

**Management's Discussion and Analysis** 

For The Year Ended December 31, 2021

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## To Our Shareholders

The following Management's Discussion and Analysis ("MD&A") relates to the financial condition and results of operations of Largo Inc. (formerly Largo Resources Ltd.) ("we", "our", "us", "Largo", or the "Company") for the year ended December 31, 2021 ("2021") and should be read in conjunction with the annual consolidated financial statements and related notes for the same period. References in the below discussion refer to the note disclosures contained in the annual consolidated financial statements for the years ended December 31, 2021 and 2020 ("2021 annual consolidated financial statements"). References in the below discussion to "O4 2021" and "Q4 2020" refer to the three months ended December 31, 2021 and December 31, 2020 and references to "2020" refer to the year ended December 31, 2020.

The financial statements and related notes of Largo have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") applicable to a going concern. Certain non-GAAP measures are discussed in this MD&A, which are clearly disclosed as such. Additional information, including the Company's press releases, has been filed electronically through the System for Electronic Document Analysis and Retrieval ("SEDAR") and is available online under the Company's profile at www.sedar.com and www.sec.gov.

This MD&A reports the Company's activities through March 15, 2022, unless otherwise indicated. References to "date of this MD&A" mean March 15, 2022. Except as otherwise set out herein, all amounts expressed herein are in thousands of U.S. dollars, denominated by "\$". The Company's shares, options, units and warrants are expressed in thousands. Prices are not expressed in thousands. References to the symbol "C\$" mean the Canadian dollar and references to the symbol "R\$" mean the Brazilian real.

Mr. Paul Sarjeant B.Sc. P.Geo., is a Qualified Person as defined under National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and has reviewed the technical information in the MD&A. Mr. Sarjeant is Manager, Geology of the Company. Refer to the Operations section of this MD&A for details of the Qualified Persons involved in reviewing the updated reserves and resources at the Company's Maracás Menchen Mine.

# The Company

On November 8, 2021, the Company changed its legal name from Largo Resources Ltd. to Largo Inc.

Largo is a Canadian domiciled company that has historically been solely committed to the production and supply of high-quality vanadium products. The Company recently announced its belief that the development and sale of vanadium based electrical energy storage systems to support the planet's on-going transition to renewable energy presents both an attractive economic opportunity for the use of the Company's vanadium products and an opportunity to enhance the Company's sustainability. Consequently, the Company is in the process of vertically integrating its highly efficient vanadium production operations with its vanadium based energy storage technology to create a unique competitive advantage in the rapidly growing long duration energy storage market. The Company is confident that using its VPURE<sup>™</sup> and VPURE+<sup>™</sup> products, which are sourced from one of the world's highest-grade vanadium deposits at the Company's Maracás Menchen Mine in Brazil, in its VCHARGE vanadium redox flow battery ("VRFB") technology results in a competitive and practical long duration energy storage product.

The Company is organized and exists under the Business Corporations Act (Ontario) and its common shares are listed on the Toronto Stock Exchange ("TSX") under the symbol "LGO" and on the Nasdaq Stock Market ("Nasdag") under the symbol "LGO".

# 2021 Highlights

- On November 8, 2021, the Company changed its legal name from Largo Resources Ltd. to Largo Inc.
- The Company's Maracás Menchen Mine produced 10,319 tonnes of vanadium pentoxide ("V<sub>2</sub>O<sub>5</sub>") in 2021, including quarterly production 2,003 tonnes of  $V_2O_5$  produced in Q4 2021. The global  $V_2O_5$  recovery rate for 2021 was 79.7%, with 76.0% seen in Q4 2021. The Company sold 11,393 tonnes of  $V_2O_5$  equivalent in 2021, with sales in Q4 2021 of 2,899 tonnes.
- The Company recorded net income before tax of \$31,759 for 2021 and net income of \$22,571 after the recognition of an income tax expense of \$5,430 and a deferred income tax expense of \$3,758.

- The Company's cash balance at December 31, 2021 was \$83,790.
- Between January 29, 2021 and February 3, 2021, the Company completed the settlement of two outstanding credit facilities through the repayment in full of the outstanding principal amount of \$24,788. On May 6, 2021, the Company secured and drew down a \$15,000 working capital financing facility with a bank in Brazil.
- On March 1, 2021, the Company held a Special Meeting of Shareholders (the "Special Meeting") where the shareholders approved the consolidation of the Company's common shares. On March 4, 2021, the Company completed the consolidation of its common shares on the basis of one post-consolidation common share for every 10 pre-consolidation common shares.
- On March 17, 2021, the Company announced the appointment of Mr. Ian Robertson to its Board of Directors. On July 22, 2021, consistent with the Company's commitment to its focus on the transition to VRFB development and production, the Company announced the appointment of Mr. Ian Robertson as Co-Chair of the Board of Directors of the Company and as Interim President of Largo Clean Energy ("LCE").
- On April 16, 2021, the Company announced that it had received approval from the Nasdag to list its issued and outstanding common shares on the Nasdaq. The Company's common shares commenced trading on the Nasdaq at the open of market trading on April 19, 2021 under the symbol "LGO".
- On June 4, 2021, the Company announced that it obtained a receipt for a final short form base shelf prospectus (the "Shelf Prospectus") from the securities regulatory authorities in each of the provinces and territories of Canada. A corresponding registration statement on Form F-10 (the "Registration Statement") was filed with the United States Securities and Exchange Commission (the "SEC") under the Canada/U.S. Multijurisdictional Disclosure System ("MJDS"). The Company filed the Shelf Prospectus to replace its prior base shelf prospectus, which expired in March 2021.
- On June 9, 2021, the Company hosted an investor-oriented virtual 'Battery Day', during which the Company detailed a transformational strategic shift to the development and production of vanadium based electrical energy storage systems. The Company believes that vertically integrating its VRFB technology with its vanadium production operations creates a unique competitive advantage in the rapidly growing long duration energy storage market.
- On July 20, 2021, the Company announced that LCE had entered into its first VCHARGE VRFB sales contract with Enel Green Power España ("EGPE"). Under the contract, LCE is obligated to deliver a five hour, 6.1 MWh VCHARGE system for a project in Spain with expected commissioning in Q4 2022, subject to receipt of the notice to proceed from EGPE. On July 30, 2021, the Company announced that it had received the notice to proceed.
- On August 19, 2021, the Company announced the release of its 2020 sustainability report, highlighting significant progress made by the Company with its environmental, social and governance priorities in furthering vanadium's role in the global green economy.
- On September 23, 2021, the United States Department of Energy ("DOE") announced funding for research and development projects to scale up American manufacturing of flow battery and long duration storage systems. LCE is expected to receive \$4.2 million of this funding to develop and demonstrate highly efficient manufacturing processes for affordable, grid-scale flow batteries. The receipt of funds is subject to the completion of the award negotiation with the DOE.
- On November 3, 2021, the Company announced the results of an updated mining plan for its Maracás Menchen Mine to provide enhanced access to the vanadium needed for the Company to continue to execute on its energy storage transition strategy. The mining plan also includes new cash flow generation from the anticipated production and sale of titanium dioxide pigment. An independent technical report has been prepared in respect of the Company's Maracás Menchen Mine in accordance with National Instrument 43-101, Standards of Disclosure for Mineral Projects, which has been filed on SEDAR (www.sedar.com) and EDGAR (www.sec.gov).
- In November 2021, the Company's subsidiary, Largo Resources USA Inc., signed a 10-year exclusive off-take agreement with Gladieux Metals Recycling ("GMR") for the purchase of all standard and high purity grade vanadium products from GMR's recycling facility located in Freeport, Texas.

# **Significant Events and Transactions Subsequent to 2021**

- On January 18, 2022, the Company announced the appointment of Mr. Stephen Prince as President of LCE.
- On February 3, 2022, the Company announced the creation of Largo Physical Vanadium Corp. and a proposed qualifying transaction pursuant to the policies of the TSX Venture Exchange with Column Capital Corp. (the "CPC"), a capital pool company, the terms of which are set out in a non-binding letter of intent dated February 1, 2022 (the "LOI"). Upon completion of the proposed qualifying transaction and associated regulatory approvals amongst other things, it is anticipated that the resulting entity will be named Largo Physical Vanadium Corp. ("LPV") and will become a publicly listed physical vanadium holding company that will purchase and hold physical vanadium, amongst other things, for use in the Company's VCHARGE batteries.

# 2021 Summary

#### **Financial**

	Three months ended					
	De	cember 31,	December 3	L,		
		2021	202	0	Moven	nent
Revenues	\$	50,326	\$ 42,25	4	\$ 8,072	19%
Operating costs		(37,746)	(31,60	4)	(6,142)	19%
Direct mine and production costs		(21,370)	(18,54		(2,823)	15%
Professional, consulting and management fees		(5,557)	(3,22		(2,328)	72%
Foreign exchange gain		79	2,57	2	(2,493)	(97%)
Other general and administrative expenses		(2,297)	(1,02	7)	(1,270)	124%
Share-based payments		(1,153)	(45	•	(703)	156%
Finance costs		(368)	(38	0)	12	(3%)
Interest income		137	6	6	71	108%
Technology start-up costs		(3,105)	-	-	(3,105)	(100%)
Exploration and evaluation costs		(653)	(2,17		1,526	(70%)
		(50,663)	(36,23		(14,432)	40%
Net income (loss) before tax	\$	(337)			\$ (6,360)	(106%)
Income tax (expense) recovery		(402)	28		(684)	(243%)
Deferred income tax recovery		1,528	57		952	165%
Net income	\$	789	\$ 6,88	1	\$ (6,092)	(89%)
Unrealized (loss) gain on foreign currency						
translation		(4,086)	10,11	2	(14,198)	(140%)
Comprehensive income (loss)	\$	(3,297)	\$ 16,99	3	\$ (20,290)	(119%)
Basic earnings per share	\$	0.01	\$ 0.1	2	\$ (0.11)	(92%)
Diluted earnings per share	\$	0.01	\$ 0.1		\$ (0.10)	(91%)
Cash provided before working capital items	\$	6,102	\$ 7,53	9	\$ (1,437)	(19%)
Net cash provided by operating activities	4	3,427	4,74		(1,314)	(28%)
. , , , ,		•	•			
Net cash (used in) provided by financing activities		(2)	2,58		(2,591)	(100%)
Net cash used in investing activities		(6,985)	(5,07		(1,915)	38%
Net change in cash		(3,777)	4,25	U	(8,027)	(189%)

