



Corporate Presentation

A South Australian ionic rare earth and PNG gold exploration company





Disclaimer

Cautionary Statement

Corporate Presentation

The information contained in this presentation is provided by Frontier Resources Limited ("Frontier") and its related bodies corporate (the "Group") for background informational purposes only. The information in this presentation is not investment advice, is not intended to be used as the basis for making an investment decision and does not constitute an offer to issue or arrange to issue, or the solicitation of an offer to issue, securities of Frontier. Frontier has made reasonable efforts to ensure that the information contained in this presentation is accurate as of the date hereof, however, there may be inadvertent or unintentional errors. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information contained in this presentation. To the maximum extent permitted by law, none of Frontier nor its directors, officers, employees or agents, nor any other person, accepts any liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of the information contained in this presentation.

Technical Information

This presentation includes disclosure of scientific and technical information. The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by or compiled under the supervision of Peter Swiridiuk - Member of the Aust. Inst. of Geoscientists. Peter Swiridiuk is a Technical Consultant and Non-Executive Director for Frontier Resources. Peter Swiridiuk has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter Swiridiuk consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. Additionally, Mr Swiridiuk confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

Forward-looking statements

Certain information contained in this presentation may contain "forward-looking statements". Forward-looking statements may include, but is not limited to, information with respect to the future financial and operating performance of Frontier, its subsidiaries and affiliates, the estimation of Mineral Reserves and Mineral Resources, realization of Mineral Reserve and Mineral Resource estimates, costs and timing of development of Frontier's projects, costs and timing of future exploration, timing and receipt of approvals, consents and permits under applicable legislation, results of future exploration and drilling and adequacy of financial resources. Forward-looking statements are often characterized by words such as "plan", "expect", "budget", "target", "project", "intend", "believe", "anticipate", "estimate" and other similar words or statements that certain events or conditions "may" or "will" occur.

Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from those expressed or implied by such forward-looking statements, including: risks associated with investments in publicly listed companies; risks associated with general economic conditions; fluctuations in commodity prices; the inherent risks and dangers of mining exploration and operations in general; the possibility that required permits may not be obtained; environmental risks; uncertainty in the estimation of Mineral Resources and Mineral Reserves; general risks associated with the feasibility, development and production of each of Frontier's projects; the risk that further funding may be required, but unavailable, for the ongoing exploration, development and production of Frontier's projects; changes in laws or government regulations, policies or legislation; unforeseen expenses; fluctuation in the exchange rate of the Australian dollar; litigation risk; risks of being unable to sell production resulting from the development of a project; uninsured hazards; disruptions to Frontier's supplies or service providers; reliance on key personnel; retention of key employees; absence of dividends; and competition.

Forward-looking statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of their experience and their perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Frontier believes that the assumptions and expectations reflected in such forward-looking statements are reasonable.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been considered by Frontier. Although Frontier 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 information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, the forward looking information contained in this release is expressly qualified in its entirety by this qualifying statement and readers should not place undue reliance on forward-looking statements. Frontier does not undertake to update any forward-looking statements, except in accordance with applicable securities laws.



Corporate Snapshot

- Tight capital structure
- Excess of \$5m in cash (as of 24/8/21)
- First mover advantage, strategic landholding in emerging ionic clay hosted REE Murray Basin
- Along strike of ASX.AR3 Koppamurra discovery 39.9 Mt @ 725 ppm TREO¹
- Unique exploration opportunity – only two other ASX-listed ionic clay REE companies
- REE target definition ongoing with multiple exploration programs planned
- South Australia ranked in the Top 10 global mining investment jurisdictions by Fraser Institute

Key Metrics

ASX Code	FNT
Shares on issue	725,001,987*
Unlisted options	20,000,000
Performance Shares	26,923,076
Share price	\$ 0.020 (24 August 2021)
Market Capitalisation	\$11.19m*
Cash	\$5.18m
Debt	NIL

Directors & Management

Alec Pismiris	Non-Executive Chairman
Jessica O'Neil	Non-Executive Director
Peter Swiridiuk	Non-Executive Director
Matthew Foy	Company Secretary





Investment Highlights

Recent material acquisition of **prospective ionic clay hosted rare earth element (REE) Murraydium Project** in the Murray Basin heavy mineral province, South Australia

Murraydium Rare Earth Element's (REE) Project exploring for REE's Dysprosium, Terbium, Neodymium and Praseodymium all of which are used in rare earth permanent magnets (REPM) which were responsible for over 90% of total global REO value traded in 2020¹

Early mover securing 873km² of Murray Basin sediments with the potential to host a high value REE assemblage with low radioactivity ore characteristics, analogous to the Koppamurra discovery

Numerous deposits and prospects in the region including **Australian Rare Earths (ASX.AR3) Koppamurra Project with an Inferred Mineral Resource Estimate of 39.9 Mt @ 725 ppm TREO-Ce cut-off grade²**

