Corporate Presentation

October 2022

IperionX Limited
ABN 84 618 935 372

Disclaimer

Forward Looking Statements
Information included in these materials constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance, and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation, as well as other uncertainties and risks set out in filings made by the Company from time to time with the Australian Securities Exchange and the U.S. Securities and Exchange Commission ("SEC").

Forward looking statements are based on the Company's and its management's assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

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This presentation has been prepared by the Company as a summary only and does not contain all information about assets and liabilities, financial position and performance, profits and losses, prospects, and the rights and liabilities attaching to securities. Any investment in the Company should be considered speculative and there is no guarantee that they will make a return on capital invested, that dividends would be paid, or that there will be an increase in the value of the investment in the future.

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Competent Persons Statements
The information in this document that relates to Exploration Results, Mineral Resources, Production Targets, Process Design, Mine Design, Cost Estimates, and Financial Analysis is extracted from IperionX's ASX Announcement dated June 30, 2022 ("Original ASX Announcement") which is available to view at IperionX's website at www.IperionX.com.

The Company confirms that a) it is not aware of any new information or data that materially affects the information included in the Original ASX Announcement; b) all material assumptions and technical parameters underpinning the Production Target, and related forecast financial information derived from the Production Target included in the Original ASX Announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the Original ASX Announcement.

IperionX's mission is to develop a sustainable, low-cost U.S. titanium supply chain via a three-pronged approach

1	**Scaling HAMR Technology**	Lowering the cost of titanium to create its "Bessemer Moment"
2	**Sustainable Feedstock Integration**	Integrating HAMR technology with sustainable U.S. sourced feedstocks, including from the Titan Project
3	**Sustainable Development Practices**	Employing sustainable development practices, including renewable power and additive manufacturing

Why are we focused on re-shoring a low cost, U.S. titanium supply chain?

Titanium has superior properties, enabling superior products...

Highest strength-to-weight metal

Reduced carbon emissions in transportation sector

Lightweight metal – 45% lighter than steel

Improved energy efficiency of products

Superior corrosion resistance

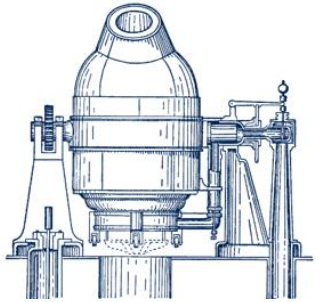
Long lasting products

..but titanium has one major drawback that has limited its widespread use

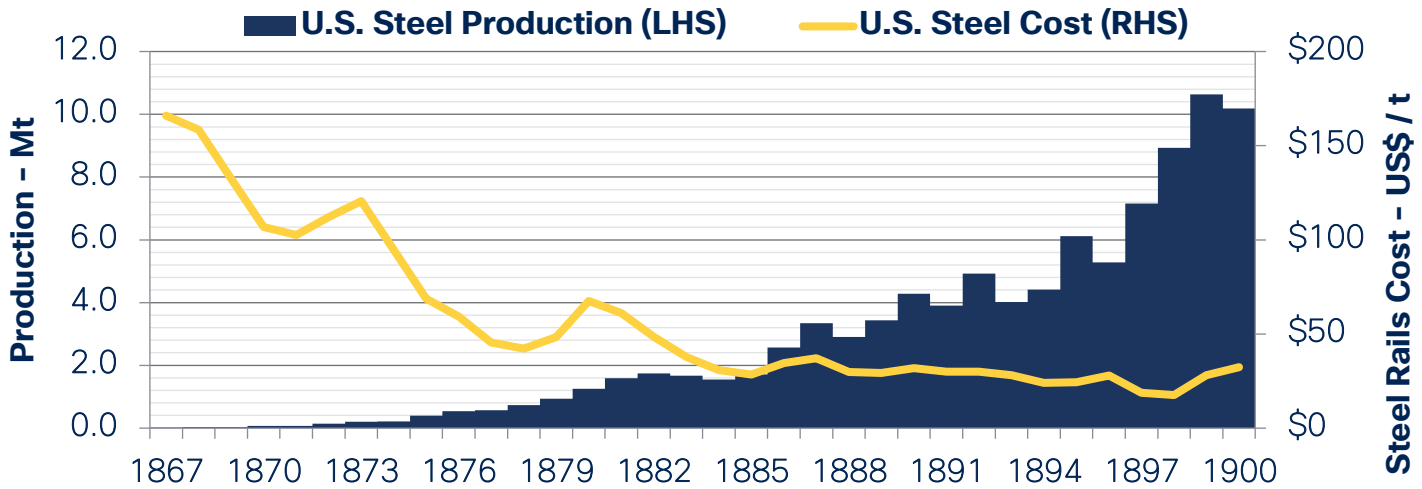
Very high cost of producing titanium metal and processing into products

Historical metal technology breakthroughs have enabled mass production and deployment in steel and aluminum