	Year ended					
	De	ecember 31,				
		2021	2020	Mover	nent	
Revenues	\$	198,280	\$ 119,987	\$ 78,293	65%	
Other gains (losses)		_	1,636	(1,636)	(100%)	
		198,280	121,623	76,657	63%	
Operating costs		(133,010)	(88,390)	(44,620)	50%	
Direct mine and production costs		(75,126)	(48,929)	(26,197)	54%	
Professional, consulting and management fees		(17,922)	(8,255)	(9,667)	117%	
Foreign exchange gain (loss)		610	(9,064)	9,674	(107%)	
Other general and administrative expenses		(6,404)	(3,329)	(3,075)	92%	
Share-based payments		(3,135)	(1,638)	(1,497)	91%	
Finance costs		(1,135)	(1,350)	215	(16%)	
Interest income		403	1,148	(745)	(65%)	
Technology start-up costs		(3,835)	_	(3,835)	(100%)	
Exploration and evaluation costs		(2,093)		929	(31%)	
		(166,521)		(52,621)	46%	
Net income before tax	\$	31,759		\$ 24,036	311%	
Income tax expense		(5,430)		(5,291)	3,806%	
Deferred income tax expense		(3,758)	(823)	(2,935)	357%	
Net income	\$	22,571	\$ 6,761	\$ 15,810	234%	
Unrealized loss on foreign currency translation		(10,334)	(41,937)	31,603	(75%)	
Comprehensive income (loss)	\$	12,237	\$ (35,176)	\$ 47,413	(135%)	
Basic earnings per share (note 14)	\$	0.35	\$ 0.12	\$ 0.23	192%	
Diluted earnings per share (note 14)	\$	0.35	\$ 0.11	\$ 0.24	218%	
Cash provided before working capital items	\$	55,362		\$ 43,297	359%	
Net cash provided by (used in) operating activities		39,777	(59,508)	99,285	(167%)	
Net cash (used in) provided by financing activities		(6,902)	•	(37,134)	(123%)	
Net cash used in investing activities		(27,399)		(9,293)	51%	
Net change in cash	\$	4,645	\$ (48,354)	\$ 52,999	(110%)	

The movements in the discussion below refer to those shown in the previous table.

The Company recorded net income of \$22,571 in 2021, compared with a net income of \$6,761 in 2020. This movement was primarily due to a 65% increase in revenues. This was partially offset by a 50% increase in operating costs, a 117% increase in professional, consulting and management fees, a 92% increase in other general and administrative expenses, a 91% increase in share-based payments and a 100% increase in technology start-up costs. For Q4 2021, the Company recorded net income of \$789, compared with net income of \$6,881 for Q4 2020. This movement was primarily attributable to a 19% increase in operating costs, a 72% increase in professional, consulting and management fees, a 124% increase in other general and administrative expenses, a 156% increase in share-based payments and a 100% increase in technology start-up costs. This was partially offset by a 19% increase in revenues and a 70% decrease in exploration and evaluation costs.

#### Commercial

- In Q4 2021, the Company sold 2,899 tonnes of  $V_2O_5$  equivalent (Q4 2020 3,751 tonnes). The Company delivered both standard grade and high purity  $V_2O_5$  as well as ferrovanadium ("FeV") to customers globally.
- For 2021, the Company achieved the lower end of its annual sales guidance of 11,200 to 11,800 tonnes of  $V_2O_5$  equivalent with total sales of 11,393 tonnes of  $V_2O_5$  equivalent (2020 – 10,260 tonnes).

- The Company continues to actively manage its logistics and supply chain operations to provide premium products and service to its customers. Logistical challenges and higher transport costs have impacted all aspects of the Company's supply chain resulting in lower than anticipated sales and increased inventory in transit in Q4 2021. However, the Company continued to deliver on all its commercial commitments through careful planning. The Company does not expect the logistics situation to improve until mid-2022, at which point the Company anticipates being able to reduce its inventory in transit through increased sales.
- During Q4 2021, the average benchmark price per lb of  $V_2O_5$  in Europe was \$8.30, a decrease of 12% from the average of \$9.40 seen in Q3 2021 and an increase of 57% from the average of \$5.29 seen in Q4 2020. The average benchmark price for 2021 was \$8.24, compared with \$5.71 for 2020. The average benchmark price at December 31, 2021 was approximately \$8.75, compared with approximately \$8.78 at September 30, 2021 and \$5.40 at December 31, 2020. During Q4 2021, the average benchmark price per kg of FeV in Europe was \$32.29, an increase of 33% from the average of \$24.36 seen in Q4 2020. The average benchmark price for 2021 was \$34.31, compared with \$24.99 for 2020. The average benchmark price at December 31, 2021 was approximately \$32.75, compared with approximately \$33.00 at September 30, 2021 and \$25.25 at December 31, 2020. The Company is now selling products with pricing based on several different V<sub>2</sub>O<sub>5</sub> and FeV benchmarks. The Company's revenues will be driven by the movements in these prices.
- Demand in all of the Company's key markets remained strong in Q4 2021. Spot sales activity in the steel industry recovered compared to previous quarters. The aerospace industry's demand is increasing but still significantly below pre-COVID levels. The chemical industry has remained strong throughout the year and demand from energy storage continues its rapid growth.
- Subsequent to Q4 2021, sales in January 2022 and February 2022 were 964 and 571 tonnes of  $V_2O_5$ equivalent, respectively. The lower sales in February 2022 is due to a combination of shipment delays and a decrease in spot sales as the Company took actions to increase its available inventory levels.
- The Company maintains a strong focus on developing new markets for its high purity products and will be supported by the addition of vanadium trioxide (" $V_2O_3$ ") to its product range for that purpose.

	Three mor	nths ended	Year ended		
	December 31,	December 31,	December 31,	December 31,	
	2021	2020	2021	2020	
V <sub>2</sub> O <sub>5</sub> revenues per pound of V <sub>2</sub> O <sub>5</sub> sold <sup>1, 2</sup>					
<ul> <li>Produced material</li> </ul>	\$ 7.58		\$ 7.47		
<ul> <li>Purchased material</li> </ul>	\$ -		\$ 8.27		
- Total	\$ 7.58		\$ 7.48		
FeV revenues per kg of FeV sold <sup>1, 2</sup>					
<ul> <li>Produced material</li> </ul>	\$ 26.72		\$ 27.30		
<ul> <li>Purchased material</li> </ul>	\$ 24.44		\$ 26.85		
– Total	\$ 26.63		\$ 27.26		
Revenues per pound sold <sup>1, 2</sup>	\$ 7.88	\$ 5.12	\$ 7.89	\$ 5.31	

 $V_2O_5$  revenues per pound of  $V_2O_5$  sold, FeV revenues per kg of FeV sold and revenues per pound sold are non-GAAP ratios with no standard meaning under IFRS, and may not be comparable to similar financial measures disclosed by other issuers. Refer to the "Non-GAAP Measures" section of this MD&A. Calculated based on the quantity sold during the stated period.

- During Q4 2021, the Company recognized revenues of \$50,326 (Q4 2020 \$42,254) from sales of 2,899 tonnes of  $V_2O_5$  equivalent (O4 2020 - 3,751 tonnes). Of the total revenues, \$38,102 is related to the Sales & trading segment, \$10,853 is related to the Mine properties segment and \$1,371 is related to the Corporate segment (after the elimination of inter-segment transactions).
- During 2021, the Company recognized revenues of \$198,280 (2020 \$119,987) from the sales of 11,393 tonnes of  $V_2O_5$  equivalent (2020 – 10,260 tonnes). Of the total, \$160,535 is related to the Sales & trading segment, \$33,705 is related to the Mine properties segment and \$4,040 is related to the Corporate segment(after the elimination of inter-segment transactions).

#### Costs

- Operating costs of \$37,746 in Q4 2021 (Q4 2020 \$31,604) include direct mine and production costs of \$21,370 (Q4 2020 - \$18,547), conversion costs of \$2,592 (Q4 2020 - \$1,330), product acquisition costs of \$1,010 (Q4 2020 - \$2,965), royalties of \$2,279 (Q4 2020 - \$1,958), distribution costs of \$1,463 (Q4 2020 -\$1,029), inventory write-down of \$3,208 (Q4 2020 - \$47) and depreciation and amortization of \$5,824 (Q4 2020 – \$5,728). The increase in direct mine and production costs is primarily attributable to the decrease in global recovery, from 80.6% in Q4 2020 to 76.0% in Q4 2021, as well as the impact of abnormally elevated levels of rainfall experienced in Q4 2021 which negatively impacted the operational performance and increased costs. In addition, cost increases in critical consumables, including HFO and diesel, are still being experienced. Conversion costs relate to the costs incurred in converting quantities of V<sub>2</sub>O<sub>5</sub> into FeV for delivery to customers and distribution costs relate to the costs incurred in delivering products to customers. Of the total operating costs, \$25,186 is related to the Sales & trading segment, \$11,620 is related to the Mine properties segment and \$940 is related to the Corporate segment (after the elimination of inter-segment transactions).
- Operating costs of \$133,010 for 2021 (2020 \$88,390) include direct mine and production costs of \$75,126 (2020 – \$48,929), conversion costs of \$9,252 (2020 – \$1,976), product acquisition costs of \$9,666 (2020 – \$10,459), royalties of \$8,867 (2020 - \$7,107), distribution costs of \$5,302 (2020 - \$2,269), inventory writedown of \$3,210 (2020 - \$177), depreciation and amortization of \$21,537 (2020 - \$17,473) and a margin on iron ore sales of \$50 (2020 – \$nil)). The increase in direct mine and production costs is primarily attributable to the increase in sales, with 11,393 tonnes of V<sub>2</sub>O<sub>5</sub> equivalent sold in 2021 (2020 – 10,260 tonnes), the impact of a lower global recovery in 2021 of 79.7% (2020 - 81.5%) and the cost increases for critical consumables as noted above. Of the total, \$101,291 is related to the Sales & trading segment, \$29,282 is related to the Mine properties segment and \$2,437 is related to the Corporate segment (after the elimination of inter-segment transactions).

		Three mor	is ended	Year ended			ded							
	Dec	December 31,		December 31,		December 31,		December 31,		December 31,	[	December 31,		December 31,
		2021		2020		2021		2020						
Cash operating costs per pound <sup>1</sup>	\$	4.04	\$	2.81	\$	3.74	\$	2.90						
Cash operating costs excluding royalties per pound <sup>1</sup>	\$	3.68	\$	2.56	\$	3.37	\$	2.56						

Cash operating costs per pound and cash operating costs excluding royalties per pound are non-GAAP ratios with no standard meaning under IFRS, and may not be comparable to similar financial measures disclosed by other issuers. Refer to the "Non-GAAP Measures" section of this MD&A.