Global push for carbon neutrality driven by renewable energy (particularly wind turbine) installations and Electric Vehicle (EV) adoption driving global demand for the combination of rare earths, in particular neodymium and praseodymium

The Australian Government has highlighted the **growing importance of REE's as we 'electrify' the worlds economies** by putting REE's at the top of the list in the Outlook for Selected Critical Minerals in Australia 2021 Report³

¹ Adamas Intelligence September 2020 ² 29/6/21 – Prospectus – Australian Rare Earths Limited (ar3.com.au) ³ Outlook for Selected Critical Minerals (industry.gov.au)



Murraydium Rare Earth's Project

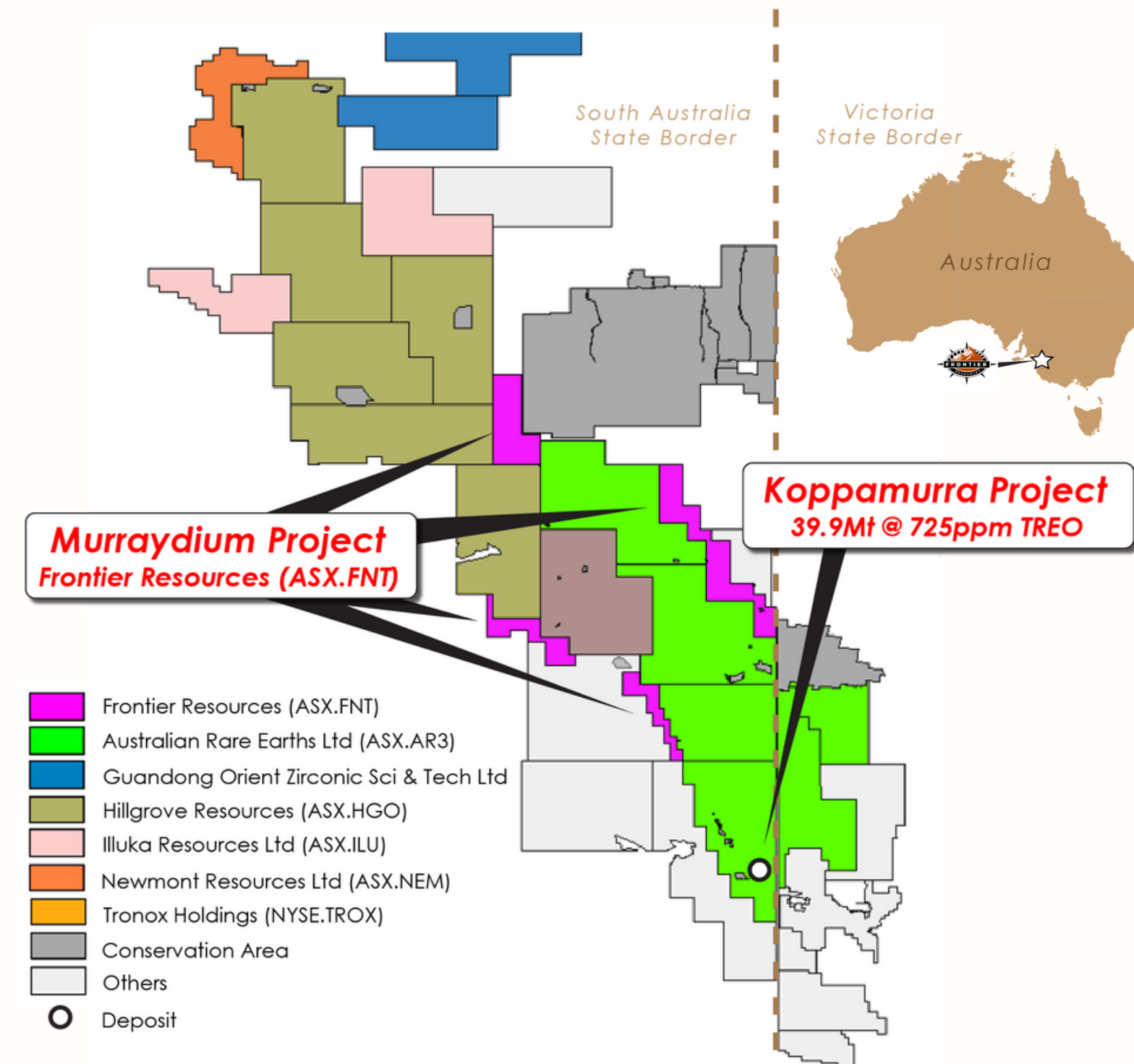
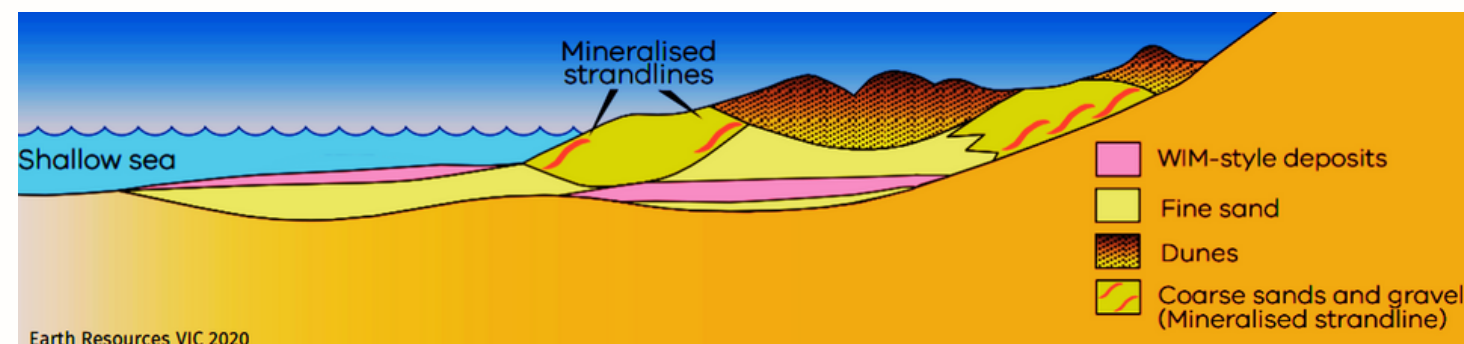
Recent material acquisition of prospective ionic clay hosted rare earth element (REE) Murraydium Project in the Murray Basin heavy mineral province, South Australia