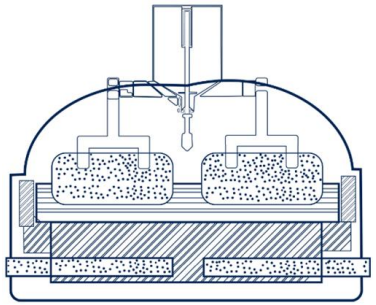
Steel



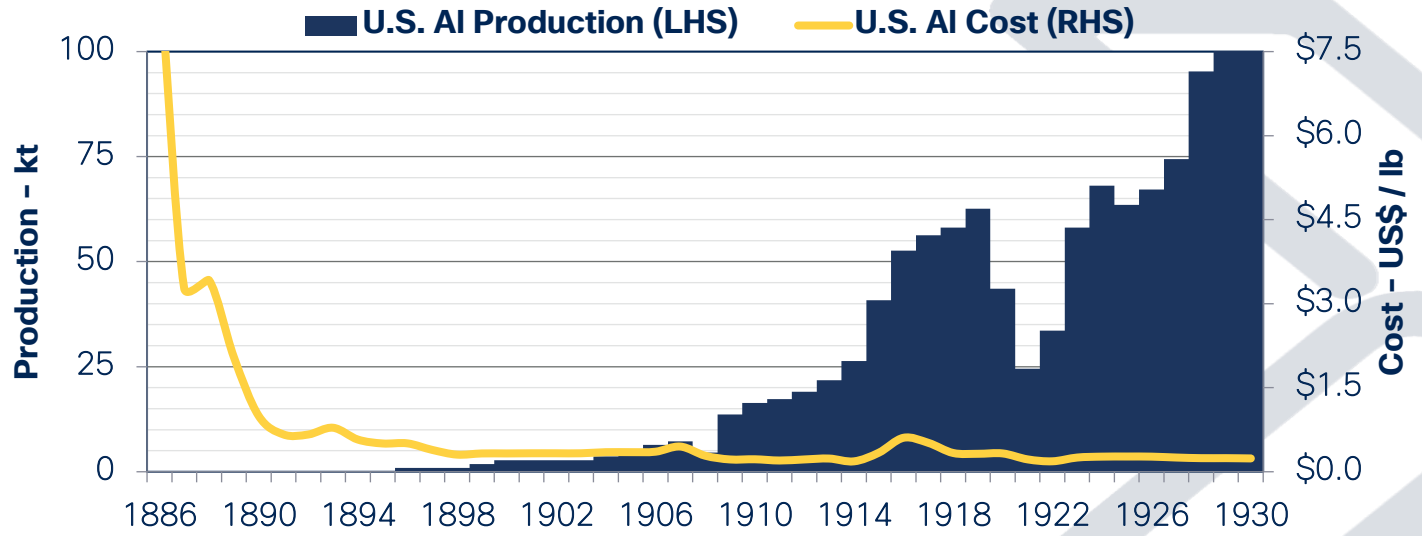
The Bessemer Converter
Invented in 1856



Aluminum



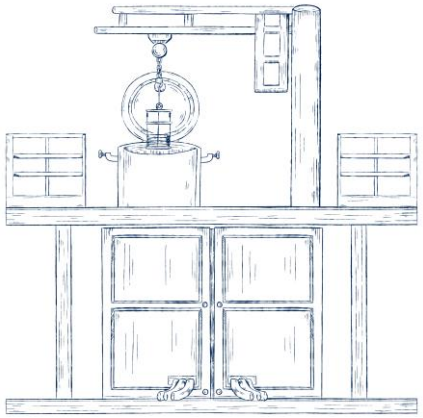
The Hall-Heroult Process
Invented in 1886



Source: World Steel Association, American Iron and Steel Institute, American Iron and Steel Association, USGS, International Aluminum Institute

Our Technology can create the “Bessemer Moment” for titanium, potentially enabling its mass production and deployment

Titanium



Hydrogen **A**ssisted **M**agnesiothermic **R**eduction (HAMR)[1] Process

Dr. Fang’s HAMR Process – 2016:

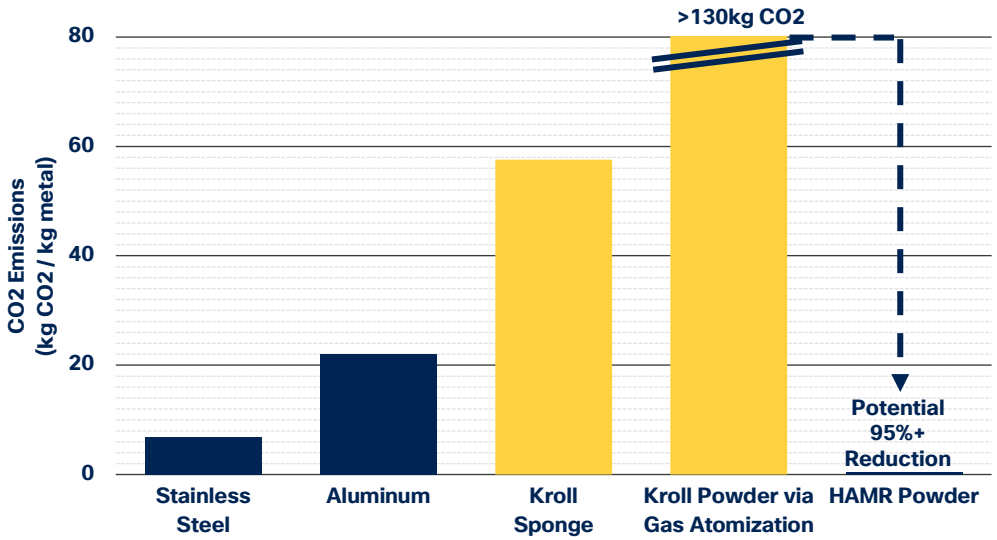
Introducing hydrogen into the Titanium-Oxygen solid solution destabilizes Ti-O bonds, allowing for the low-cost production of titanium

Willy Shih, renowned American economist and the Robert and Jane Cizik Professor of Management Practice in Business Administration at Harvard Business School, recently covered our technology in an article for Forbes[2] (link)

1. Dr Fang’s history: https://powder.metallurgy.utah.edu/research/hamr.php
2. https://www.forbes.com/sites/willyshih/2022/07/10/manufacturing-process-innovations-a-bessemer-moment-for-titanium/

Our technology potentially allows titanium to be a more sustainable alternative to stainless steel and aluminum

Low-to-Net-Zero Carbon Emissions Metal Production[1]

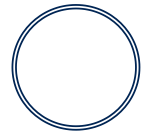


100% Recycled Product

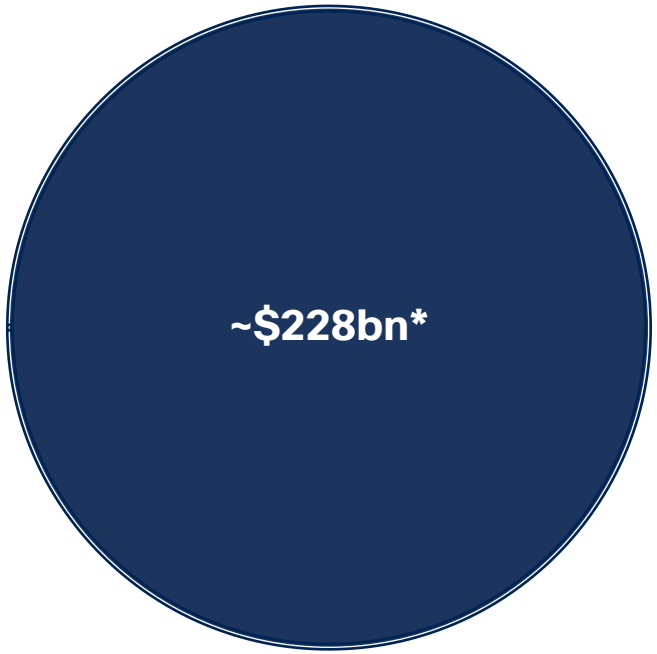
Ideal Metal Feedstock for Additive Manufacturing

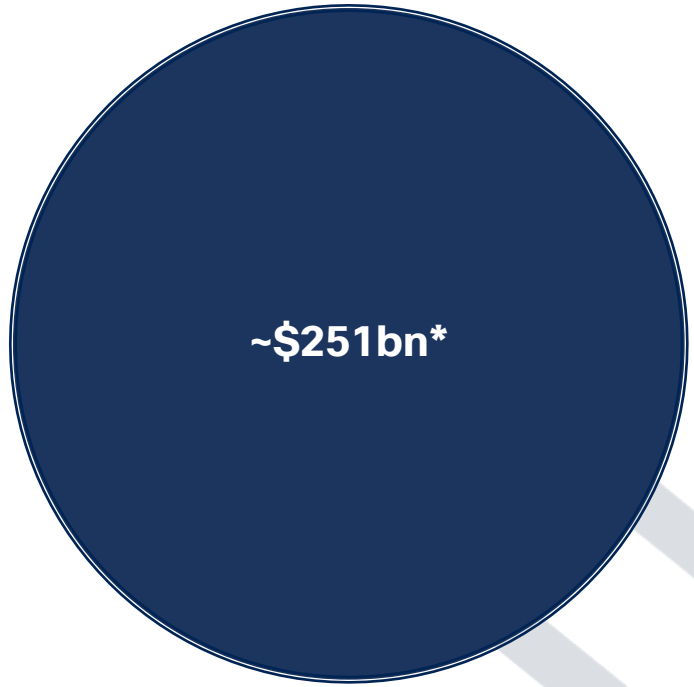
1. Source: ARPA-E METALS Program estimates, Feng Gao et al (Journal of Cleaner Production), IperionX Estimates for HAMR. HAMR emissions target assumes renewable power sourced for IPX Facility, and 100% scrap feedstock for HAMR spherical powder. Figures shown are target metrics at projected 10,000tpa capacity.