- Cash operating costs excluding royalties per pound were \$3.68 per lb in Q4 2021, compared with \$2.56 for Q4 2020. The increase seen in Q4 2021 compared with Q4 2020 is largely due to a decrease in the global recovery, with 76.0% achieved in Q4 2021, compared with 80.6% achieved in Q4 2020, and the impact of cost increases for critical consumables, including HFO and diesel. The abnormally elevated levels of rainfall experienced in Q4 2021 negatively impacted the operational performance and increased costs. Produced  $V_2O_5$  equivalent sold decreased, with 6,267 (000s lb) sold in Q4 2021, as compared with 7,831 (000s lb) sold in Q4 2020.
- Professional, consulting and management fees in Q4 2021 increased from Q4 2020 by 72%. The increase is primarily attributable to costs incurred in Q4 2021 in connection with LCE, which was not fully operational in Q4 2020. In addition, the Company's Corporate segment continues to incur increased insurance, legal, regulatory and compliance costs in Q4 2021 as a result of the Nasdaq listing earlier in 2021, U.S. regulatory requirements and ongoing strategic initiatives. Of the total professional, consulting and management fee expense in Q4 2021, \$523 related to the Sales & trading segment (Q4 2020 - \$476), \$1,176 related to the Mine properties segment (Q4 2020 - \$963), \$1,946 related to Corporate (Q4 2020 - \$1,083) and \$1,912 related to Largo Clean Energy (Q4 2020 - \$707). For 2021, total professional, consulting and management fees increased from 2020 by 117%. Of the total, \$1,642 related to the Sales & trading segment (2020 - \$1,274), \$4,162 related to the Mine properties segment (2020 - \$3,086), \$7,036 related to Corporate (2020 - \$3,188) and \$5,081 related to Largo Clean Energy (\$707).
- The foreign exchange gain in Q4 2021 decreased from the gain in Q4 2020 by 97%. This is primarily attributable to a strengthening of the U.S. dollar against the Brazilian real by approximately 3% since

September 30, 2021 on U.S. dollar denominated cash and liabilities in Brazil and a weakening of the Euro against the U.S. dollar by approximately 2% since September 30, 2021 on Euro denominated assets. Of the total foreign exchange gain in Q4 2021, a loss of \$42 related to the Sales & trading segment (Q4 2020 – gain of \$27), a gain of \$90 related to the Mine properties segment (Q4 2020 - gain of \$1,826) and a gain of \$35 related to Corporate (Q4 2020 - gain of \$719). For 2021, a loss of \$161 related to the Sales & trading segment (2020 - gain of \$44), a gain of \$574 related to the Mine properties segment (2020 - a loss of \$15,943) and a gain of \$207 related to Corporate (2020 - gain of \$6,835).

- Other general and administrative expenses in Q4 2021 increased from Q4 2020 by 124%. The increase is primarily attributable to costs incurred in Q4 2021 in connection with LCE that was not fully operational in Q4 2020. This contributed to the increases seen in travel, occupancy, information technology, depreciation and amortization and office costs. Of the total other general and administrative expenses in Q4 2021, \$124 related to the Sales & trading segment (Q4 2020 - \$74), \$497 related to the Mine properties segment (Q4 2020 – \$514), \$783 related to Corporate (Q4 2020 – \$334) and \$793 related to Largo Clean Energy (Q4 2020 – \$105). In addition, \$100 in Q4 2021 related to initial activities for the titanium project (Q4 2020 - \$nil). For 2021, total other general and administrative expenses increased from 2020 by 92%. Of the total, \$414 related to the Sales & trading segment (2020 - \$473), \$1,500 related to the Mine properties segment (2020 -\$1,669), \$2,358 related to Corporate (2020 - \$1,082) and \$2,029 related to Largo Clean Energy (2020 - \$105). In addition, \$100 related to initial activities for the titanium project and \$3 related to exploration and evaluation (2020 - both \$nil).
- Share-based payments in Q4 2021 increased from Q4 2020 by 156%. The increase is primarily due to the grant of restricted share units ("RSUs") and stock options in 2021. The total in Q4 2021 of \$1,153 was related to the Corporate segment (Q4 2020 – \$450). For 2021, share-based payments increased from the same prior year period by 91%, with the total of \$3,135 related to Corporate (2020 - \$1,638).
- Technology start-up costs relate to activities at LCE focussed on the establishment and ramp up of operations to support the future deployments of its VCHARGE VRFB system (Q4 2021 - \$2,391 and 2021 -\$3,121) and costs related to initial activities for the titanium project (Q4 2021 and 2021 - \$714).
- Exploration and evaluation costs in Q4 2021 decreased from Q4 2020 by 70%. For 2021, the decrease from 2020 was 31%. These decreases are a result of the completion of the technical report in Q4 2021.
- Comprehensive loss for Q4 2021 increased from Q4 2020 by 119% after an increase in the unrealized loss on foreign currency translation of 140%. For 2021, comprehensive income increased from 2020 by 135% after a decrease in the unrealized loss on foreign currency translation of 75%. The unrealized loss on foreign currency translation in Q4 2021 is primarily due to a weakening of the Brazilian real against the U.S. dollar by approximately 3% since September 30, 2021, and by approximately 7% in 2021.

## Cash Flows

- Cash provided by operating activities of \$3,427 in Q4 2021 is a decrease from cash provided by operating activities of \$4,741 in Q4 2020. This is primarily due to a decrease in cash provided before working capital items of \$1,437 and a net increase in working capital items of \$123. For 2021, cash provided by operating activities was \$39,777, compared with cash used in operating activities of \$59,508 in 2020. This movement is primarily attributable to an increase in cash provided before working capital items of \$43,297 and a net change in working capital items of \$55,988, which is largely driven by movements in amounts receivable and accounts payable and accrued liabilities.
- Cash used in financing activities in Q4 2021 increased from cash provided by financing activities in Q4 2020 by \$2,591. The movement is primarily due to finance lease payments in Q4 2021 of \$139 and the issuance of common shares in Q4 2020 of \$2,519. For 2021, cash used in financing activities increased from cash provided by financing activities in 2020 by \$37,134. The movement is primarily attributable to the receipt of debt of \$15,000 (2020 - \$24,788), repayment of debt of \$24,788 (2020 - \$nil), interest received of \$403 (2020 -\$1,135), negative change in restricted cash of \$448 (2020 - positive \$76), finance lease payments of \$230 (2020 - \$nil) and cash received from the issuance of common shares of \$3,161 (2020 - \$4,233).
- Cash used in investing activities in Q4 2021 of \$6,985 is an increase of \$1,915 from the \$5,070 seen in Q4 2020. For 2021, the increase from 2020 was \$9,293. These movements are primarily due to the V<sub>2</sub>O<sub>3</sub> project being undertaken in 2021.

The net change in cash in Q4 2021 was a decrease of \$3,777, compared with an increase of \$4,250 for Q4 2020. For 2021, the net change in cash was an increase of \$4,645 (2020 - a decrease of \$48,354).

## **Net income reconciliation**

		2021	
Total V <sub>2</sub> O <sub>5</sub> equivalent sold	000s lbs	25,117	Α
	tonnes <sup>1</sup>	11,393	
Produced V₂O₅ equivalent sold	000s lbs	23,953	В
	tonnes <sup>1</sup>	10,865	
Revenues per pound sold	\$/lb	\$ 7.89	С
Cash operating costs per pound	\$/lb	\$ 3.74	D

Conversion of tonnes to pounds, 1 tonne = 2,204.62 pounds or lbs.

2021								
Revenues		\$	198,280	$$\rm AxC$$ 11,393 tonnes of $\rm V_2O_5$ equivalent sold (2020 - 10,260 tonnes), with revenues per pound sold of \$7.89 (2020 - \$5.31).				
Cash operating costs			(89,655)	B x D Global recovery of 79.7% (2020 - 81.5%), impact of cost increases for critical consumables, including HFO and diesel, and abnormal rainfall.				
Other operating costs								
Conversion costs (costs incurred in converting V <sub>2</sub> O <sub>5</sub> to FeV that are recognized on the sale of FeV)	(9,252)			Note 22 3,251 tonnes of FeV sold. Unit conversion costs are increasing due to aluminium price increases.				
Product acquisition costs (costs incurred in purchasing products from 3rd parties that are recognized on the sale of those products)	(9,666)			Note 22 $528$ tonnes of $V_2O_5$ equivalent of purchased products sold, compared with 716 tonnes in 2020 with a cost of \$10,459.				
Distribution costs	(5,302)			Note 22				
Depreciation	(21,537)			Note 22				
Inventory write-down	(3,210)			Note 22				
Loss on iron ore sales	(50)			Note 22				
_		-	(49,017)					
Commercial & Corporate costs								
Professional, consulting and management fees	(8,678)			Note 17 (Sales & trading plus Corporate) Increased insurance, legal, regulatory and				
Other general and administrative expenses	(2,772)			compliance costs in 2021 as a result of the Nasdaq listing earlier in 2021 and ongoing U.S.				
Share-based payments	(3,135)			regulatory requirements.				
			(14,585)					

	202	1	
Largo Clean Energy		),231)	Note 17 (excluding finance costs) 2021 guidance between \$7,000 and \$9,000.
Titanium project		(814)	Note 17 - "other"
E&E properties		(4)	Note 17 (excluding finance costs)
Foreign exchange gain		610	
Finance costs	(1	L,135)	
Interest income		403	
Exploration and evaluation costs	(2	2,093)	
Net income (loss) before tax	31	1,759	
Income tax expense	(5	5,430)	
Deferred income tax expense	(3	3,758)	
Net income	\$ 22	2,571	