High REE content has been discovered in clay sediments linked with coastal progradation in the SW Murray Basin (South Australia)

Sediments linked to fossil beach strandlines, typically shallow (2-20m thick) and NW-SE trending in direction, see geological schematic below

Potential for further new discoveries across the Murray Basin region

Australian Rare Earth's (ASX.AR3) \$125m market capitalisation¹, with the recent Koppamurra REE discovery hold a total 4,000km² in the region adjacent to FNT



¹ AR3 share price and company information for ASX:AR3



Murray Basin sediment hosted REE

Emerging Murray Basin heavy mineral and REE province

Landscape evolution models of the Murray Basin to build strategies for heavy mineral exploration for sediment-hosted REE mineralisation

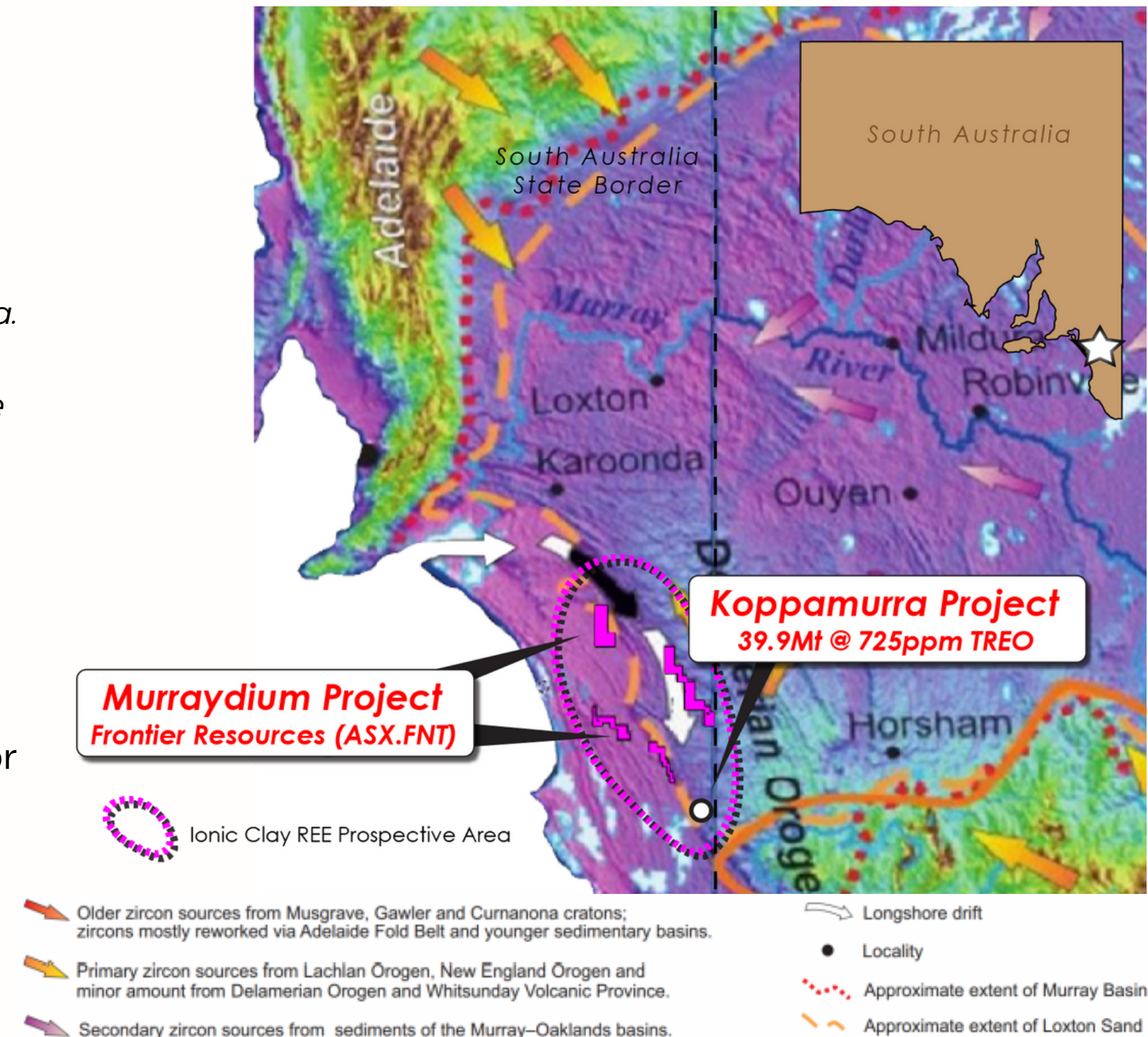
*"The Murray Basin is one of the important heavy mineral provenances in Australia. Numerous deposits and prospects are associated with an extensive series of stranded shorelines formed during marine regression in Miocene to early Pliocene time (Loxton Sand Formation, c. 7.2–3.5 Ma)."*¹