Mass deployment of our technology can potentially disrupt existing stainless steel and aluminum markets



~$4bn*





Titanium Market
2019 Ingot Production ~283kt
2019 Av. Price ~$15,100/t

Aluminum Market
2021 Production ~67Mt
Q1-2022 Price ~$3,400/t

Stainless Steel Market
2021 Production ~56Mt
Q1-2022 Price ~$4,450/t

* Estimated Global Market Summary in USD
Sources: Roskill, International Stainless Steel Forum, Jefferies Equity Research, LME, Metal Miner. Pricing as of Q1-2022.

While also potentially re-shoring titanium in the U.S., addressing a major national security risk

Current Titanium Defense Applications

U.S. Airforce

F-35 Lighting

V-22 Osprey

U.S. Army

M777 Howitzer

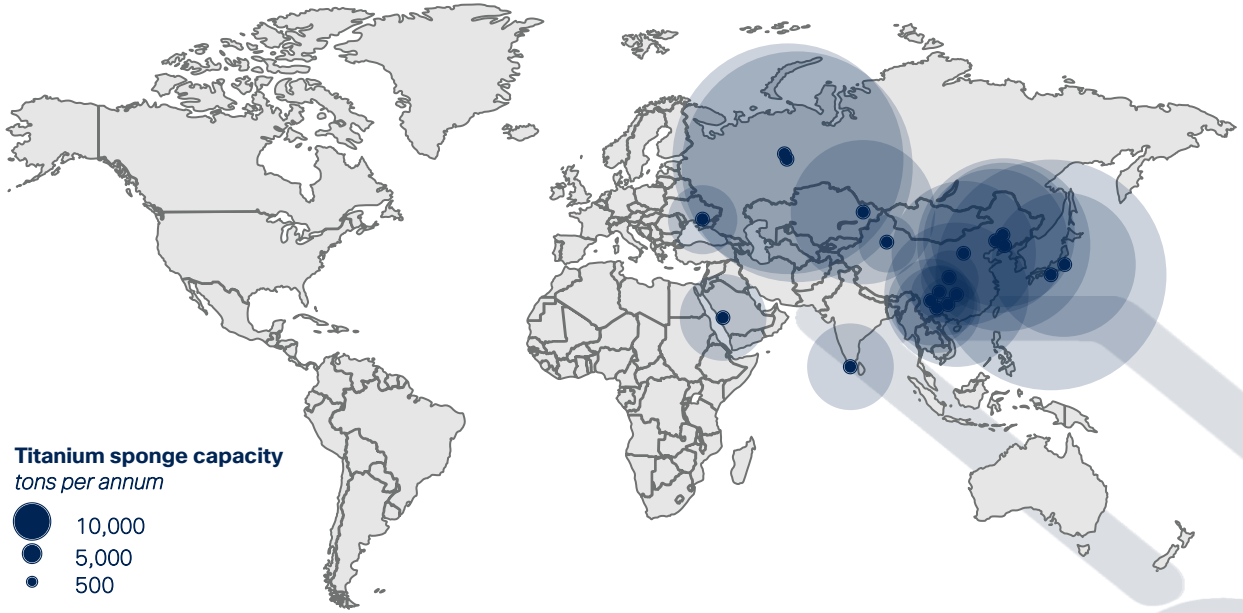
M1 Abrams

U.S. Navy

SSN774 Virginia Class

LPD17 San Antonio Class

~72% of Global Titanium Sponge Capacity is in China & Russia

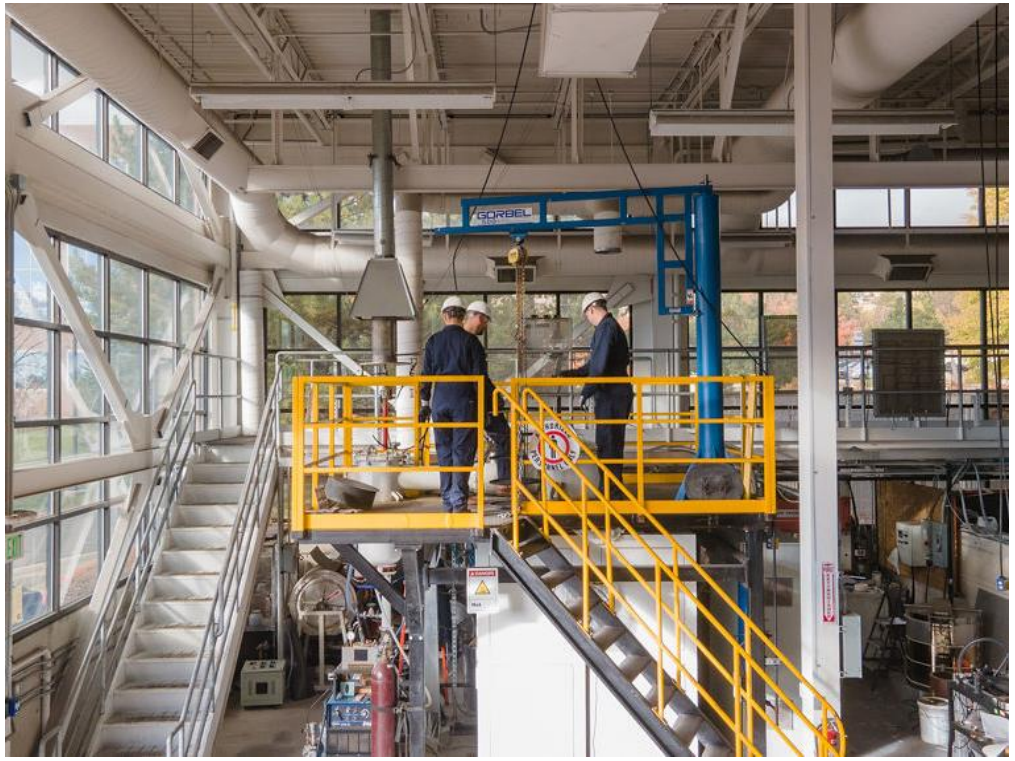


Source: US Geological Survey. Locations shown are approximate.