## **Operations**

- V<sub>2</sub>O<sub>5</sub> production in October 2021 was 865 tonnes, with 621 tonnes produced in November and 517 tonnes produced in December, for a total of 2,003 tonnes of V<sub>2</sub>O<sub>5</sub> produced in Q4 2021.
- The global recovery achieved in Q4 2021 was 76.0%, 6% lower than the 80.6% achieved in Q4 2020 and 9% lower than the 83.7% achieved in O3 2021. The global recovery in October 2021 was 81.1%, with 78.7% achieved in November and 65.4% achieved in December.
- The operational results in Q4 2021 were impacted by abnormally elevated levels of rainfall in November and December. During these two months, approximately 580 millimetres of rain was recorded, which represents an increase of 690% over the monthly average rainfall (measured from 2014 to 2020) and an increase of 360% over the O4 average rainfall (measured from 2014 to 2020) in the Maracás area. Following these rains, the Company installed a rainwater diversion system around the Campbell Pit and has improved its pumping system. The Company expects that these actions will mitigate the impact to the operations from higher than expected rainfall.
- Subsequent to Q4 2021, the Company scheduled a six day shutdown of the processing plant in January 2022 in order to perform maintenance on the plant cooler engine system and power substations. Following this shutdown, production in January 2022 and February 2022 was 702 and 731 tonnes of V<sub>2</sub>O<sub>5</sub>.
- The Company completed the ramp-up of the V<sub>2</sub>O<sub>3</sub> plant and provided samples to prospective customers for product specification analysis. The Company began shipping V<sub>2</sub>O<sub>3</sub> to customers in Q1 2022 for customer qualification.
- Production quantities and non-GAAP unit cost measures are summarized in the following table:

Period	Production Tonnes	Production Pounds Equivalent <sup>1</sup>	Average Quarterly V <sub>2</sub> O <sub>5</sub> price <sup>2</sup> \$/lb	Cash operating costs excluding royalties per pound <sup>3</sup> \$/lb <sup>4</sup>	Total cash costs per pound <sup>3</sup> \$/lb <sup>4,5</sup>
		•		• • •	
Q4 2021	2,003	4,415,854	\$8.30	\$3.68	\$5.01
Q3 2021	3,260	7,187,061	\$9.40	\$3.53	\$4.76
Q2 2021	3,070	6,768,184	\$8.19	\$3.39	\$4.77
Q1 2021	1,986	4,378,375	\$7.09	\$2.87	\$4.07
Q4 2020	3,340	7,363,431	\$5.29	\$2.56	\$3.41
Q3 2020	3,092	6,816,685	\$5.33	\$3.14	\$3.69
Q2 2020	2,562	5,648,236	\$6.14	\$1.89 <sup>6</sup>	\$3.68 <sup>6</sup>
Q1 2020	2,831	6,241,279	\$6.07	\$2.66	\$2.87

- Conversion of tonnes to pounds, 1 tonne = 2,204,62 pounds or lbs.
- Average benchmark price per lb of  $V_2O_2$  in Europe for the stated period.
- Cash operating costs excluding royalties per pound and total cash costs per pound are non-GAAP ratios with no standard meaning under IFRS, and may not be comparable to similar financial measures disclosed by other issuers. Refer to the "Non-GAAP Measures" section of this MD&A.
- For periods prior to Q2 2020, calculated from C\$ using average C\$/\$ foreign exchange rate of C\$1.32 for Q1 2020.
- Q4 2021 is the last period when this measure is being calculated and presented. Beginning in Q1 2022, this measure will no longer be disclosed.
- The measure for Q2 2020 includes the benefit of tax credits of \$2,187, without which the cash operating costs excluding royalties per pound would be \$3.04 and total cash costs per pound would be \$4.66.
- 2021 production of 10,319 tonnes of  $V_2O_5$  (22.7 million lbs) represents a decrease of 13% over 2020. The global recovery of 79.7% achieved in 2021 is 2% lower than that achieved in 2020.

# **Selected Quarterly Information**

Summary financial information for the eight quarters ended December 31, 2021, prepared in accordance with IFRS (in thousands of U.S. dollars, except for basic earnings (loss) per share and diluted earnings (loss) per share):

Period	Revenue	Net	Income (Loss)	Basic (Loss) pe	Earnings er Share <sup>1</sup>	Diluted I (Loss) pe	• .	Tot	al Assets	-	current abilities
Q4 2021	\$ 50,326	\$	789	\$	0.01	\$	0.01	\$	313,909	\$	6,544
Q3 2021	53,861		9,193		0.14		0.14		315,577		6,911
Q2 2021	54,292		8,445		0.13		0.13		318,276		8,259
Q1 2021	39,801		4,144		0.07		0.07		261,018		5,440
Q4 2020	42,254		6,881		0.12		0.11		297,806		6,295
Q3 2020	27,474		2,549		0.05		0.04		272,099		5,857
Q2 2020	8,350		(7,012)		(0.12)		(0.12)		268,874		5,893
Q1 2020	41,909		4,343		0.08		0.07		325,336		6,163

Basic earnings (loss) per share and diluted earnings (loss) per share have been adjusted in order to reflect the effect of the share consolidation that was completed on March 4, 2021 (refer to note 12).

## 2022 Guidance

The Company has committed a significant proportion of its monthly production in 2022 to sales of its VPURE+™ and VPURE<sup>™</sup> products, as well as FeV produced from VPURE<sup>™</sup>. The Company remains confident that its sales and trading division will add significant long-term value to the Company.

The Company's Maracás Menchen Mine continued operations during 2021. The Company continues to monitor the evolving COVID-19 pandemic and has taken preventative measures at its mine site and corporate offices to mitigate potential risks. Although there have been some challenges with logistics, there continues to be no significant impact on the Company's production or on the shipment of products out of Maracás. To date, there continues to be no significant disruption to the Company's supply chain for its operations and the level of critical consumables continues to be at normal levels. In addition, the restrictions imposed by the government in Brazil have not significantly impacted operations. The Company continues to follow the recommendations provided by health authorities and all corporate office personnel have been instructed to work from home where possible. The Company continues to staff critical functions at the Maracás Menchen Mine and has encouraged those in non-essential roles to work from home.

The Company's 2022 guidance is presented on a "business as usual" basis. The Company continues to monitor measures being imposed by governments globally to reduce the spread of COVID-19 and the impact that this may have on the Company's operations, sales and guidance for 2022. Although these restrictions have not, to date, had a material impact on the Company's operations and sales, the potential future impact of COVID-19 both in Brazil and globally could have a significant impact on the Company's operations, sales efforts and logistics. The Company is continuing to monitor the rapidly developing impacts of the COVID-19 pandemic and will take all possible actions to help minimize the impact on the Company and its people. However, these actions may significantly change the guidance and forecasts presented and will, if and when necessary, update its guidance accordingly. Refer to the Company's Annual Information Form for the year ended December 31, 2021 for the full discussion of the Company's Risks and Uncertainties, including those relating to the COVID-19 pandemic.

The Company's guidance for 2022 is presented below.

		2022 Guidance
Annual V <sub>2</sub> O <sub>5</sub> equivalent production	tonnes	12,000 - 12,750
Annual V <sub>2</sub> O <sub>5</sub> equivalent sales	tonnes	12,000 - 12,750
Cash operating costs excluding royalties per pound <sup>1</sup>	\$/lb	3.20 - 3.40
Distribution costs	\$	7,000 - 8,000
Corporate and Sales & Trading administrative costs <sup>2</sup>	\$	10,000 - 11,000
Largo Clean Energy expenditures <sup>3</sup>	\$	15,000 - 18,000
Capital expenditures - components		
Sustaining capital expenditures (excluding capitalized stripping costs)	\$	9,000 - 10,000
Capitalized stripping costs	\$	10,000 - 11,000
Ilmenite concentration plant capital expenditure	\$	29,000 - 30,000
TiO <sub>2</sub> processing plant capital expenditure	\$	9,000 - 10,000
Carry-over capital expenditures	\$	2,000 - 3,000
Largo Clean Energy capital expenditures	\$	1,500 - 2,500

Cash operating costs excluding royalties per pound is a non-GAAP ratio with no standard meaning under IFRS, and may not be comparable to similar financial measures disclosed by other issuers. Refer to the "Non-GAAP Measures" section of this MD&A.

# **Operations**

# **Largo Clean Energy**

#### **Recent Developments**

On July 20, 2021, the Company announced that LCE had entered into its first VCHARGE± VRFB sales contract with Enel Green Power España ("EGPE"). Under the contract, LCE is obligated to deliver a five hour, 6.1 MWh VCHARGE± system for a project in Spain with expected commissioning in Q4 2022, subject to receipt of notice to proceed from EGPE. On July 30, 2021, the Company announced that it had received the notice to proceed.

During Q4 2021, LCE remained focused on obtaining certification of its VCHARGE VRFB under UL1973 and UL9540, being requirements to support 2022 project deployments. The UL (Underwriters Laboratories) certifications were successfully completed December 2021, following which, LCE will proceed to obtain CE certification, which is expected by the end of Q2 2022. The CE certification is the European parallel to the UL certification.

A location was secured for LCE's headquarters, including a VRFB product development and stack manufacturing centre, in Massachusetts, U.S. with an expected manufacturing capacity of up to 1.4 gigawatt hours per year. The LCE team moved into the office facilities in May 2021 and building modifications are underway to enable the installation and commissioning of the stack manufacturing capacity and test equipment required to support the 2022 business plan. Substantial completion is expected by Q1 2022.

Hiring of additional personnel to support the achievement of these timelines and targets continues, including the recent hiring of Mr. Stephen Prince as President of Largo Clean Energy.

## **Maracás Menchen Mine**

#### Recent Developments

Expenditures of \$28,923 were capitalized to mine properties, plant and equipment during 2021 (2020 - \$19,759), including \$8,726 of capitalized waste stripping and push back costs (2020 - \$8,512). The V<sub>2</sub>O<sub>3</sub> plant was commissioned during Q4 2021, with \$7,607 reclassified from construction in progress to buildings, plant and equipment.

The production of 2,003 tonnes of V<sub>2</sub>O<sub>5</sub> in Q4 2021 was 40% lower than the 3,340 tonnes of V<sub>2</sub>O<sub>5</sub> produced in Q4 2020. Lower quarterly production was due to the abnormally elevated levels of rainfall in November and

Consists of the total of professional, consulting and management fees and other general and administrative expenses for the Corporate and Sales & Trading

Consists of the total of professional, consulting and management fees, other general and administrative expenses and technology start-up costs for the Largo Clean Energy segment.

December 2021. An effective water diversion channel system has been implemented to mitigate the impacts of future rains.

The Q4 2021 global recovery of 76.0% was lower than the 80.6% seen in Q4 2020 as a result of the instability of the production processes. This is a consequence of the heavy rains which restricted the availability of ore in the mine to feed the plant.