The rare earths were found to accumulate in the shallow clay layer deposited onto a limestone base (Gambier Limestone)

Murraydium Project areas are ideally located proximal to the Loxton–Parilla strandplain and the Gambier coastal plain, with target generation ongoing prior to fieldwork activities commencing

Ionic Clay REE deposits are relatively fast to drill and develop, with low capex, simple metallurgy and a high value REE offtake product

¹ M. Köhler (TU Bergakademie Freiberg), October 2020



REE market and forecasts

Global magnet rare earth oxides consumption will rise 5x by 2030, from US\$2.98B in 2020 to US\$ 15.65B by 2030¹

Forecasts global shortages of NdFeB alloy and powder will amount to 48KT p.a. by 2030 equals to approx 25 to 30 million EV traction motors¹

Global shortages of NdPr and Dy oxide will collectively rise to 16KT tonnes in 2030, an amount equal to approximately 3x Lynas annual output¹

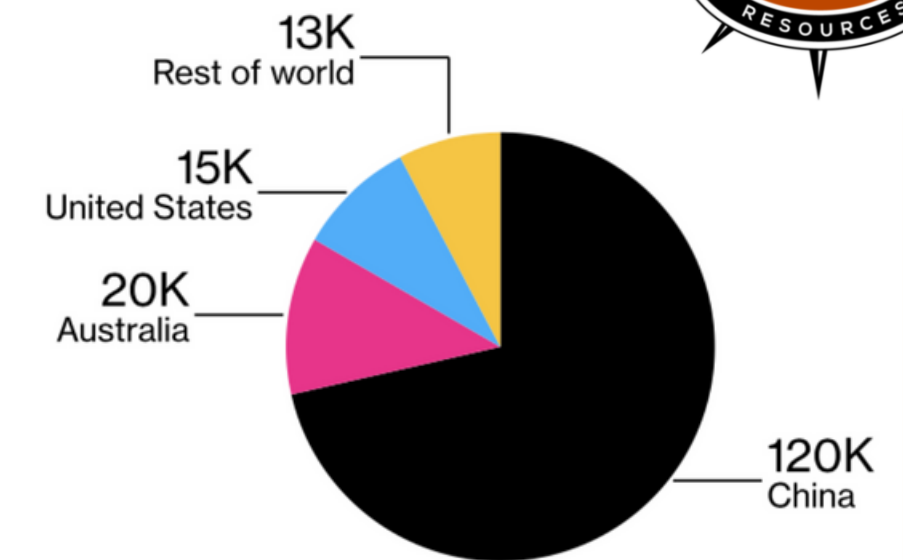
Passenger EVs are forecast to grow at over 26%pa over the next decade, by 2022, EV demand for NdFeB magnets to be double wind turbines and dominate the industry towards the end of the decade, accounting for over 40% of demand²

Uncertain, tenuous supply, potentially subject to “trade wars” & tariffs affecting international market demand and risks because of pandemic and trade tensions – Anticipation that Chinese government will launch a stockpiling program for light rare earth due to strong domestic demand³

¹ Adamas Intelligence September 2020 ² Roskill Aug 2020 ³ S&P Global Market Intelligence Sept 2020

Chinese Dominance

Global mined rare-earths production in 2018



Source: BloombergNEF, USGS

If you're reading this story on a smartphone, you probably have China to thank for it. The Asian nation generates about 70% of mined rare earths and controls 90% of a \$4 billion global market for materials used in magnets and motors that power phones, wind turbines, electric vehicles and military hardware.