The U.S. closed its last sponge plant in 2020, owned by TIMET in Nevada, and is now 100% reliant on imports

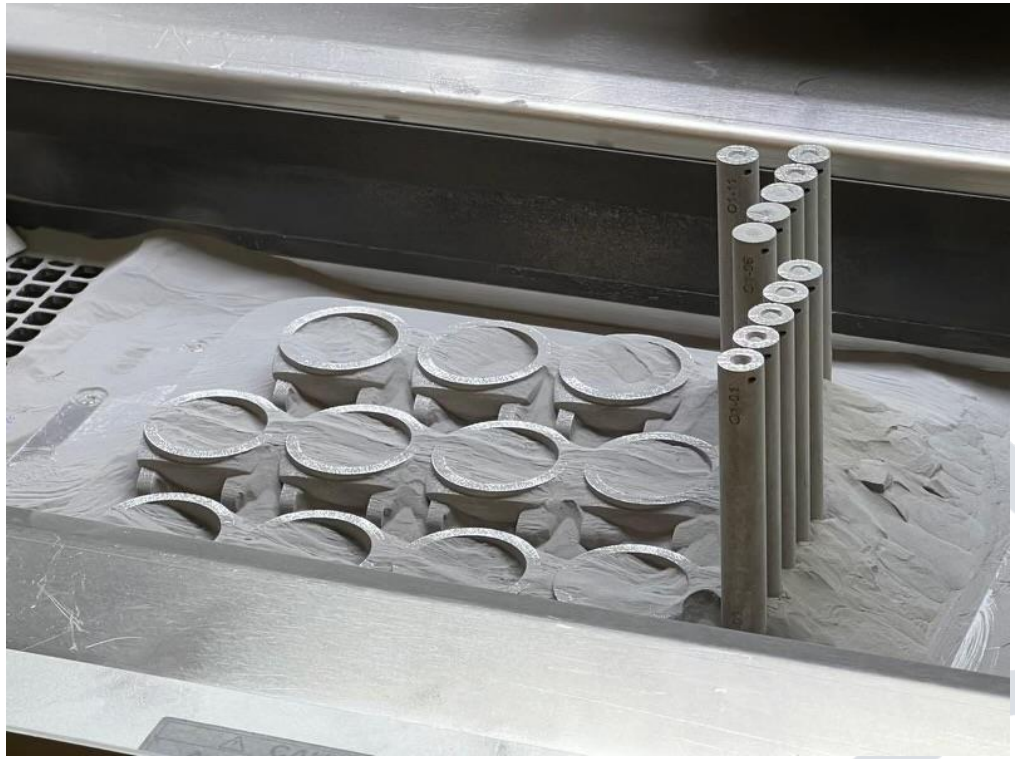
We are producing at small scale today, and we are working with customers to prototype titanium parts

Pilot Powder Production – Salt Lake City, UT



Department of Energy's ARPA-E METALS program funded pilot scale build-out

Printed Prototype Parts



First commercial partnership agreement signed with Officine Panerai, a luxury consumer goods company

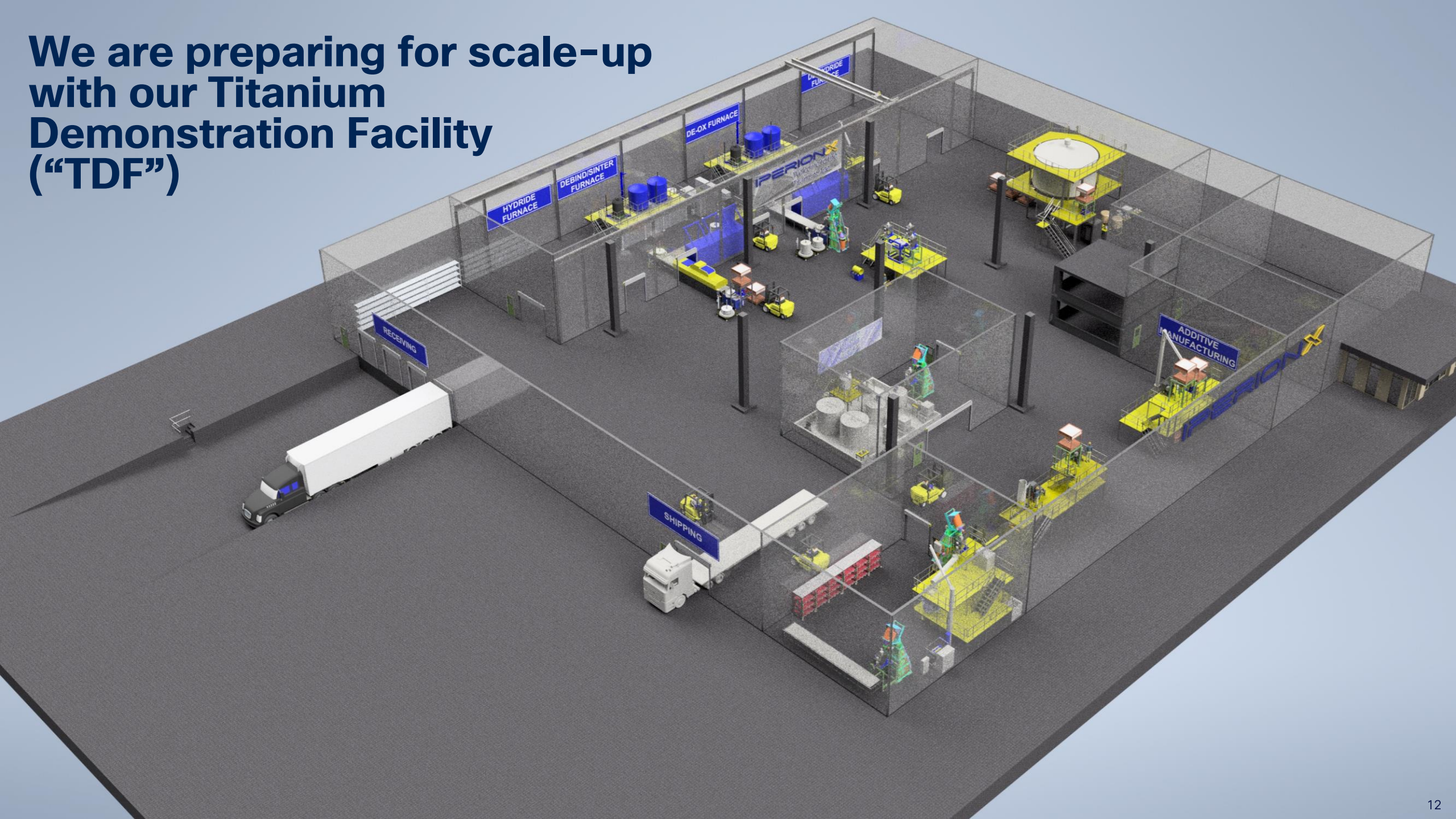
PANERAI

RICHEMONT

- Commercial partnership agreement to produce luxury, sustainable, watch cases for Panerai using IperionX's titanium and advanced additive manufacturing methods[1]
- Panerai is a division of Compagnie Financière Richemont SA ("Richemont", SWX: CFR), a US$60 billion luxury goods organization
- The watch cases are made with low carbon, fully circular and closed loop materials in pursuit of higher sustainability standards
- IperionX titanium provides a potential solution to this emerging need in a >$200 billion global market

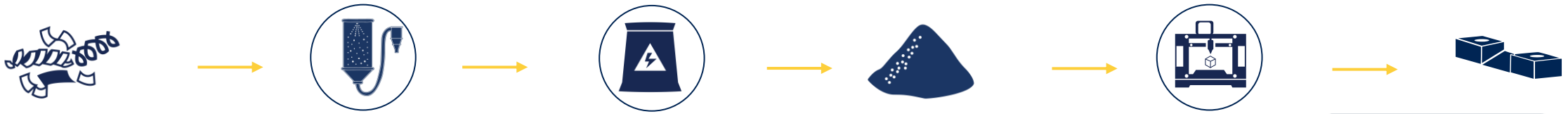
1. See ASX announcement dated August 30th 2022 for details.