In Q4 2021, 277,783 tonnes of ore were mined with an effective grade of 1.00% of V<sub>2</sub>O<sub>5</sub>. The ore mined in Q4 2021 was 18% lower than in Q4 2020. The Company produced 86,129 tonnes of concentrate with an effective grade of 3.13%.

The COVID-19 restrictions put in place did not have an impact on the Company's operational performance in Q4 2021.

The following table is a summary of production statistics at the Maracás Menchen Mine.

	Q4 2021	Q4 2020	2021	2020
Total Ore Mined (tonnes)	277,783	338,226	1,248,967	1,087,518
Ore Grade Mined - Effective Grade <sup>1</sup> (%)	1.00	1.18	1.12	1.29
Effective Grade of Ore Milled (%)	1.16	1.28	1.24	1.34
Concentrate Produced (tonnes)	86,129	108,608	398,847	412,661
Grade of Concentrate (%)	3.13	3.24	3.23	3.28
Contained V <sub>2</sub> O <sub>5</sub> (tonnes)	2,697	3,516	12,879	13,540
Crushing Recovery (%)	96.7	98.1	97.7	98.1
Milling Recovery (%)	97.1	95.4	97.6	96.2
Kiln Recovery (%)	86.6	91.2	89.0	91.0
Leaching Recovery (%)	97.7	98.5	98.0	98.6
Chemical Plant Recovery (%)	95.7	95.8	95.9	96.3
Global Recovery <sup>2</sup> (%)	76.0	80.6	79.7	81.5
V <sub>2</sub> O <sub>5</sub> Produced (Flake + Powder) (tonnes)	2,003	3,340	10,319	11,825

Effective grade represents the percentage of magnetic material mined multiplied by the percentage of  $V_2O_5$  in the magnetic concentrate.

#### **Exploration Developments**

The Company completed its 2021 exploration drilling program in October. During Q4 2021 the Company drilled 1,134 metres (eight holes) at targets in the South Block area, south of the current mining operation. Diamond drills were demobilized from the site by the end of October. For the remainder of Q4 2021, exploration activities focused on the completion of geological and geotechnical logging and sampling of drilled core, and compilation of databases for future modelling purposes.

In 2021 the Company completed 8,838 metres of drilling (56 holes) at various targets across the Maracás Menchen Mine. At the Campbell Pit, 2,337 metres were drilled in seven holes to explore depth extension opportunities. A further 2,248 metres of drilling (26 holes) were completed within the pit as part of a short-term drill program focused on defining ore/waste contacts and increasing grade control for short-term modelling and mining purposes. Limited drilling was completed at Novo Amparo Norte ("NAN") (483 metres in two holes) and Gulçari A Norte ("GAN") (706 metres in four holes) in support of the technical report. Two holes (809 metres) were drilled to test geophysical anomalies adjacent to the existing mine operations, east of the Campbell Pit. Finally, 2,255 metres of drilling (15 holes) were completed on two targets in the South Block.

On November 3, 2021 the Company announced the results of a new NI 43-101 technical report titled "An Updated Life of Mine Plan ("LOMP") for Campbell Pit and Pre-Feasibility Study for GAN and NAN Deposits" (the "Technical Report"). The Technical Report was filed on December 20, 2021. A summary of the report outcomes

Global recovery is the product of crushing recovery, milling recovery, kiln recovery, leaching recovery and chemical plant recovery.

can be found in the aforementioned press release and the full report can be accessed via SEDAR (www.sedar.com) and EDGAR (www.sec.gov).

Subsequent to Q4 2021, the Company has been active with database compilation for various Near Mine and South Block targets and has initiated the short-term block modelling process for the Campbell Pit.

## **Exploration Outlook**

The Company is planning for approximately 8,000 metres of drilling in 2022 at the Maracás Menchen Mine. Efforts will focus on areas in the South Block with known magnetic anomalies that require work to maintain concessions in good standing in accordance with the applicable rules and regulations in Brazil. Exploration will continue to develop early stage targets for diamond drilling and resource evaluation as deemed appropriate. Exploration efforts will also include a limited soil geochemistry sampling survey to identify areas of anomalous mineralization associated with known magnetic anomalies to further refine exploration targeting.

## Campo Alegre de Lourdes

#### **Recent Developments**

The Company completed a 1,200 metre drilling program in December 2018 and has finalized the geological and structural mapping needed to satisfy the Company's contractual requirements and to develop the Company's knowledge of mineralization.

In Q3 2019, a limited drill program was completed at the Morro Branca target at the Campo Alegre de Lourdes project. From July 5 to August 5, 2019 the Company completed six diamond drill holes (1,016 metres) to test down dip extension of mineralization and to collect material for additional metallurgical testing at the Morro Branca target. Internal studies to determine potential recovery of both V<sub>2</sub>O<sub>5</sub> and titanium dioxide ("TiO<sub>2</sub>") from the vanadiferous titanomagnetite ("VTM") mineralization are being complimented with additional work currently underway at SGS Lakefield's facility in Canada. This metallurgical testing continues and is being supplemented through the Company's internal work. The research agreement with Companhia Baiana de Pesquisa Mineral ("CBPM") was to expire on January 11, 2020. Prior to expiration the Company met with CBPM representatives and agreed to extend the research agreement for an additional two years to allow the Company to continue to evaluate the geological and economic potential of the project and the renewed agreement now extends the working relationship to January 11, 2022.

In 2021 the Company did not undertake any field work. Project status reports were delivered to CBPM as contractually required.

During Q4 2021, the Company incurred \$nil in expenditures (Q4 2020 - \$nil) at the Campo Alegre de Lourdes project and in 2021, the Company incurred \$nil in expenditures (2020 - \$57).

#### Outlook

Additional metallurgical testing is planned for 2022. A limited program of 1,500 metres of drilling is planned in 2022 in support of any metallurgical work and to ensure the concessions are maintained in good order in accordance with the applicable rules and regulations in Brazil.

## **Northern Dancer**

#### Recent Developments

Management is not conducting any further work at this time on the Northern Dancer property, as the majority of the Company's efforts are focused on the Maracás Menchen Mine. During 2021, the Company addressed the outstanding Inspector's Direction for reclamation work with respect to historic drill roads and drill sites on the property. Due to COVID-19 restrictions for travel and work as defined by the Yukon Territory government, the time frame to complete this work was extended to July 1, 2022. The Company initiated a small work program to bring the Company into full compliance with the conditions of the Quartz Mining Act (Yukon) and the Quartz Mining Land Use Regulations. Subsequent to the completion of the work program, the Company received notification that it had met all provisions of the operating plan and successfully resolved all outstanding concerns. The Company has received a Certificate of Closure for activities at Northern Dancer.

No work was performed in O4 2021 on the project.

During Q4 2021, the Company incurred \$2 in expenditures (Q4 2020 – \$2) at the Northern Dancer project and in 2021, the Company incurred \$15 in expenditures (2020 – \$7).

#### Outlook

Management is not planning any significant expenditures for the foreseeable future.

## **Currais Novos Tungsten Tailings Project**

#### **Recent Developments**

Management is not conducting any work at this time on the Currais Novos Tungsten Tailings Project, as the majority of the Company's efforts are focused on the Maracás Menchen Mine.

Management is not planning any significant expenditures for the foreseeable future.

### **Financial Instruments**

Financial assets and financial liabilities at December 31, 2021 and 2020 were as follows:

	De	ecember 31,	December 31,
		2021	2020
Cash	\$	83,790	\$ 79,145
Restricted cash		448	_
Trade and other receivables		22,172	13,791
Accounts payable and accrued liabilities		19,723	15,968
Debt		15,000	24,788

Refer to note 8 for lease liabilities.

The Company's risk exposures and the impact on the Company's financial instruments are summarized in note 20. There have been no changes in the risks, objectives, policies and procedures from the previous year.

# **Liquidity And Capital Resources**

The Company's continuance as a going concern is dependent on its ability to maintain profitable levels of operations.

At December 31, 2020, the benchmark price per lb of  $V_2O_5$  was between \$5.30 and \$5.50. This increased to a range of between \$8.50 and \$9.00 at December 31, 2021, with an average of approximately \$8.30 for Q4 2021, compared with approximately \$9.40 for Q3 2021 and \$5.29 for Q4 2020.

The average benchmark price per lb of V<sub>2</sub>O<sub>5</sub> was approximately \$9.29 and the average benchmark price per kg of FeV was approximately \$36.31 for January 2022 and approximately \$10.72 and \$42.11, respectively, for February 2022. At the date of the MD&A, the market price of  $V_2O_5$  was in a range of \$12.00 to \$12.50 per lb and the market price of FeV was in a range of \$60.50 to \$63.50 per kg.

The Company is continuing to monitor the rapidly developing impacts of the COVID-19 pandemic and will take all possible actions to help minimize the impact on the Company and its people.

The adequacy of the Company's capital structure is assessed on an ongoing basis and adjusted as necessary after taking into consideration the Company's strategy, vanadium prices, economic conditions and associated risks. To maintain or adjust its capital structure, the Company may adjust capital expenditures, issue new common shares or take on new debt. At December 31, 2021, the Company's debt balance was \$15,000 following the settlement of the two credit facilities and the drawdown of the working capital facility as described below and in note 10.

#### **Credit facilities**

On March 18, 2020, the Company secured a \$13,000 credit facility with a bank in Brazil. This facility was fully drawn down and proceeds of R\$65,980 (\$13,000) were received on March 20, 2020. On March 24, 2020 the Company secured a \$11,788 credit facility with a second bank in Brazil. This facility was fully drawn down and proceeds of R\$60,000 (\$11,788) were received on March 24, 2020.

Between January 29, 2021 and February 3, 2021, the Company completed the settlement of these outstanding credit facilities through the repayment in full of the outstanding principal amounts of \$13,000 and \$11,788.

On May 6, 2021, the Company secured a \$15,000 working capital facility with a bank in Brazil. This facility was fully drawn down and proceeds of R\$78,915 (\$15,000) were received. This facility is due to be repaid as a lump sum payment in May 2022, together with accrued interest at a rate of 1.78% per annum.

#### Maracás Menchen Mine

The Company's vanadium production commenced during August 2014, with the first sale of V<sub>2</sub>O<sub>5</sub> flake concluded during September 2014. Since this time, the Company has continued to further ramp up the production and sales of V<sub>2</sub>O<sub>5</sub>, as described in the "Maracás Menchen Mine" section above. In connection with the ramp-up, the Company has also evaluated its future financial requirements, including inter alia its sustaining capital and working capital needs for the next 12 months.