China's dominance poses a considerable economic and national security risk to the U.S., one that's become all the more apparent in the months since trade relations between Beijing and Washington turned sour. "Control of the rare earth supply gives Beijing both economic and military advantages over the U.S.," writes Michael Silver, CEO of American Elements, in a [Wall Street Journal op-ed](#).

In conclusion, until the rest of the world starts investing in the critical downstream linkages that take rare earth mine outputs and upgrade them into market-desired materials, such as NdFeB magnets, **end-users outside of China will remain reliant on (and vulnerable to) China's monopoly into the foreseeable future** – irrespective of how many new mines are brought online elsewhere.

Source: Adamas Intelligence



REE market and forecasts

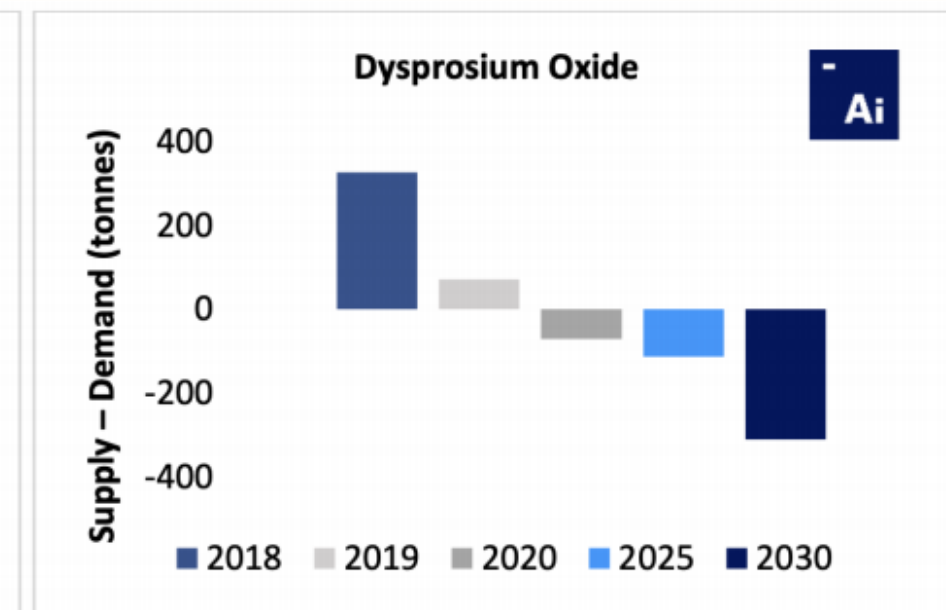
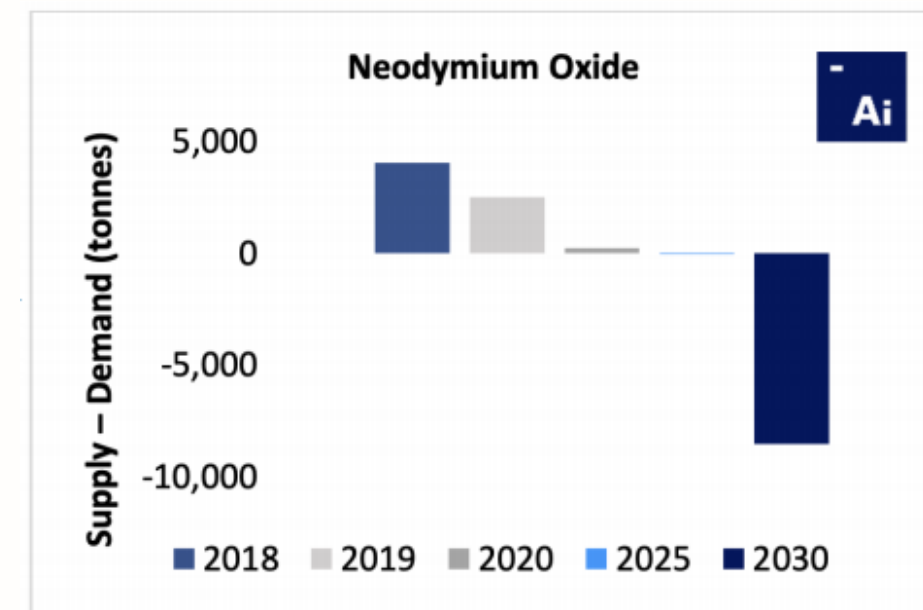
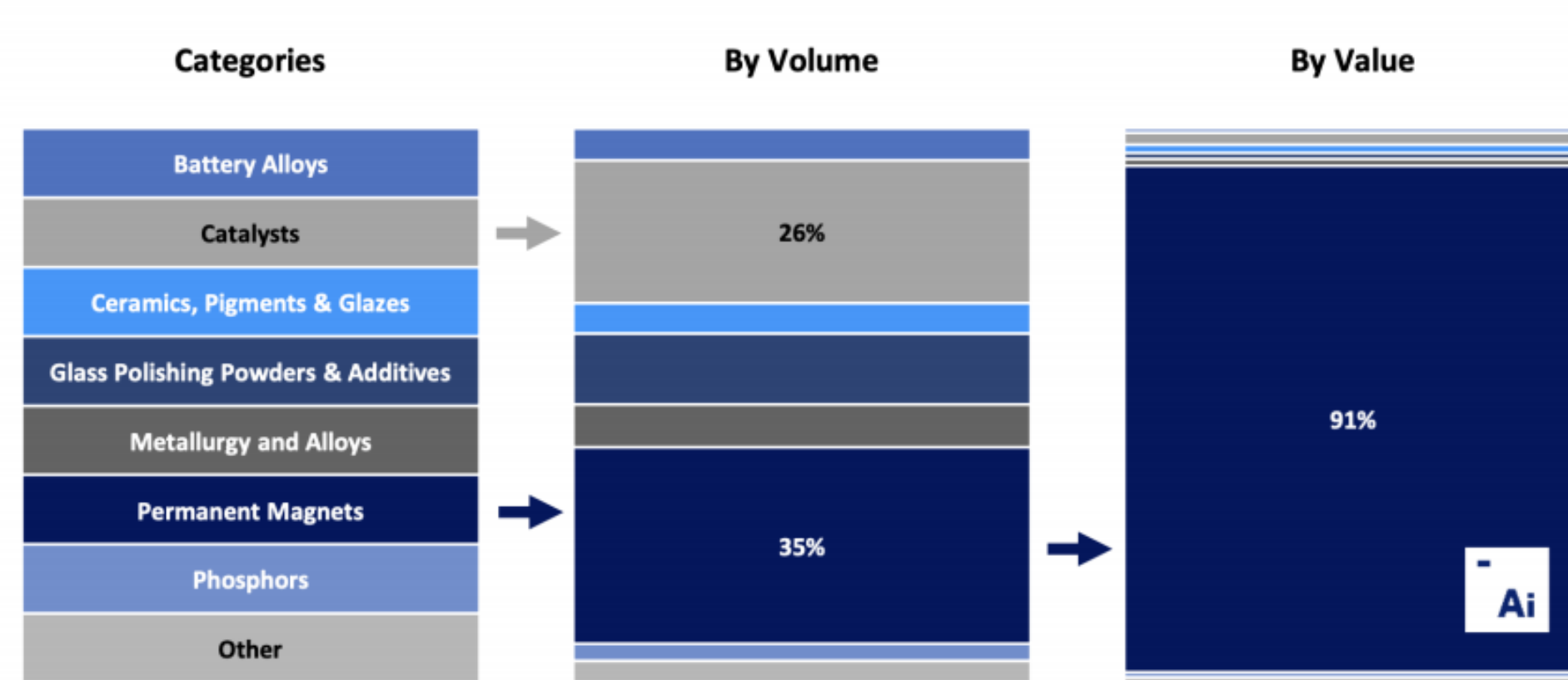
Permanent magnet applications such as in electric vehicles and clean energy are the dominant demand drivers¹

