation of the Balasausgandiq project

## Development plan

## **Development plan**

Now	Expansion of existing operation and feasibility study for Balasausqandiq	Ongoing
Phase 1	Mining and processing 1 Mtpa of ore Production 5,600 tpa (to be funded from existing operations, debt, and exercise of options by strategic partner)	Capex \$100m
Phase 2	Expansion to 4 Mtpa of ore Production increase to 22,400 tpa (to be funded from earnings of Phase 1)	Capex \$225m

Production figures in tonnes of vanadium pentoxide (V2O5). Source for Capex and Production: Competent Person's Report 2018. Future Capex estimates will be updated as part of the publication of the feasibility study.

- Funding for Phase 1 is expected to be from a combination debt, cash flows arising from the existing operation and limited equity if required. Note: Vision Blue has options to subscribe for an additional US\$32.5m of equity or convertible loan notes
- The current intention is that funding of Phase 2 will be substantially from operating earnings of Phase 1 plus limited debt

## Timeline – near term

Approximate timeline of existing plant and feasibility study

	Completed by
Commissioning of new molybdenum circuit	Q4 2022
Commissioning of new press filter and repulpation	Q4 2022
Commissioning of nickel roast and leach circuit	Q4 2022
Completion of drilling of OB 2, 3 &4	Q4 2022
Full metallurgical testwork Phase 1	Q4 2022
Commissioning of dissociation oven	Q4 2022
Revised resource estimation	Q4 2022/Q1 2023
Full feasibility study Phase 1	Q2/Q3 2023
Full feasibility study Phase 2	Q2/Q3 2024

## Timeline – post feasibility study

Approximate timeline of development plan

Completed	Ву
Existing plant at full capacity	Q4 2022
Finance for Phase 1	Q3/Q4 2023
Front end engineering Phase 1	Q1 2024
Construction Phase 1	Q4 2025
Construction Phase 2	Q2 2028

## **Appendix**

## Interim results for half year to 30 June 2022

- H1 revenue, while materially ahead of last year, has been impacted by the supply chain issues caused by the war in Ukraine and the after effects of Covid-19
- Uncertainty remains as to the impact these issues will have on the outcome for H2 but the Company expects H2 revenues to be significantly greater than H1

	2022 \$000	2021 \$000
Revenue from customers	4,327	1,520
Adjustment to revenue price-changes after delivery and fair value *	(417)	27
Total revenue	3,910	1,547
Cost of sales	(3,541)	(1,491)
Gross income	369	56
Loss for the period	(694)	(1,083)

<sup>\*</sup> Reflecting the change in metal prices between the amounts booked at time of shipment and the prices finally agreed at based on the contractual pricing period.

## Kazakhstan

An attractive operating environment

- An upper-middle income country (World Bank)
- 25th (of 191) in ease of doing business (World Bank 2020)
- 10% income tax, 20% profits tax
- No general requirement for government free-carry or local ownership
- Subsoil use law updated in 2018 based on international practices

"Since independence in 1991, Kazakhstan has experienced remarkable economic performance. Rapid growth, fuelled by structural reforms, abundant hydrocarbon resources, strong domestic demand, and foreign direct investment (FDI), has helped reduce poverty and transform the country into an upper-middle-income economy." – World Bank 2021



## **By-products**

Valuable by-products produced as part of the single processing route

#### Carbon-silica

Concentrated to make a 40% carbon concentrate, can be used in the manufacture of rubber, principally tyres. Carbon-silica mix can also be briquetted to make feed for ferro-silicon smelting

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#### Uranium / molybdenum

Yellowcake concentrate. Kazatomprom has a statutory first right to purchase uranium products in Kazakhstan

#### Potassium alum

Able to market in China or break-down into alumina and fertilisers

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\* Source: Competent Person's Report 2018

Product	Projected revenue per tonne of ore (\$/t)		
Vanadium (V <sub>2</sub> O <sub>5</sub> ) @ \$7.50/lb	93		
Carbon-silica **	26		
Uranium	3		
Aluminium/ potassium	10		
Molybdenum	4		