At December 31, 2021, the Company had an accumulated deficit of \$49,327 since inception (December 31, 2020 -\$71,903) and had a net working capital surplus of \$118,310 (December 31, 2020 - \$92,950) (defined as current assets less current liabilities). At December 31, 2021, the total amount due within 12 months on the Company's debt was \$15,000 (December 31, 2020 - \$24,788).

The following table details the Company's expected remaining contractual cash flow requirements at December 31, 2021 for its liabilities and commitments with agreed repayment periods. The amounts presented are based on the undiscounted cash flows and therefore, may not equate to the carrying amounts on the consolidated statement of financial position.

	Less than 6 months	6 months to 1 year	1 to 3 years Over 3 year	rs
Accounts payable and accrued liabilities	\$ 19,723 \$	- \$	<b>-</b> \$ -	_
Debt	15,000	_		_
Operating and purchase commitments	12,269	1,689	143 -	_
	\$ 46,992 \$	1,689 \$	143 \$ -	_

Refer to note 8 for lease liabilities. The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. The Company's principal sources of liquidity are its cash flow from operating activities and cash of \$83,790 (December 31, 2020 - \$79,145). As a consequence of vanadium price fluctuations in recent years, a risk may exist that the Company will not have sufficient liquidity to meet its obligations as they come due.

# **Outstanding Share Data**

(Exercise prices presented in this section are in Canadian dollars and also not thousands).

At December 31, 2021, there were 64,727 common shares of the Company outstanding. At the date of this MD&A, there were 64,753 common shares of the Company outstanding.

At December 31, 2021, under the share compensation plan of the Company, 216 RSUs were outstanding and 889 stock options were outstanding with exercise prices ranging from C\$6.70 to C\$30.40 and expiry dates ranging between February 1, 2023 and June 22, 2026. If exercised, the Company would receive proceeds of C\$11,363. The weighted average exercise price of the stock options outstanding is C\$12.78.

As of the date of this MD&A, 195 RSUs and 944 stock options were outstanding with exercise prices ranging from C\$6.70 to C\$30.40 and expiry dates ranging between February 1, 2023 and June 22, 2026.

At December 31, 2021, 1,832 common share purchase warrants were outstanding with exercise prices ranging from C\$11.50 to C\$13.00 and expiring between December 1, 2022 and December 8, 2025. If these warrants were exercised, the Company would receive proceeds of C\$21,577. The weighted average exercise price of the warrants is C\$11.78.

As of the date of this MD&A, 1,822 common share purchase warrants were outstanding with exercise prices ranging from C\$11.50 to C\$13.00 and expiring between December 1, 2022 and December 8, 2025.

## **Transactions With Related Parties**

The 2021 annual consolidated financial statements include the financial statements of the Company and its subsidiaries. There have been no changes in the Company's ownership interests in its subsidiaries since December 31, 2020 except as disclosed in note 3. The Company had transactions with related parties during 2021. Refer to note 16.

Additional information regarding the compensation of officers and directors of the Company is disclosed in the Company's management information circular, which is available under the Company's profile at www.sedar.com and www.sec.gov.

# **Commitments and Contingencies**

At December 31, 2021, the Company was party to certain management and consulting contracts. Minimum commitments under the agreements are approximately \$3.152 and all payable within one year. These contracts also require that additional payments of up to approximately \$4,728 be made upon the occurrence of certain events such as change of control. As the triggering event has not occurred, the contingent payments have not been reflected in these consolidated financial statements.

The Company has entered into a number of contracts with third party customers to deliver monthly quantities of the Company's vanadium products. A significant proportion of the Company's monthly vanadium production in 2022 has been committed. Prior to April 30, 2020, the Company sold 100% of its vanadium production under an off-take agreement.

In 2021, the Company signed a 10-year exclusive off-take agreement with a third party for the purchase of all standard and high purity grade vanadium products they produce. The annual quantity to be delivered to the Company in 2022 is 220 tonnes of V<sub>2</sub>O<sub>5</sub>, with the Company having a right of first refusal over additional amounts.

The Company's Largo Clean Energy business is required to pay a royalty of 7.5% of the net sales price of each VRFB which contains a manufactured licensed product or uses or transfers a licensed product on or after January 1, 2022.

The Company's mining and exploration activities are subject to various federal, provincial and international laws and regulations governing the protection of the environment. These laws and regulations are continually changing and generally becoming more restrictive. The Company has made payments to comply with such laws and regulations.

The Company indemnifies its directors and officers against any and all claims or losses reasonably incurred in the performance of their service to the Company to the extent permitted by law. The Company has acquired and maintains liability insurance for its directors and officers.

The Company is committed to a minimum amount of rental payments under five leases of office space which expire between April 30, 2022 and December 31, 2023. Minimum rental commitments remaining under the leases are approximately \$369, including \$226 due within one year. In addition, minimum rental commitments remaining under other short-term leases are approximately \$3, all due within one year.

At the Company's Maracás Menchen Mine, the Company has entered into purchase order contracts with remaining amounts due related to goods not received or services not rendered as of December 31, 2021 of \$10,576.

The Company, through its subsidiaries, is party to legal proceedings in the ordinary course of its operations related to legally binding agreements with various third parties under supply contracts and consulting agreements. At December 31, 2021 one such proceeding was ongoing in Brazil. This relates to a supply agreement for the Maracás Menchen Mine which was filed with the courts in October 2014. The amount claimed totals R\$9,900 (\$1,774), with a counterclaim filed by Vanádio for R\$10,700 (\$1,917). A provision of R\$1,281 (\$230) has been recognized at December 31, 2021 for the probable loss (December 31, 2020 - R\$1,281 (\$247)).

The Company and its subsidiaries are also party to legal proceedings regarding labour matters. A provision was recorded at December 31, 2020 for such proceedings in Brazil in an amount of R\$3,538 (\$681). At December 31, 2021, the provision recognized was R\$469 (\$84), following a settlement in October 2021. The outcome of these proceedings remains dependent on the final judgment. Management does not expect the outcome of any of the remaining proceedings to have a materially adverse effect on the results of the Company's financial position or

results of operations. Should any losses result from the resolution of these claims and disputes, they will be charged to operations in the period that they are determined.

# **Disclosure Controls And Procedures And Internal Controls Over Financial** Reporting

#### **Disclosure Controls and Procedures**

The Company's disclosure controls and procedures ("DC&P") are designed to provide reasonable assurance that all relevant information is communicated to management to allow timely decisions regarding required disclosure. An evaluation of the effectiveness of the Company's DC&P, as defined under the rules of the Canadian Securities Administration, was conducted as at December 31, 2021 under the supervision of the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO") and with the participation of management. Based on the results of that evaluation, the CEO and CFO concluded that the Company's DC&P were effective as at December 31, 2021 providing reasonable assurance that the information required to be disclosed in the Company's annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported in accordance with securities legislation.

## **Internal Control over Financial Reporting**

Internal control over financial reporting ("ICFR") is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. ICFR should include those policies and procedures that establish the following:

- maintenance of records in reasonable detail, that accurately and fairly reflect the transactions and dispositions of assets;
- reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with applicable IFRS;
- receipts and expenditures are only being made in accordance with authorizations of management or the Board of Directors: and
- reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial instruments.

The Company's management, under supervision of the CEO and CFO, assessed the effectiveness of the Company's ICFR based on the criteria established in Internal Control - Integrated Framework (2013) issued by The Committee of Sponsoring Organizations of the Treadway Commission and concluded that as at December 31, 2021, the Company's ICFR was effective.

During the year ended December 31, 2021, the Company did not make any significant changes to its ICFR that would have materially affected, or reasonably likely to materially affect, its ICFR.

## Limitations of Disclosure Controls and Procedures and Internal Control over Financial Reporting

The Company's management, including the CEO and CFO, believe that due to inherent limitations, any DC&P or ICFR, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that any design will not succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Additionally, management is required to use judgment in evaluating DC&P and ICFR.

# **Significant Accounting Judgments, Estimates And Assumptions**

The preparation of the 2021 annual consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. These 2021 annual consolidated financial statements include estimates, which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the annual consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised, and the revision affects both current and future periods.

Significant areas requiring the use of estimates and assumptions relate to the determination of mineral reserve estimates and the impact on stripping costs, useful lives of mine properties, plant and equipment, impairment analysis of non-financial assets, estimates of the timing of outlays for asset retirement obligations and the determination of functional currencies. Other significant areas include the valuation of mine properties, plant and equipment and development properties, estimates of provisions for environmental rehabilitation, current and deferred taxes and contingencies. Refer to note 3(d) for a detailed description of these areas of significant judgment, estimates and assumptions. Actual results could differ from those estimates.

# **Changes In Accounting Policies**

The basis of presentation, and accounting policies and methods of their application in the 2021 annual consolidated financial statements are consistent with those used in the Company's annual consolidated financial statements for the year ended December 31, 2020.

# Non-GAAP<sup>1</sup> Measures

The Company uses certain non-GAAP measures in its MD&A, which are described in the following section. Non-GAAP financial measures and non-GAAP ratios are not standardized financial measures under IFRS, the Company's GAAP, and might not be comparable to similar financial measures disclosed by other issuers. These measures are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

#### **Revenues Per Pound**

The Company's MD&A refers to revenues per pound sold,  $V_2O_5$  revenues per pound of  $V_2O_5$  sold and FeV revenues per kg of FeV sold, which are non-GAAP financial measures that are used to provide investors with information about a key measure used by management to monitor performance of the Company.

These measures, along with cash operating costs, are considered to be key indicators of the Company's ability to generate operating earnings and cash flow from its Maracás Menchen Mine and sales activities. These measures differ from measures determined in accordance with IFRS, and are not necessarily indicative of net earnings or cash flow from operating activities as determined under IFRS.

The following table provides a reconciliation of revenues per pound sold,  $V_2O_5$  revenues per pound of  $V_2O_5$  sold and FeV revenues per kg of FeV sold to revenues and the revenue information presented in note 17 as per the 2021 annual consolidated financial statements.

	Three months ended				Year ended			
	De	cember 31,	December 31,	December 31,		December 31,		
		2021	2020		2021	2020		
Revenues - V <sub>2</sub> O <sub>5</sub> produced <sup>1,2</sup>	\$	24,520		\$	100,901			
V <sub>2</sub> O <sub>5</sub> sold - produced (000s lb)		3,234			13,499			
$V_2O_5$ revenues per pound of $V_2O_5$ sold - produced (\$/lb)	\$	7.58		\$	7.47			
Revenues - V <sub>2</sub> O <sub>5</sub> purchased <sup>1,2</sup> V <sub>2</sub> O <sub>5</sub> sold - purchased (000s lb)	\$	_		\$	455 55			
$V_2O_5$ revenues per pound of $V_2O_5$ sold - purchased (\$/lb)	\$	_		\$	8.27			

<sup>&</sup>lt;sup>1</sup> GAAP – Generally Accepted Accounting Principles.