Supply will struggle to keep up with the rapidly rising demand for critical magnet elements such as Neodymium (Nd), Praseodymium (Pr), Terbium (Tb) and Dysprosium (Dy)¹

Demand growth for rare earths is strong and increasing

Applications will continue rapid development especially as a dependable, cost effective, high quality² supply is established outside of China

Customers need secure, dependable, timely source of rare earth products, with fair and predictable material costs, and a flexible supply chain with minimised risks due to geopolitical landscape



Source: Adamas Intelligence



Tolukuma Gold Project - PNG

Tolukuma Gold Project - PNG

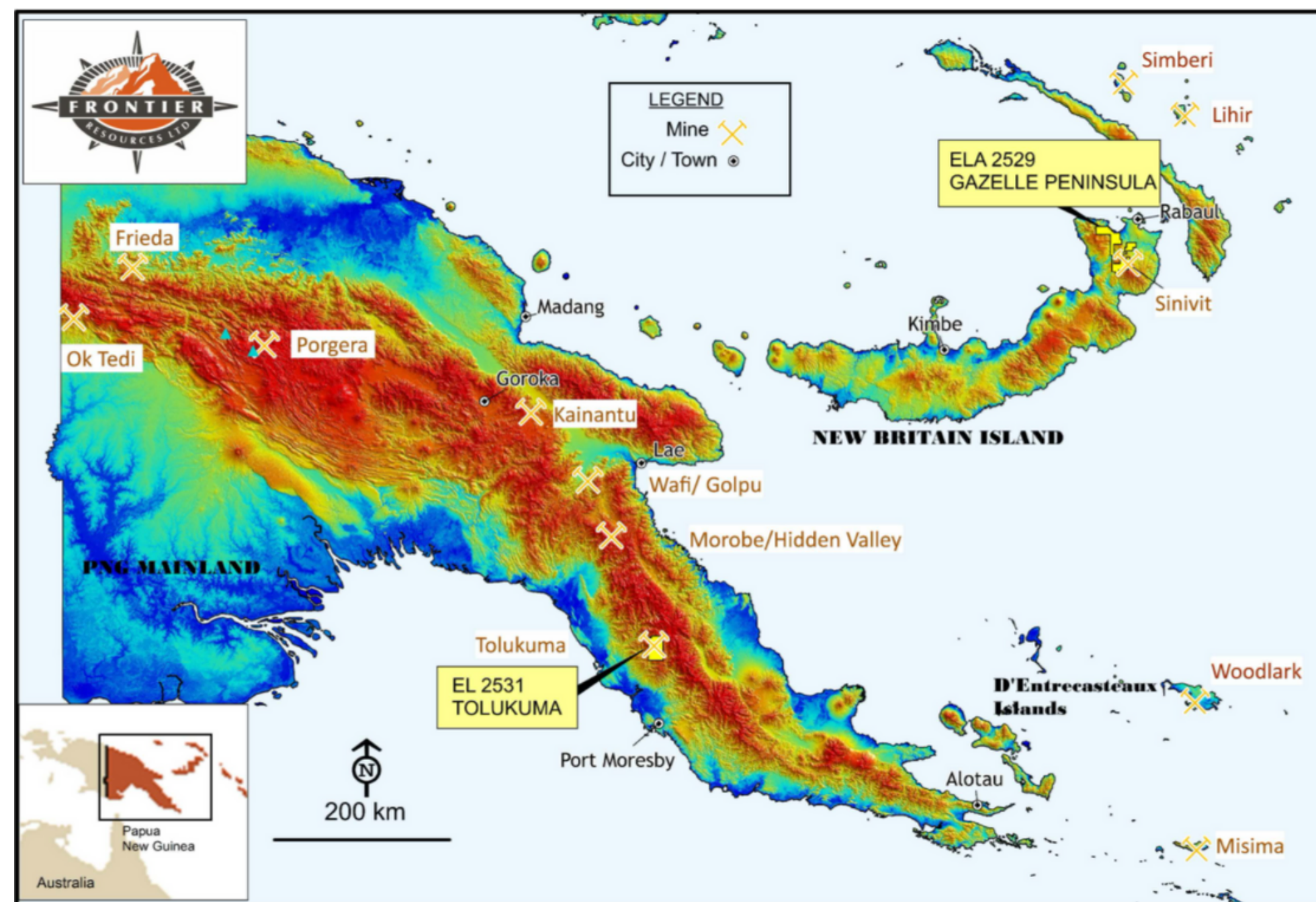
The Tolukuma Gold Project covers 223km² (ML104, EL2531) in the Central Province 70km north of the national capital Port Moresby

The Tolukuma gold mine contains high grade, narrow epithermal veins with a long history of having its gold reserves continuously extended. The mine currently has a proposed new owner as part of a planned refurbishment of the mine

Visible gold has been encountered by Frontier geologists at the Kimono gold vein system along a 4km zone on the eastern boundary of the Mining Lease where trench sampling results include¹:

-15m @ 13.89g/t Au + 46.7g/t Ag (KC22)

-7m @ 13.25g/t Au + 13.7g/t Ag (KC29)



Tolukuma Gold Project - PNG

The Saki epithermal gold-silver deposit occurs three kilometres east of the Tolukuma mine. Saki has been drilled with 47 diamond holes and an Exploration Target of 100,000oz to 300,000oz gold (600,000 to 1,000,000 tonnes grading 5.0 to 9.0 g/t gold)¹

The Exploration Target for the Saki prospect, describing the potential quantity and grade, is conceptual in nature. There has been insufficient exploration completed to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