<sup>\*\*</sup> Carbon pricing based on use for making ferro-silicon

## **Board**

#### Experienced team with proven capability

#### Sir Mick Davis Chairman

A highly successful mining executive accredited with building Xstrata plc into one of the largest mining companies in the world prior to its acquisition by Glencore plc. Before listing Xstrata on the LSE as CEO he was CFO of Billiton plc and Chairman of Billiton Coal which he joined from the position of Eskom CFO. During his career in mining he has raised almost US\$40bn from global capital markets and successfully completed over US\$120bn of corporate transactions. Founder of Vision Blue Resources.

#### Nicholas Bridgen Chief Executive

Chartered accountant, lives in Kazakhstan and speaks Russian. 14 years with Rio Tinto group in various roles and 26 years' board level experience with companies operating in the FSU including CEO of Hambledon Mining.

#### William Callewaert Chief Financial Officer

Experienced finance professional, FCA qualified and a chartered accountant (ICAEW) with over 20 years' experience working across audit and advisory services both in the UK and offshore. Holds an honours degree in Law from Durham University.

#### Andrey Kuznetsov Director of Operations

Engineer with PhD in mathematical logic, native Russian, English speaker. Previously lead the Scientific Department in Central Committee of Youth, Kontakt Research and Development and TOO Firma Balausa. Author of more than 10 vanadium treatment technology patents.

#### Chris Thomas Non-Executive Director

Chairman of I&S BBDO, Japan and previously CEO for BBDO in the Americas as well as for Asia, Middle East and Africa.

#### James Turian Non-Executive Director

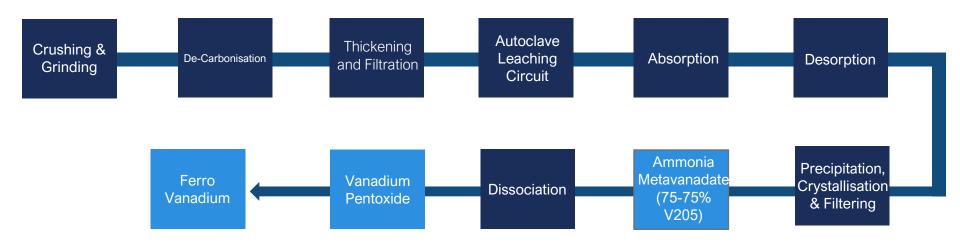
Background in accounting and trust management and a Chartered Fellow of the Securities Institute IAQ and a Fellow of the Institute of Directors. Director of Accounts For You Ltd.

#### Peet Nienaber Non-Executive Director

Former CEO of Xstrata Alloys, one of the largest producers of ferrochrome and a leading producer of vanadium, with some 20,000 people under Peet's leadership. Holds a BSc in Metallurgical Engineering and a BSc in Engineering from the University of Pretoria.

## Straightforward process

Process flowsheet tested in 15,000 tpa pilot plant



## Balasausqandiq

Resources and potential prior to recent drilling campaign

JORC resource based on OB1 plus exploration potential in OB2 – OB5

Orebody	Category (JORC 2012)	Tonnes (Mt)	V2O5 (%)	V2O5 (tonnes)
OB1	Indicated Primary <sup>1</sup>	21.4	0.67	143,380
OB1	Inferred Oxide <sup>2</sup>	1.3	0.89	11,570
OB1	Inferred Primary <sup>1</sup>	1.6	0.67	10,720
Total		24.3	0.68	165,670
OB2-OB5	Exploration Target <sup>3</sup>	90.5	0.69	624,550
То	tal	114.8	0.68	790,220

<sup>1.</sup> Oxide ore based on bulk density of 1.7

<sup>2.</sup> Primary ore based on bulk density of 2.4

<sup>3.</sup> Mean of range estimated by FAR's independent geologist. GBM CPR, 12 November 2018

A Reserve (JORC 2012) based on the indicated resource of OB 1 only amounts to 23m tonnes. In addition, the Inferred primary material in the table above lies within the contours of the planned open pit.