_		Three mor	nths ended		Year ended			
	De	cember 31,	December 31,	[	December 31,		December 31,	
Revenues - V <sub>2</sub> O <sub>5</sub> <sup>1,2</sup>	\$	2021	2020	\$	2021 101,356		2020	
$V_2O_5$ sold (000s lb)	7	3,234		J	13,554			
$V_2O_5$ revenues per pound of $V_2O_5$ sold (\$/lb)	\$	7.58		\$	7.48			
Revenues - FeV produced <sup>1,2</sup> FeV sold - produced (000s kg)	\$	24,853 930		\$	88,761 3,251			
FeV revenues per kg of FeV sold - produced (\$/lb)	\$	26.72		\$	27.30			
Revenues - FeV purchased <sup>1,2</sup> FeV sold - purchased (000s kg)	\$	953 39		\$	8,163 304			
FeV revenues per kg of FeV sold - purchased (\$/lb)	\$	24.44		\$	26.85			
Revenues - FeV <sup>1,2</sup> FeV sold (000s kg)	\$	25,806 969		\$	96,924 3,555			
FeV revenues per kg of FeV sold (\$/lb)	\$	26.63		\$	27.26			
Revenues <sup>1,2</sup>	\$	50,326	\$ 42,254	\$	198,280	\$	119,987	
V <sub>2</sub> O <sub>5</sub> equivalent sold (000s lb)		6,390	8,259		25,117		22,606	
Revenues per pound sold (\$/lb)	\$	7.88	\$ 5.12	\$	7.89	\$	5.31	

Three months ended numbers are calculated from the year ended numbers in note 17 less the corresponding number disclosed in note 16 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021 and 2020.

## **Cash Operating Costs and Cash Operating Costs Excluding Royalties**

The Company's MD&A refers to cash operating costs per pound and cash operating costs excluding royalties per pound, which are non-GAAP ratios based on cash operating costs and cash operating costs excluding royalties, which are non-GAAP financial measures, in order to provide investors with information about a key measure used by management to monitor performance. This information is used to assess how well the Maracás Menchen Mine is performing compared to plan and prior periods, and also to assess its overall effectiveness and efficiency.

Cash operating costs includes mine site operating costs such as mining costs, plant and maintenance costs, sustainability costs, mine and plant administration costs, royalties and sales, general and administrative costs (all for the Mine properties segment), but excludes depreciation and amortization, share-based payments, foreign exchange gains or losses, commissions, reclamation, capital expenditures and exploration and evaluation costs. Operating costs not attributable to the Mine properties segment are also excluded, including conversion costs, product acquisition costs, distribution costs and inventory write-downs. These measures differ from the total cash costs per pound non-GAAP measure the Company has used to measure overall performance (see later in this section).

Cash operating costs excluding royalties is calculated as cash operating costs less royalties.

Cash operating costs per pound and cash operating costs excluding royalties per pound are obtained by dividing cash operating costs and cash operating costs excluding royalties, respectively, by the pounds of vanadium equivalent sold that were produced by the Maracás Menchen Mine.

Cash operating costs, cash operating costs excluding royalties, cash operating costs per pound and cash operating costs excluding royalties per pound, along with revenues, are considered to be key indicators of the Company's ability to generate operating earnings and cash flow from its Maracás Menchen Mine. These

Year ended numbers are as per note 17.

measures differ from measures determined in accordance with IFRS, and are not necessarily indicative of net earnings or cash flow from operating activities as determined under IFRS.

The following table provides a reconciliation of cash operating costs and cash operating costs excluding royalties, cash operating costs per pound and cash operating costs excluding royalties per pound for the Maracás Menchen Mine to operating costs as per the 2021 annual consolidated financial statements.

	Three mo	nths ended	Year ended			
	December 31,			December 31,		
	2021	•	2021	2020		
Operating costs <sup>1</sup>	\$ 37,746	\$ 31,604	\$ 133,010	\$ 88,390		
Professional, consulting and						
management fees <sup>2</sup>	1,176	963	4,162	3,086		
Other general and administrative						
expenses <sup>2</sup>	497	514	1,500	1,669		
Less: loss on iron ore sales <sup>1</sup>	_	_	(50)	_		
Less: conversion costs <sup>1</sup>	(2,592	(1,330)	(9,252)	(1,976)		
Less: product acquisition costs <sup>1</sup>	(1,010	(2,965)	(9,666)	(10,459)		
Less: distribution costs <sup>1</sup>	(1,463	(1,029)	(5,302)	(2,269)		
Less: inventory write-down <sup>1</sup>	(3,208	) —	(3,210)	(3)		
Less: depreciation and amortization						
expense <sup>1</sup>	(5,824	(5,728)	(21,537)	(17,473)		
Cash operating costs	25,322	22,029	89,655	60,965		
Less: royalties <sup>1</sup>	(2,279	(1,958)	(8,867)	(7,107)		
Cash operating costs excluding royalties	23,043	20,071	80,788	53,858		
Produced V <sub>2</sub> O <sub>5</sub> sold (000s lb)	6,267	7,831	23,953	21,027		
Cash operating costs per pound (\$/lb)	\$ 4.04	\$ 2.81	\$ 3.74	\$ 2.90		
Cash operating costs excluding royalties						
per pound (\$/lb)	\$ 3.68	\$ 2.56	\$ 3.37	\$ 2.56		

Year ended numbers as per note 22. Three months ended numbers are calculated from the year ended numbers in note 22 less the corresponding number disclosed in note 20 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30,

#### Total Cash Costs per Pound

The Company's MD&A refers to total cash costs per pound, a non-GAAP ratio based on total cash costs, which is a non-GAAP financial measure, in order to provide investors with information about a key measure that has been used by management to monitor performance. This information is used to assess how well the Company is performing at producing and selling vanadium products compared to plan and prior periods, and also to assess its overall effectiveness and efficiency. This ratio was referred to as "total cash costs" in previous disclosure, but has been renamed "total cash costs per pound" to more accurately describe its composition.

Total cash costs includes all operating costs, sales and distribution costs and the Company's total professional, consulting and management fees and other general and administrative expenses, except those incurred in the Company's Largo Clean Energy segment and those relating to the titanium project. Total cash costs exclude royalties, depreciation and amortization, share-based payments, foreign exchange gains or losses, commissions, reclamation costs, exploration and evaluation costs, capital expenditures and all costs incurred in the Company's LCE division and relating to the titanium project.

Total cash costs per pound is obtained by dividing total cash costs by the total pounds of vanadium sold by the Company.

Total cash costs per pound differs from cash operating costs excluding royalties per pound in that it includes all operating costs, sales and distribution costs, professional, consulting and management fees and other general and administrative expenses (except those incurred in the Company's Largo Clean Energy segment and those

Year ended numbers as per the Mine properties segment in note 17. Three months ended numbers are calculated from the year ended numbers in note 17 less the corresponding number disclosed in note 16 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021 and 2020.

relating to the titanium project), rather than just those costs from the Mine properties segment, and is calculated on total  $V_2O_5$  equivalent pounds sold rather than pounds sold that were produced by the Maracás Menchen Mine.

Total cash costs per pound is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. This measure differs from measures determined in accordance with IFRS, and is not necessarily indicative of net earnings or cash flow from operating activities as determined under IFRS.

The following table provides a reconciliation of total cash costs and total cash costs per pound to operating costs as per the 2021 annual consolidated financial statements.

	Three months ended				Year ended			
	December 31,		December 31,		December 31,	Dece	mber 31,	
		2021	2020		2021		2020	
Operating costs <sup>1</sup>	\$	37,746	\$ 31,604	\$	133,010	\$	88,390	
Professional, consulting and management fees <sup>2</sup>		3,645	3,229		12,840		8,255	
Other general and administrative expenses <sup>2</sup>		1,404	1,027		4,272		3,329	
Less: loss on iron ore sales <sup>1</sup>		_	_		(50)		_	
Less: depreciation and amortization								
expense <sup>1</sup>		(5,824)	(5,728)		(21,537)		(17,473)	
Less: iron ore inventory write-down <sup>3</sup>		(2,652)	_		(2,652)		_	
Less: royalties <sup>1</sup>		(2,279)	(1,958)		(8,867)		(7,107)	
Total cash costs	\$	32,040	\$ 28,174	\$	117,016	\$	75,394	
V <sub>2</sub> O <sub>5</sub> equivalent sold (000s lb)		6,390	8,259		25,117		22,606	
Total cash costs per pound (\$/lb)	\$	5.01	\$ 3.41	\$	4.66	\$	3.34	

Year ended numbers as per note 22. Three months ended numbers are calculated from the year ended numbers in note 22 less the corresponding number disclosed in note 20 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021 and 2020.

#### **Risks And Uncertainties**

The Company is subject to various business, financial and operational risks that could materially adversely affect the Company's future business, operations and financial condition. These risks could cause such future business, operations and financial condition to differ materially from the forward-looking statements and information contained in this MD&A and as described in the Cautionary Statement Regarding Forward-Looking Information found in this MD&A.

The Company's business activities expose it to significant risks due to the nature of mining, development and exploration activities, as well as due to the nature of its VRFB business. The ability to manage these risks is a key component of the Company's business strategy. Management is forward looking in its assessment of risks. Identification of key risks occurs in the course of business activities, pursuing approved strategies and as part of the execution of risk oversight responsibilities at the management and Board of Directors' level.

For a full discussion of the Company's Risks and Uncertainties, please refer to the Annual Information Form for the year ended December 31, 2021, which is filed on www.sedar.com and www.sec.gov.

# **Cautionary Statement Regarding Forward-Looking Information**

The information presented in this MD&A contains "forward-looking information" and "forward-looking statements" within the meaning of applicable Canadian and United States securities laws concerning the Company's projects, capital, anticipated financial performance, business prospects and strategies and other

<sup>2.</sup> Year ended numbers as per the sum of the Sales & trading, Mine properties and Corporate segments in note 17. Three months ended numbers are calculated from the year ended numbers in note 17 less the corresponding number disclosed in note 16 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021 and 2020.