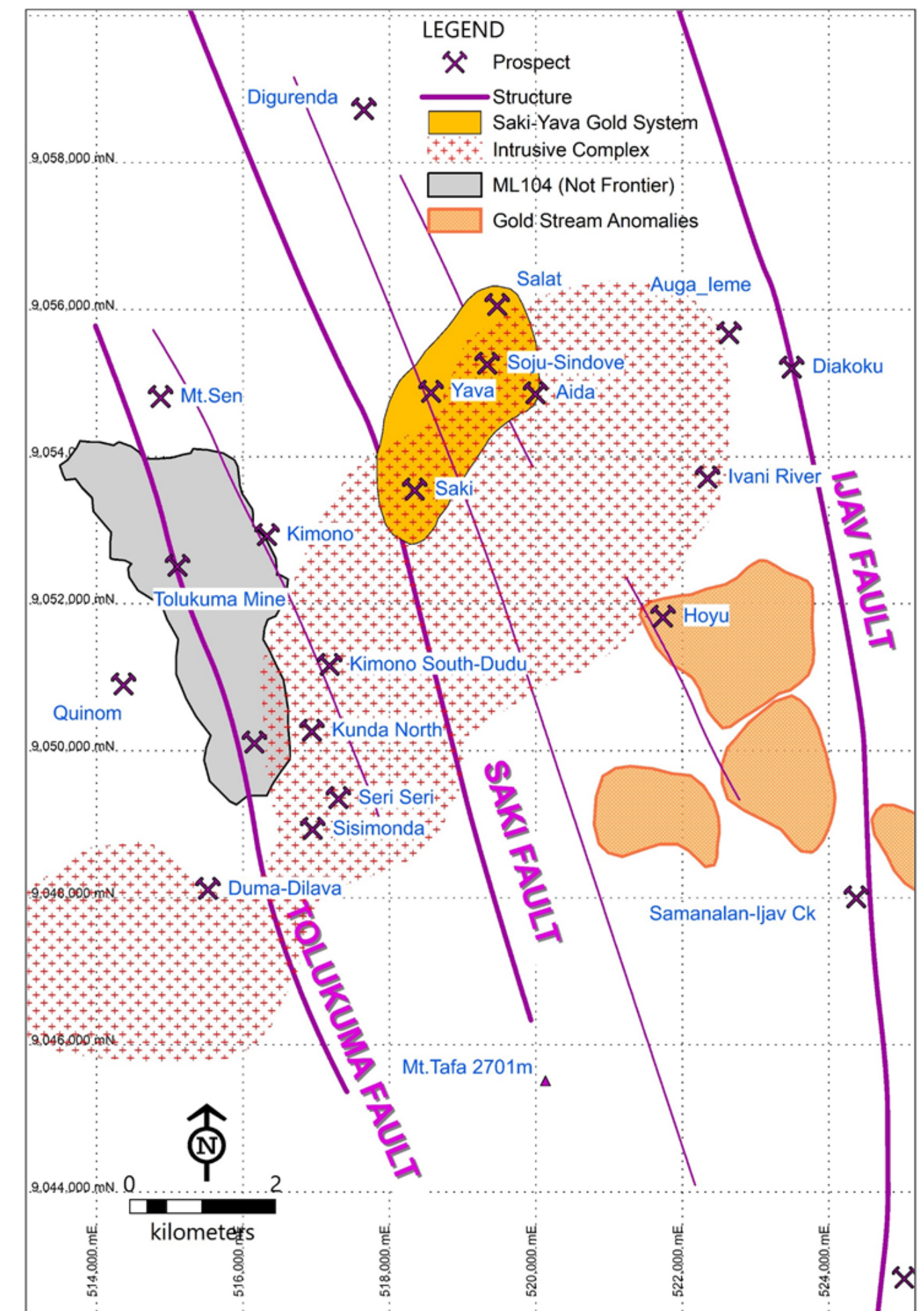
The Saki-Yava gold system is one of fifteen prospects currently being followed-up with sampling and mapping to define drill targets

The Saki-Yava gold system occurs within an envelope of mineralisation of more than 3.6 km², providing a substantial target area to expand on the size of Saki system of veins. Sample results within this zone include²:

- 1,750g/t gold in rock float at Saki
- 1m @ 158g/t gold in trench samples at Soju

Frontier Resources | **Corporate Presentation 2021**

¹ For further information please see the ASX release dated 7 October 2019 "Saki Gold Prospect Exploration Target and Plan". The Company confirms that it is not aware of any new information or data that materially affects the information regarding the Exploration Target. ² ASX.FNT, 19 Aug 2020, Yava Gold Veins Demonstrate a 3km Wide Zone of Mineralisation





Project Newsflow

Murraydium Rare Earth's Project – South Australia

Ongoing review of available desktop literature including geological models and historical exploration data

Field mapping to confirm prospective geological horizons to validate geological models and assist in exploration targeting

Defining targets for extensive surface sampling and testing

Systematic drilling in the early stages testing for a broad scale, relatively shallow deposit including but not limited to auger, push tube and aircore drilling

Surface excavations of costeans for sampling and bulk metallurgical studies

Tolukuma Gold Project – PNG

Given the proximity of the existing high grade gold prospects within 3km of the Tolukuma gold mine, Frontier is focusing on exploring these near mine gold vein systems to develop potential resources that will be required for future mill-feed once the mine has re-opened

Field mapping and surface sampling to assist in exploration targeting

Receive and interpret trench and rock sampling assay results from the Saki veins collected during the June/July 2021 fieldwork program

Evaluation of Saki drilling to determine viability of a maiden JORC Resource

Connect

Thank you, for enquiries please see
contact details below

Alec Pismiris
Chairman

Level 8, 99 St Georges Terrace, Perth WA 6000

+61 (8) 9486 4036

www.frontierresources.net.au