We are preparing for scale-up with our Titanium Demonstration Facility (“TDF”)



The TDF is a potential step towards scaling our high value metal powders business to cashflow, using titanium scrap as feedstock

Titanium Demonstration Facility



Titanium Metal Scrap
In-spec and out-of-spec (high oxygen content) titanium scrap

Spray-dry & Sinter
Electricity and reagents (no carbon inputs)

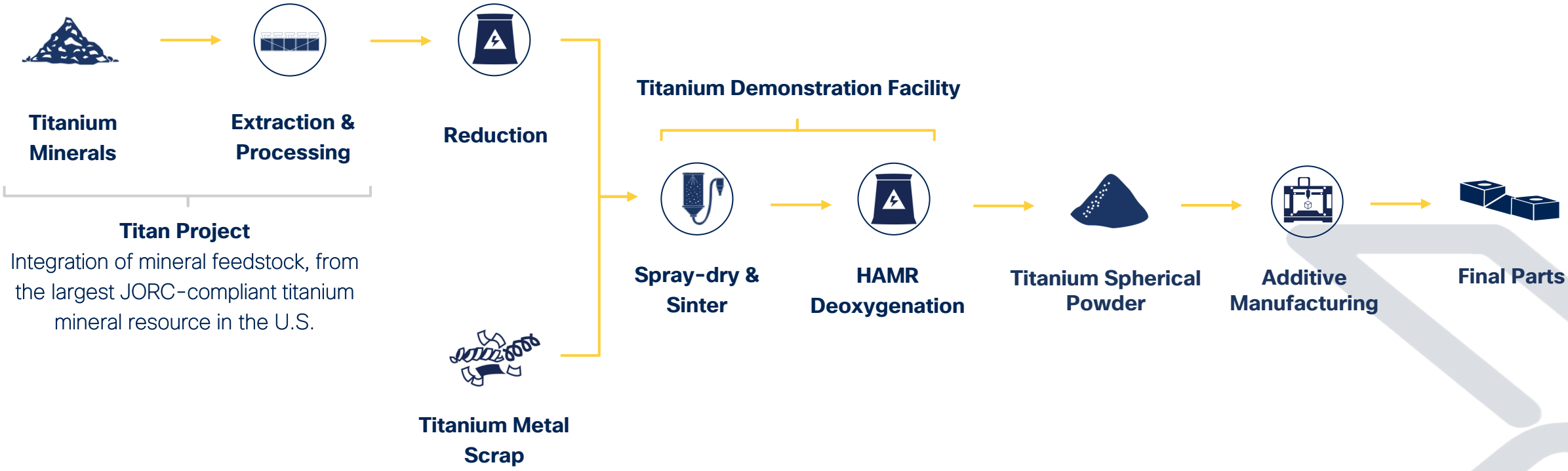
HAMR Deoxygenation
Electricity, H_2, & Mg (no carbon inputs)

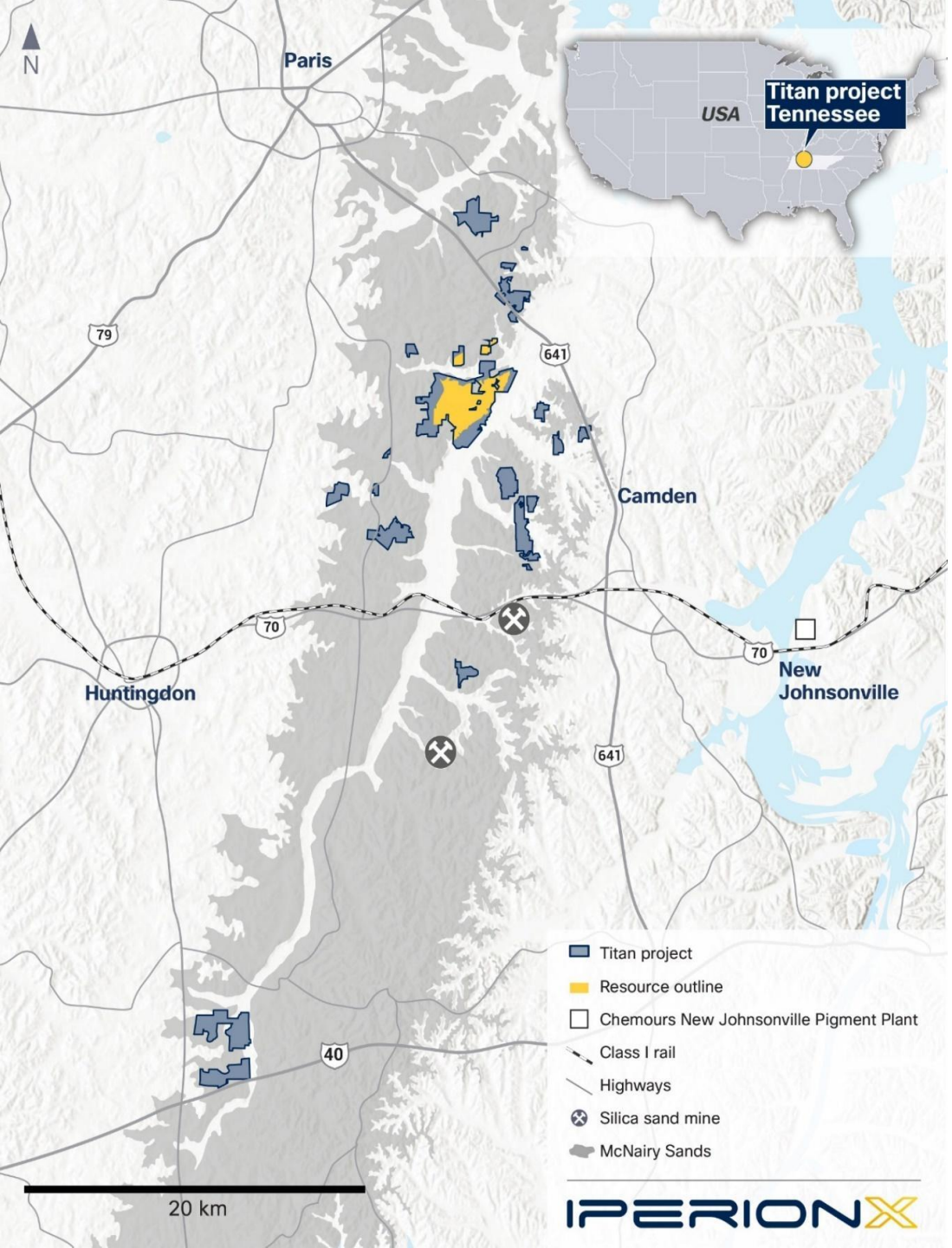
Titanium Spherical Powder
<0.2% oxygen by weight

Additive Manufacturing
Electricity & Argon

Final Parts

Longer term, we aim to backward integrate with our own sustainable source of titanium minerals from the Titan Project



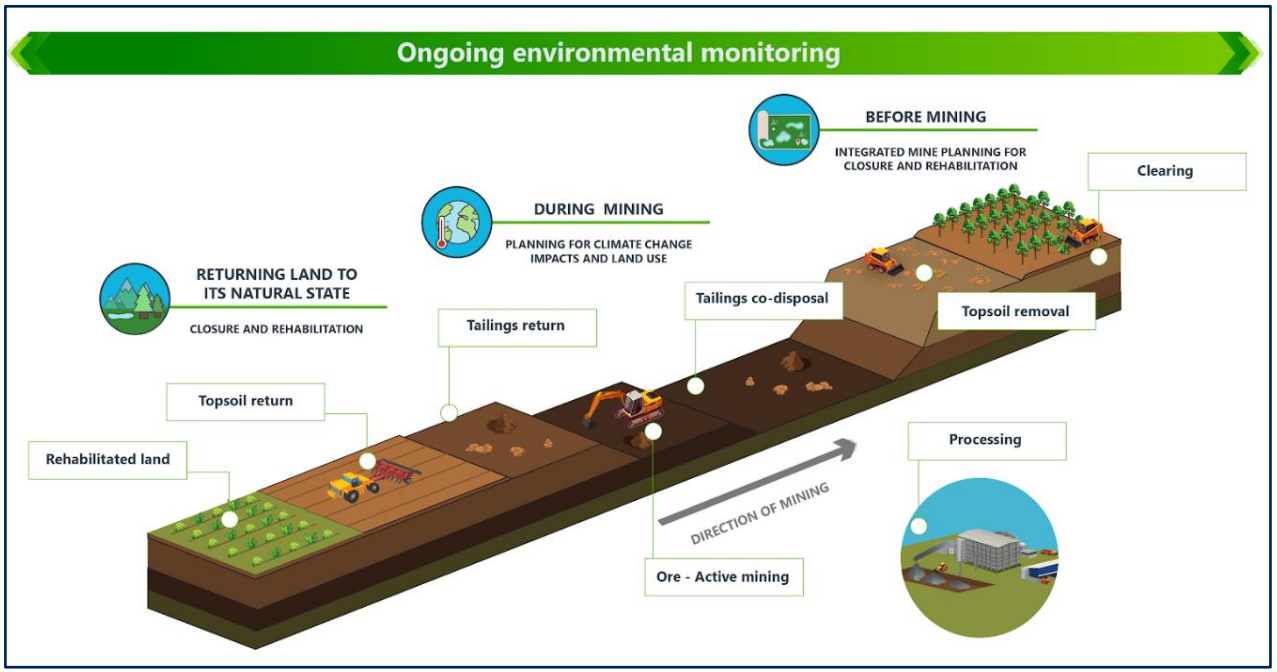


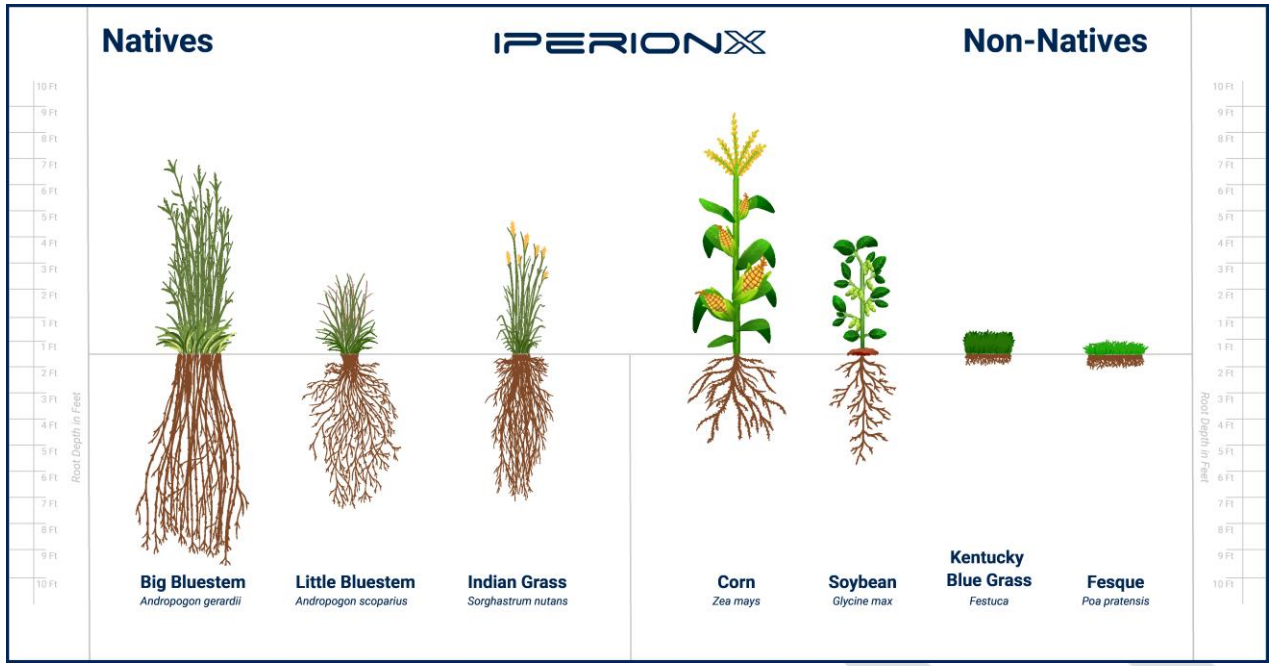
Based on the results of our Scoping Study, the Titan Project is a potential multi-decade source of U.S. titanium, with significant rare earth co-product

- The largest JORC and SK-1300 compliant resource of titanium and monazite/xenotime rare earth minerals in North America
- Projected 25-year initial operational life covers only a small portion of existing landholdings
- Potential for additional resource discovery and conversion within land controlled by IperionX
- Initial scoping study (technoeconomic assessment) outlined a ~$700 million NPV[1] with potential for $117 million per annum EBITDA[1]
- Titan potentially provides for not only the critical titanium mineral needs of North America but could potentially provide for a large portion of the heavy and light rare earth mineral needs

1. June 2022 Scoping Study projections are based on Q1-2022 price projections and cost estimates in U.S. Dollars. Evaluation was carried out on a 100% equity basis using an 8% discount rate. For further information, see Scoping Study press release dated June 30, 2022.

We are focused on sustainable extraction, processing, reclamation, and rehabilitation of these minerals





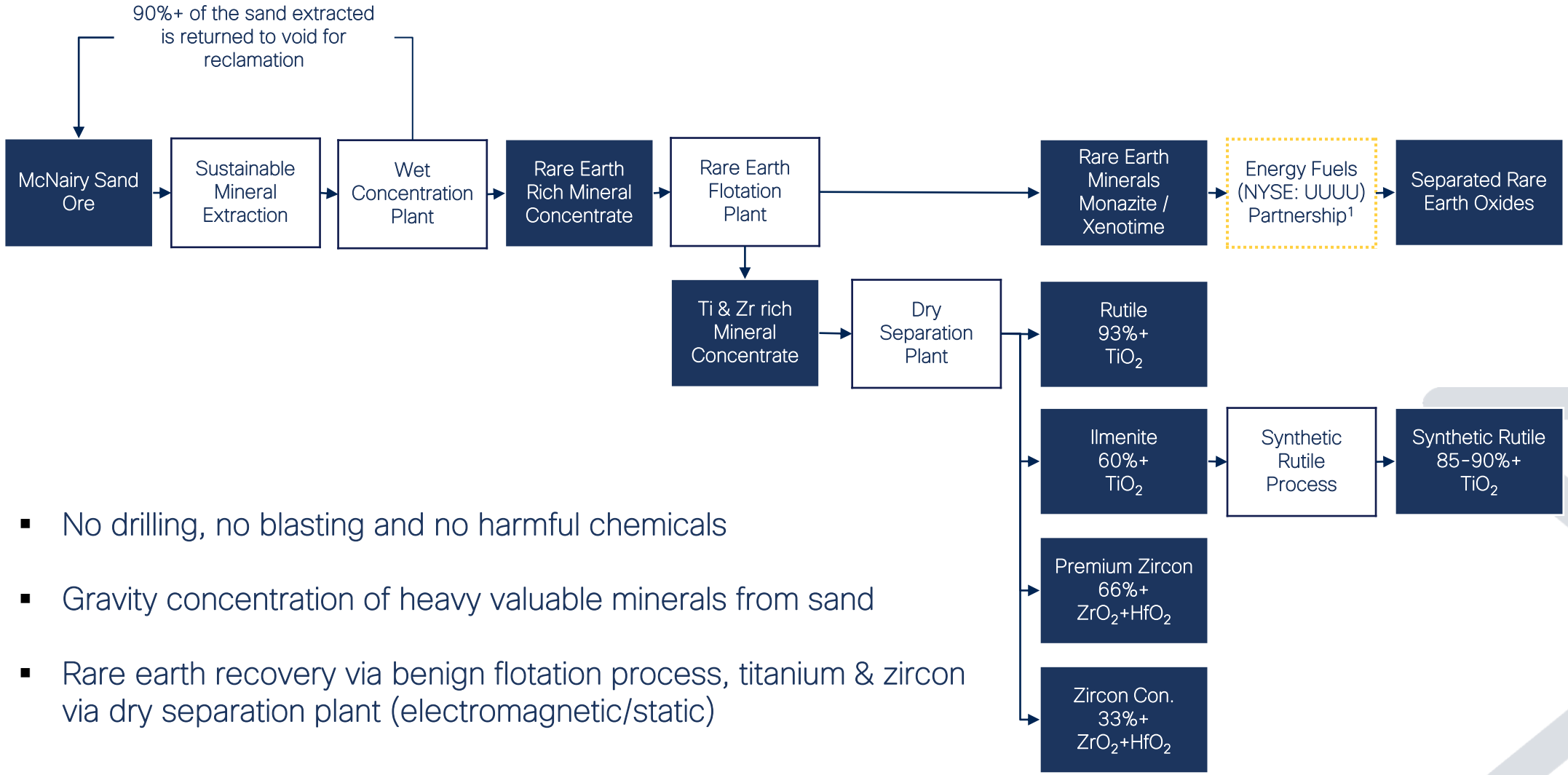
Targeting low carbon impact extraction with active reclamation

- Focusing on renewable power sources (as processing requires mainly electrical power) to limit carbon intensity
- Reclaiming voids actively during extraction results in only temporary disturbance in any one area at a time

Research into improved rehabilitation programs to return land to a better post-operations state

- Native warm season grasses experimental plots for improved rehabilitation
- Experimental plots investigating carbon sequestration opportunities during rehabilitation

Targeting simple and conventional extraction and processing to produce multiple high-value product streams including rare earths



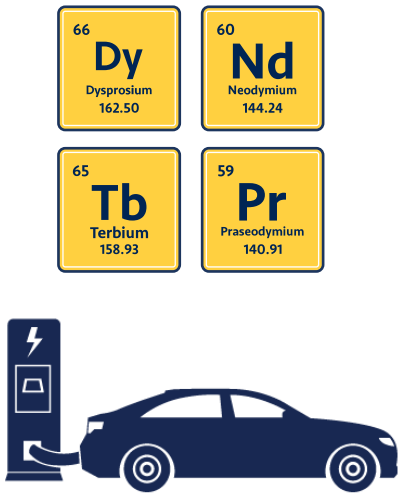
- No drilling, no blasting and no harmful chemicals
- Gravity concentration of heavy valuable minerals from sand
- Rare earth recovery via benign flotation process, titanium & zircon via dry separation plant (electromagnetic/static)

1. See ASX announcements dated April 22nd, 2021, and update announcement dated March 8th, 2022 for details.

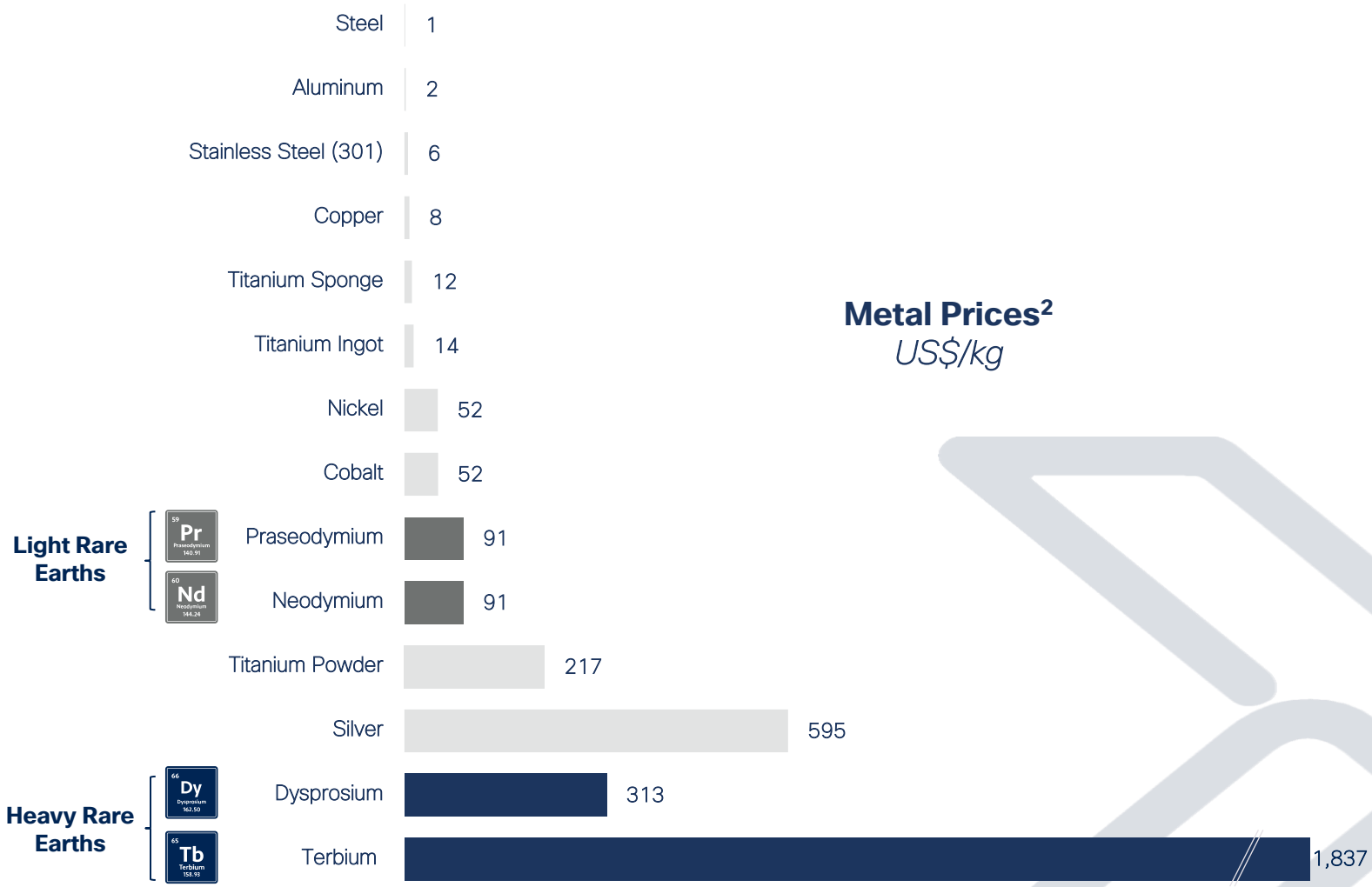
Potential to be a major U.S. source of rare earths, including a significant endowment of heavy rare earths

Over its initial 25-year mine life, the Titan Project is projected to produce enough contained rare earth oxides to support

~24,000,000
Electric Vehicles[1]



Metal Prices[2]
US$/kg



1. Source: Adamas Intelligence, Titan Project Scoping Study. Estimates are based on the in-situ Titanium metal and Neodymium metal contained in of the Titan Project's cumulative total mineral concentrate production over 25 years of projected mine life, as outlined in the Titan Project Scoping Study. Assumes 1.3kg of NdFeB magnet per electric vehicle and 31wt% Nd content per kg NdFeB magnet.
2. Source: Roskill, LME, Metal.com, AgMetalMiner, Kitco Metals. Data as of September 2022.

First-class leadership team with a breadth and depth of experience across sectors

Executive Leadership Team

Anastasios Arima

Founder & Chief Executive Officer

Founder of multiple $1+ billion listed start-ups, most recently Piedmont Lithium (NASDAQ: PLL)

Todd Hannigan

Executive Chairman

Highly respected & renowned Australian metals industry investor, previously CEO of $3+ billion IPO

Toby Symonds

Chief Strategy Officer

25+ years U.S. finance industry veteran, previously founder of 2 hedge funds and ex-SAC, MS & JPM

Jeanne McMullin

Chief Legal Officer

25+ years U.S. corporate legal industry veteran, previously CLO of start-up PE firm with $50 billion AUM

Scott Sparks

Chief Operating Officer

30+ years U.S. EPCM veteran, previously head of operations DRA and manager of 1,000+ person teams

Dominic Allen

Chief Commercial Officer

17+ years finance industry professional, previously corporate development at Rio Tinto

Independent Board Members

Lorraine Martin

Independent Director

President & CEO of the National Safety Council, ex-EVP Lockheed Martin

Beverly Wise

Independent Director

Board member Héroux-Devtek, ex-Boeing, President of Shared Services

Melissa Waller

Independent Director

President of AIF Institute, ex-Deputy Treasurer for State of North Carolina

Vaughn Taylor

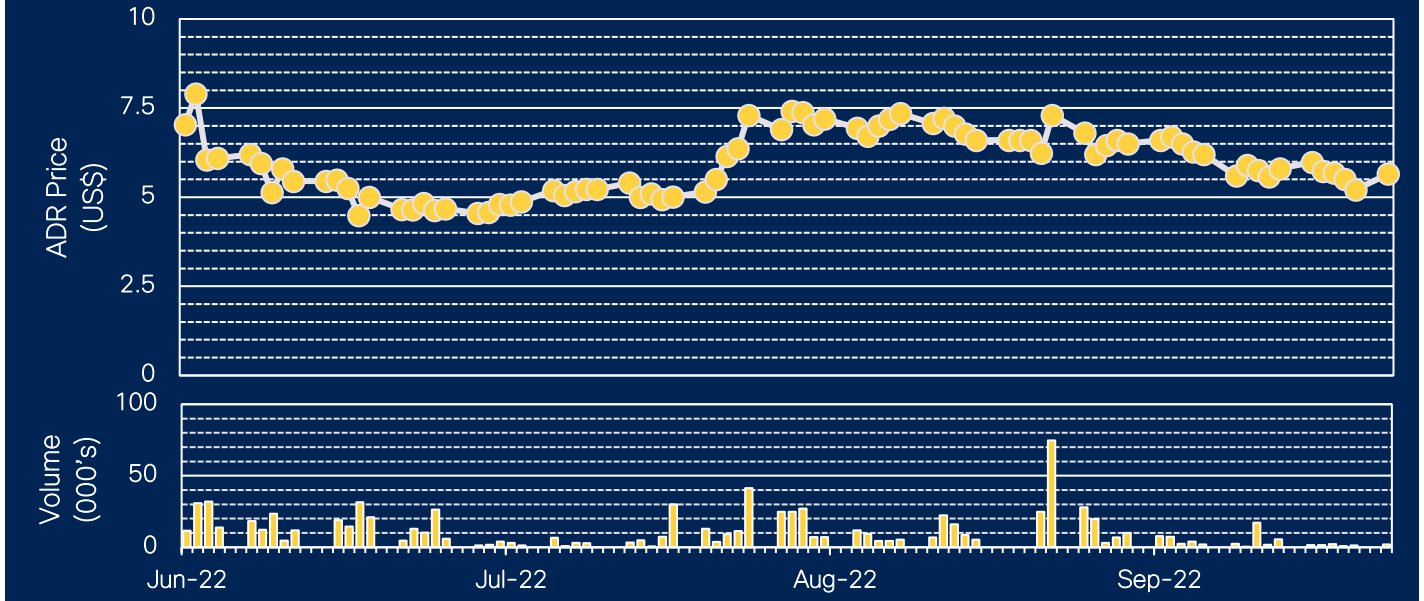
Independent Director

Start-up company investor & board member, ex-CIO AMB Capital

Target milestones to drive value in the next 12 months

- **Secure strategic partners for our Titanium Metal operations**
  - ☑ Test powders and/or prototype parts with prospective customers
  - ☑ Panerai partnership to produce sustainable luxury consumer goods
  - ☑ Further customers in various industries including automotive and consumer electronics companies
- **Scale-up of Titanium Metal Powder Production**
  - ☑ Secure breakthrough technology I.P. portfolio
  - ☑ Scale up of titanium pilot plant production
  - ☑ Complete site selection and engineering work for the TDF
  - ☑ Construction & commissioning of the TDF
- **Development of Titan Project to construction ready**
  - ☑ Definition of largest titanium mineral resource in U.S.
  - ☑ Scoping study defining highly economic, low-cost operation
  - ☑ Feasibility level engineering studies
  - ☑ State permits

U.S. ADR Price & Volume Performance



Capital Structure (NASDAQ / ASX Ticker Symbol: IPX)

Shares Outstanding (ADR equivalent)[1]	16.9 million
Debt	Nil
Cash (Sept. 30, approx.)	~US$ 15 million
Fidelity Mutual Funds (FMR) Boston	~10%
Fidelity International (FIL)	~7%
B. Riley Financial	~5%
U.S. Retail (% ownership held as ADRs)	~7%
Insider and Associate Ownership	~30%

1. IperionX has 168.7 million ordinary shares outstanding, equivalent to 16.9 million ADRs at a 10:1 ratio.