Year ended numbers as per note 5. Three months ended numbers are calculated from the year ended numbers in note 5 less the corresponding number disclosed in note 5 of the Company's unaudited condensed interim consolidated financial statements for the three and nine months ended September 30, 2021

general matters. Forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". All information contained in this MD&A, other than statements of current and historical fact, is forward looking information. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company or Largo Clean Energy to be materially different from those expressed or implied by such forward-looking statements, including but not limited to those risks described in the Annual Information Form of the Company and in its public documents filed on www.sedar.com and www.sec.gov from time to time. Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company does not undertake to update any forward-looking statements, except in accordance with applicable securities laws.

Trademarks are owned by Largo Inc. (formerly Largo Resources Ltd).

Forward-looking information in this MD&A includes, but is not limited to, statements with respect to the timing and amount of estimated future production and sales; costs of future activities and operations; the extent of capital and operating expenditures; the iron ore price environment, the timing and cost related to the build out of the ilmenite plant, eventual production from the ilmenite plant, the ability to sell ilmenite on a profitable basis; growth of the Company's sales and trading division, anticipated timing of V<sub>2</sub>O<sub>3</sub> shipments, the extent and overall impact of the COVID-19 pandemic in Brazil and globally, the extent and impact of global freight delays and higher inventory transit time, the completion of the qualifying transaction, which is required, amongst other things, for the public listing of LPV on the terms disclosed to date. Forward-looking information in this MD&A also includes, but is not limited to, statements with respect to the Company's ability to build, finance and operate a VRFB business including the expected manufacturing capacity of the LCE plant, the Company's ability to protect and develop its technology, the Company's ability to maintain its IP, the Company's ability to market, sell and fulfill orders for its VCHARGE battery system on specification and at a competitive price, the completion of award negotiations with the DOE, the Company's ability to secure the required production resources to build its VCHARGE battery system, and the adoption of VFRB technology generally in the market.

The following are some of the assumptions upon which forward-looking information is based: that general business and economic conditions will not change in a material adverse manner; demand for, and stable or improving price of V<sub>2</sub>O<sub>5</sub>, other vanadium commodities, iron ore, ilmenite and titanium dioxide pigment; receipt of regulatory and governmental approvals, permits and renewals in a timely manner; that the Company will not experience any material accident, labour dispute or failure of plant or equipment or other material disruption in the Company's operations at the Maracás Menchen Mine or relating to Largo Clean Energy; the availability of financing for operations and development; the continued ability to mitigate the impact of heavy rainfall; the Company's ability to procure equipment and operating supplies in sufficient quantities and on a timely basis; that the estimates of the resources and reserves at the Maracás Menchen Mine are within reasonable bounds of accuracy (including with respect to size, grade and recovery); the competitiveness of the Company's VRFB technology; that the Company's current plans for iron ore, ilmenite, titanium dioxide pigment and VRFBs can be achieved; the Company's decision to transition to a VRFB business will be successful; the Company's ability to attract and retain skilled personnel and directors; the ability of management to execute strategic goals; and the accuracy of the Company's mineral resource estimates (including size, grade and recoverability) and the geological, operational and price assumptions on which these are based.

Actual results could differ materially from those anticipated in this forward-looking information as a result of the risks and uncertainties including, without limitation: volatility in prices of, and demand for, V<sub>2</sub>O<sub>5</sub> and other vanadium commodities; risks inherent in mineral exploration and development; uncertainties associated with estimating mineral resources; uncertainties related to title to the Company's mineral projects; the risks inherent with the introduction and reliance on recently developed VRFB technology; revocation of government approvals; tightening of the credit markets, global economic uncertainty and counterparty risk; failure of plant, equipment or processes to operate as anticipated; unexpected operational events and delays; competition for, among other things, capital and skilled personnel; geological, technical and drilling problems; fluctuations in foreign exchange or interest rates and stock market volatility; rising costs of labour and equipment; risks associated with political and/or economic instability in Brazil; inherent uncertainties involved in the legal dispute resolution process, including in foreign jurisdictions; changes in income tax and other laws of foreign jurisdictions; and other factors discussed under "Risk Factors" in the Company's Annual Information Form for the year ended December 31, 2021 which is filed on www.sedar.com and www.sec.gov, and any additional risks as included in "Risks and Uncertainties" above. Assumptions relating to the potential mineralization of the Maracás Menchen Mine are discussed in the Technical Report. Statements relating to mineral resources are also forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral resources described can be profitably produced in the future. There is no certainty that it will be commercially viable to produce any portion of the mineral resources.

The forward-looking information is presented in this MD&A for the purpose of assisting investors in understanding the Company's plans, objectives and expectations in making an investment decision and may not be appropriate for other purposes. This forward-looking information is expressly qualified in its entirety by this cautionary statement. Forward-looking information contained in this MD&A or documents incorporated herein by reference are made as of the date hereof or the document incorporated herein by reference, as applicable, and are accordingly subject to change after such date. The Company disclaims any obligation to update any such forward-looking information to reflect events or circumstances after the date of such information, or to reflect the occurrence of anticipated or unanticipated events, except as required by law.

Certain terms appearing in the following table are defined previously in this MD&A. This table contains the material forward-looking statements made by the Company in this MD&A, the assumptions made by the Company in making those statements and the risk factors associated with those assumptions.

Forward-looking Statements	Assumptions	Risk Factors
	assumed that it will be	The Company's continuance as a going concern is dependent on its ability to maintain profitable levels of
statements were prepared on a going	able to continue in operation for the	•
	will be able to discharge	The adequacy of the Company's capital structure is assessed on an ongoing basis and adjusted as necessary after taking into consideration the
continue in operation for	commitments in the	Company's strategy, vanadium prices, economic conditions and associated risks. To maintain or adjust
its assets and discharge	that it will address	its capital structure, the Company may adjust capital expenditures, issue new common shares or take on
commitments in the	shortfalls through positive cash flow from	new debt. At the date of this MD&A, the Company's debt balance was \$15,000.
business.	operations.	

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Forward-looking	Assumptions	Risk Factors
expected to achieve the expanded nameplate	that consistent production levels will achieve a level of or in excess of 1,100 tonnes per	The Company prepares future production estimates with respect to existing operations.  Actual production and costs may vary from the estimates for a variety of reasons such as estimates of
2022 Production Guidance: 12,000 – 12,750 tonnes	month in 2022 during normal operation.	grade, tonnage, dilution and metallurgical and other characteristics of the ore varying from the actual ore mined, revisions to mine plans, risks and hazards associated with mining, adverse weather conditions, unexpected labour shortages or strikes, equipment or design failures and other interruptions in production.
		Production costs may also be affected by increased mining costs, variations in predicted grades of the deposits, increases in level of ore impurities, labour costs, raw material costs, inflation and fluctuations in currency exchange rates. Failure to achieve production targets or cost estimates could have a material adverse impact on the Company's sales, profitability, cash flow and overall financial performance.
		In the event that the Company obtains debt financing, repayment terms associated with such financing will likely be based, among other things, on production schedule estimates. Any failure to meet such timelines or to produce amounts forecast may constitute defaults under such debt financing, which could result in the Company having to repay loans.

Forward-looking Statements	Assumptions	Risk Factors
2022 Costs Guidance:	that its current estimation	Capital and operating cost estimates made by management with respect to future projects, or current
Cash operating costs excluding royalties per pound \$3.20 – \$3.40	is accurate, as it is largely based on the current cost profile of operations at the Maracás Menchen	operations in the early stages of production are estimates which are in turn based, among other things, on interpretation of geological data, feasibility studies, anticipated climactic conditions and other information.
	Mine.	Any or all of the above could affect the accuracy of the estimates including unanticipated changes in grade and tonnage to be mined and processed; incorrect data on which engineering assumptions are made; unanticipated transportation costs; accuracy of equipment and construction cost estimates; difficulty or failure to meet scheduled construction completion dates, facility or equipment commissioning dates, or metal production dates; poor or unsatisfactory construction quality resulting in failure to meet completion, commissioning or production dates; increased expenditures required as a failure to meet completion, commissioning or production dates; capital overrun related to the completion of any construction phase including capital overrun associated with demobilization of construction workers and contractors; labour negotiations; unanticipated costs relating to the commencement of operations, ramp up and production sustainment; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas or exportation of the Company's products; and change in commodity input costs and quantities).

Forward-looking	Assumptions	Risk Factors
Statements	-	
expenditures of approximately \$9,000 to \$10,000 are expected to be required in 2022 to sustain the operational capacity to produce 1,100	that its current estimation of capital expenditures is accurate, as based on operational estimates produced and current	Capital and operating costs estimates made by management with respect to future projects, or current operations in production, or not yet in the production phase are estimates which are in turn based, among other things, on interpretation of geological data, feasibility studies, anticipated climactic conditions and other information.
(excluding capitalized waste stripping costs).		Any or all of these can affect the accuracy of the estimates including unanticipated changes in grade and tonnage to be mined and processed; incorrect data on which engineering assumptions are made; unanticipated transportation costs; accuracy of equipment and construction cost estimates; difficulty or failure to meet scheduled construction completion dates, facility or equipment commissioning dates, or metal production dates; poor or unsatisfactory construction quality resulting in failure to meet completion, commissioning or production dates; increased expenditures required as a failure to meet completion, commissioning or production dates; capital overrun related to the completion of any construction phase including capital overrun associated with demobilization of construction workers and contractors; labour negotiations; unanticipated costs relating to the commencement of operations, ramp up and production sustainment; changes in government regulation (including regulations regarding prices, cost of consumables, royalties, duties, taxes, permitting and restrictions on production quotas

Forward-looking statements and forward looking information are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward looking information, including, but not limited to, unexpected events during operations; variations in ore grade; risks inherent in the mining industry; delay or failure to receive board approvals; timing and availability of external financing on acceptable terms; risks relating to international operations; actual results of exploration activities; conclusions of economic valuations; changes in project parameters as plans continue to be refined; and fluctuating metal prices and currency exchange rates.

Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. The Company does not undertake to update any forward-looking statements or forward-looking information that are incorporated by reference herein, except in accordance with applicable securities laws.

Investors are advised that National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101") requires that each category of mineral reserves and mineral resources be reported separately. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

or exportation of the Company's products; and change

in commodity input costs and quantities).

## Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated or Inferred Resources

This MD&A uses the terms "measured", "indicated" and "inferred" mineral resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. Inferred mineral resources have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves. United States investors are also cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable.