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- The background of the slide is a light brown color with a white topographic map pattern consisting of various contour lines.
- + Discovery
  - + Resource Definition
  - + Value Capture

Road show presentation

May 2018

**PURSUIT**  
MINERALS

[pursuitminerals.com.au](http://pursuitminerals.com.au)

# Forward Looking Statement

This Presentation contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Presentation, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and our management.

We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

We have no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this prospectus, except where required by law.

These forward looking statements are subject to various risk factors that could cause our actual results to differ materially from the results expressed or anticipated in these statements.

# Company Snapshot (ASX:PUR)

## Quality assets

- Finland vanadium projects
- Sweden vanadium projects
- North Queensland zinc projects
- Favourable mining jurisdictions
- Access to quality infrastructure

## Capital Structure

- Shares: 65,370,468
- Cash \$1.926M (31 March, 2018)
- Share price: \$0.13
- Market capitalisation: \$8.5M

## Shareholders

- |                 |       |
|-----------------|-------|
| • Teck Aust.    | 19.9% |
| • Suburban Hold | 6.8%  |
| • Golden Dawn   | 2.3%  |
| • Nero Resource | 1.5%  |
| • Top 20        | 47%   |

## Unique Potential

- Ahead of the curve in the booming battery metal sector, with exciting tenements in mining friendly Scandinavia
- **Finland vanadium** - Historical resources in place and ready for conversion to JORC (2012)
- **Bluebush project in Qld**: hosts **>120km<sup>2</sup>** of zinc mineralisation, probably the largest zinc system in Australia
- **Paperbark project in Qld**: existing zinc resource and significant copper mineralisation

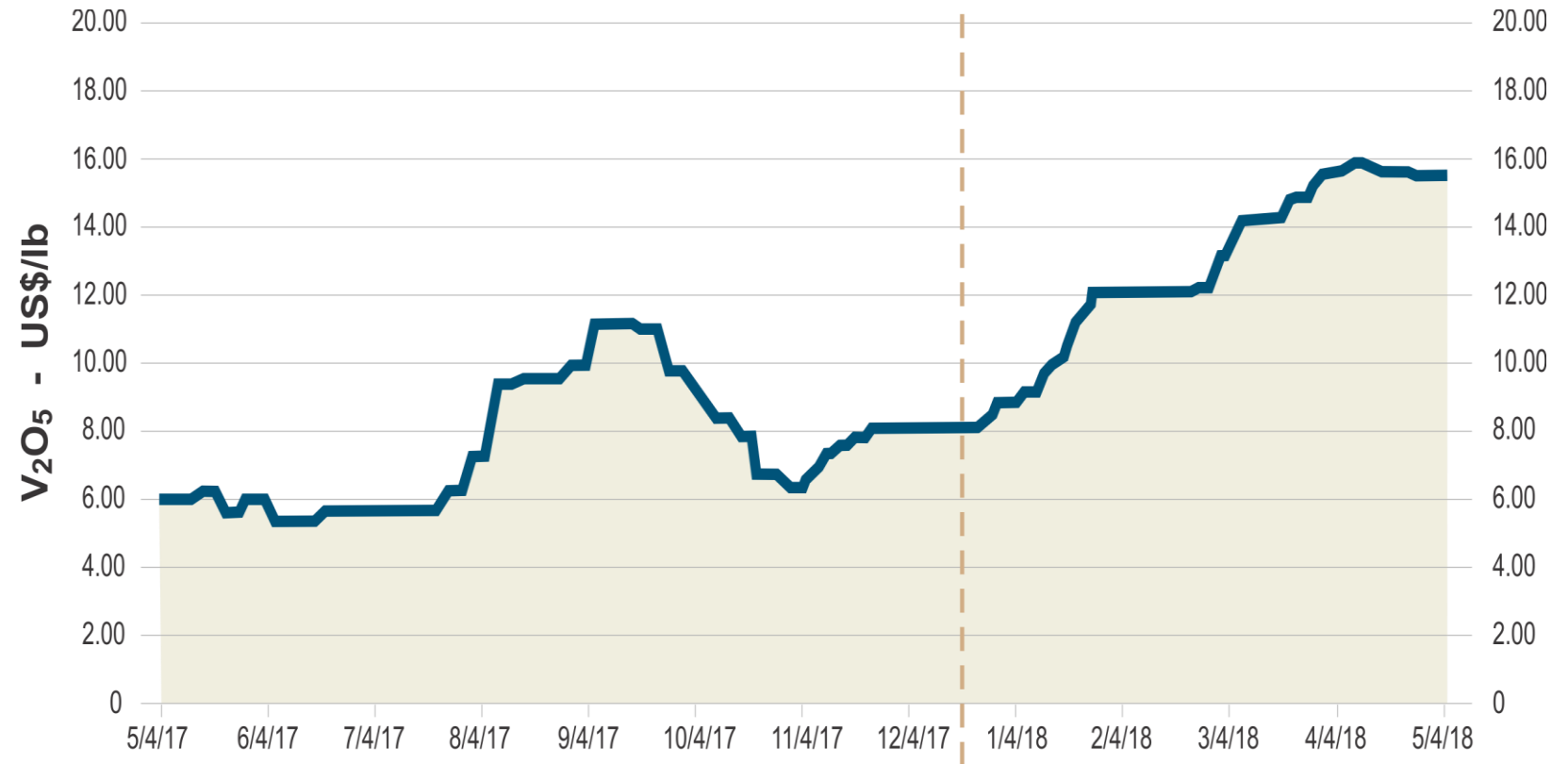
# A Quick Guide to Vanadium

- Vanadium is a transition metal and now a battery metal
- 91% of vanadium is used in steel manufacturing
  - Increases tensile strength
  - Corrosion resistant
  - Improves weldability, castability
  - An alloy for metals used in extreme conditions such as jet engines
- 5% of vanadium used as a chemical catalyst as vanadium pentoxide ( $V_2O_5$ )
- Increasing use in Vanadium Redox Flow Batteries
- Annual consumption 100,000t of V or 180,000t of  $V_2O_5$  equivalent, predicted CAGR 3.2%

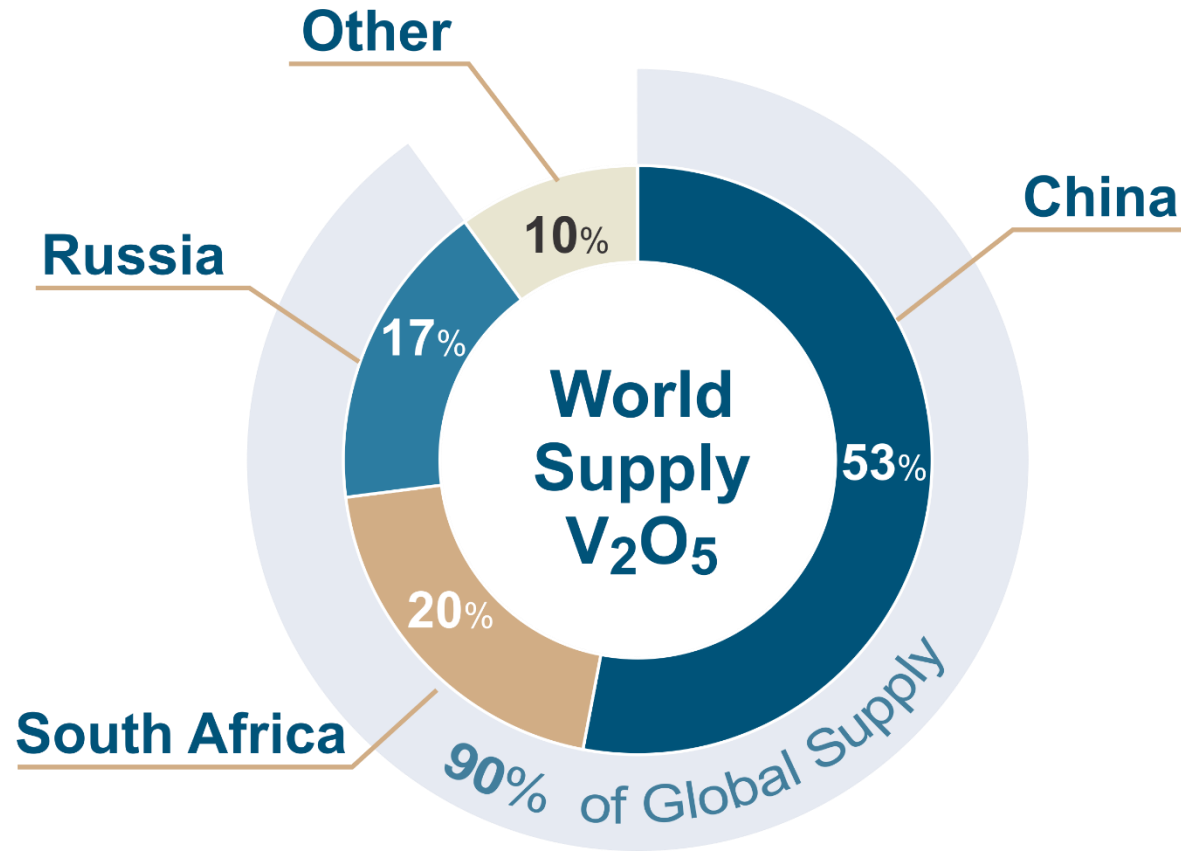


# Vanadium Price Drivers

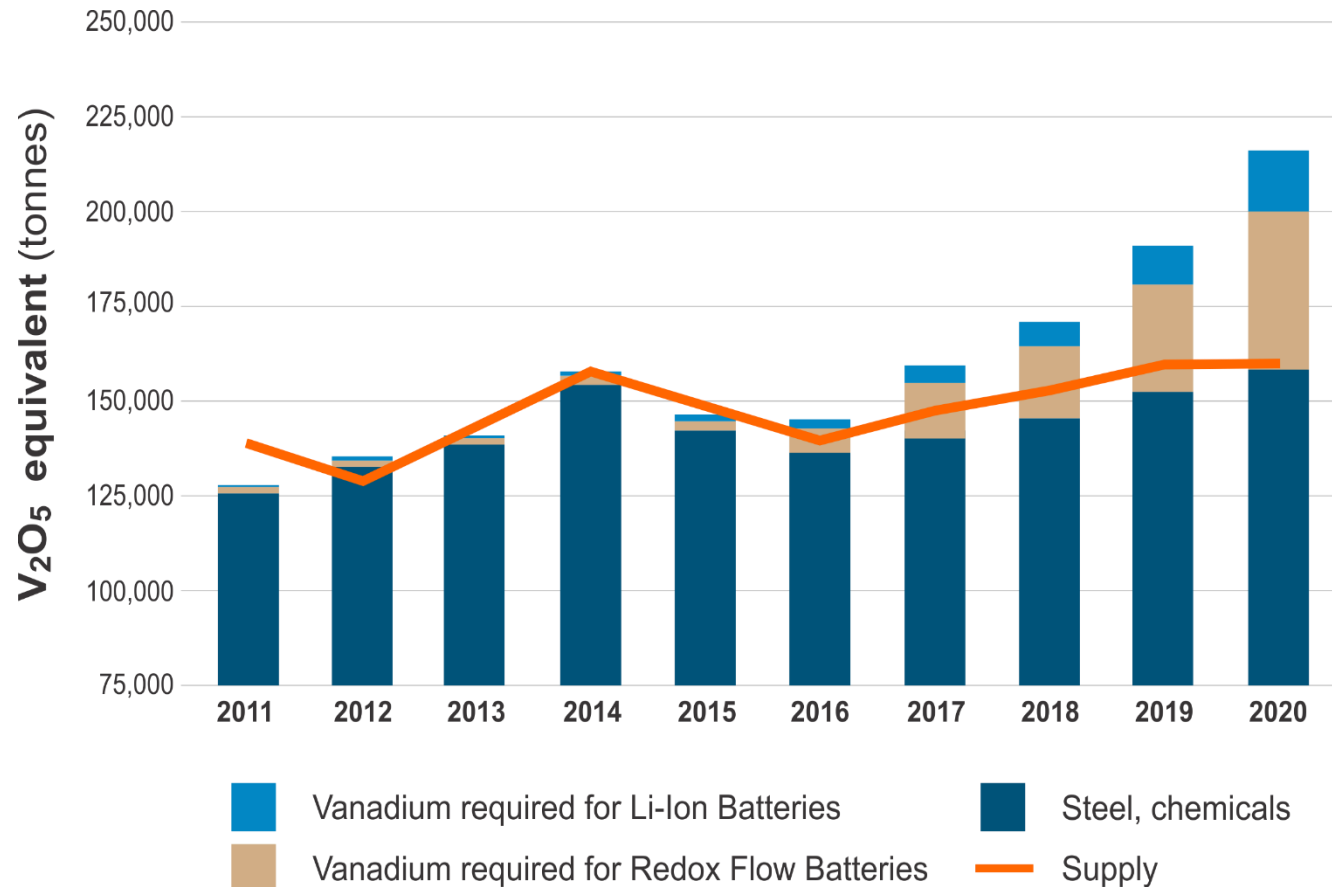
- >200% price increase in last 12 months
- 8 year high in May 2018
- Increased environmental standards in China lead to decreased production from slag and lower slag imports
- China increased rebar standards which could increase Chinese consumption by 30%
- Vanadium Redox Flow Batteries (VRFB's)



# Vanadium Global Production



# Vanadium deficit forecast



Source: Camelot Ferroalloys Inc, Vanitec

## Supply

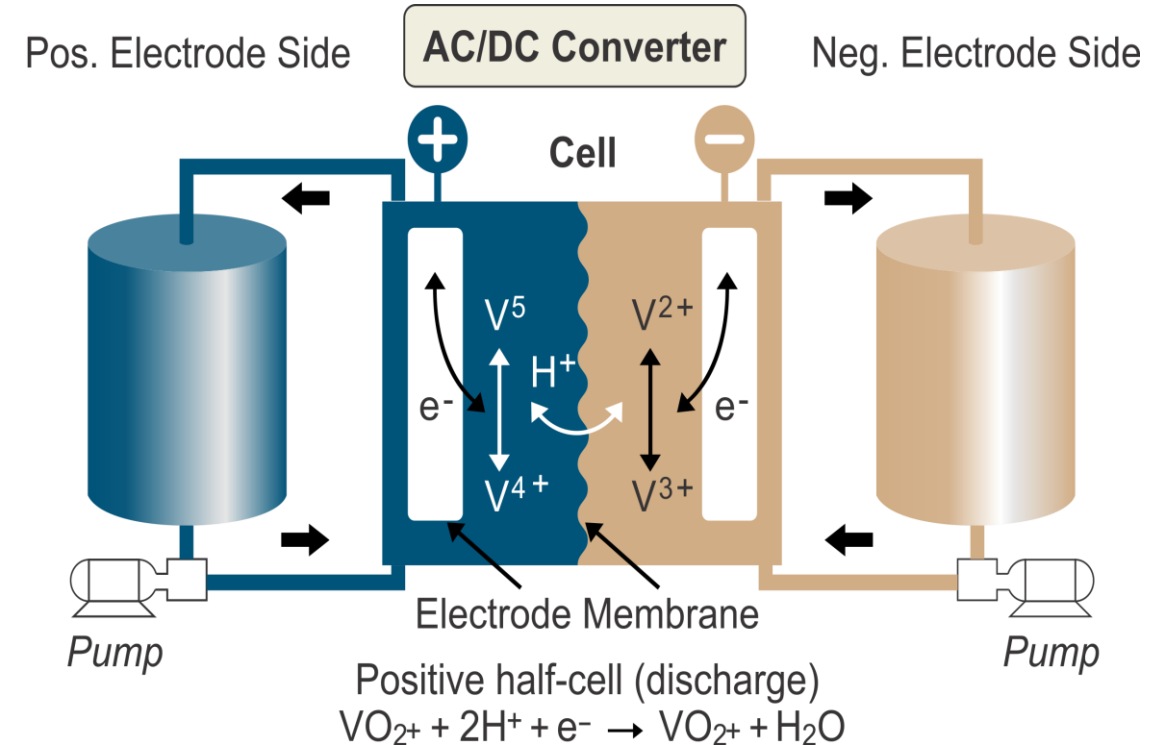
- Mine closures in Russia
- Disrupted supply in South Africa
- Decreased vanadium from slag

## Demand

- Increased Chinese rebar standards
- Battery demand both in Li-Ion and VFRB's
- Energy storage
- Predicted CAGR until 2027 is 3.2%

# Advantages of Vanadium Redox Flow Batteries

- Non-flammable
- Excellent re-chargeability
- Up to 10,000 cycles vs max 1,000 cycles for Li-Ion
- Maintain 90% of their storage capacity over 20 years
- Suitable for large scale energy storage
  - Wind farms
  - Solar
- Scalable
- Immediate energy release
- Costs have reduced 50% in the last three years to approx. \$300/kWh (Li-Ion batteries approx. \$150-200/kWh)
- On a per cycle basis VFRB's are now price competitive with Li-Ion batteries

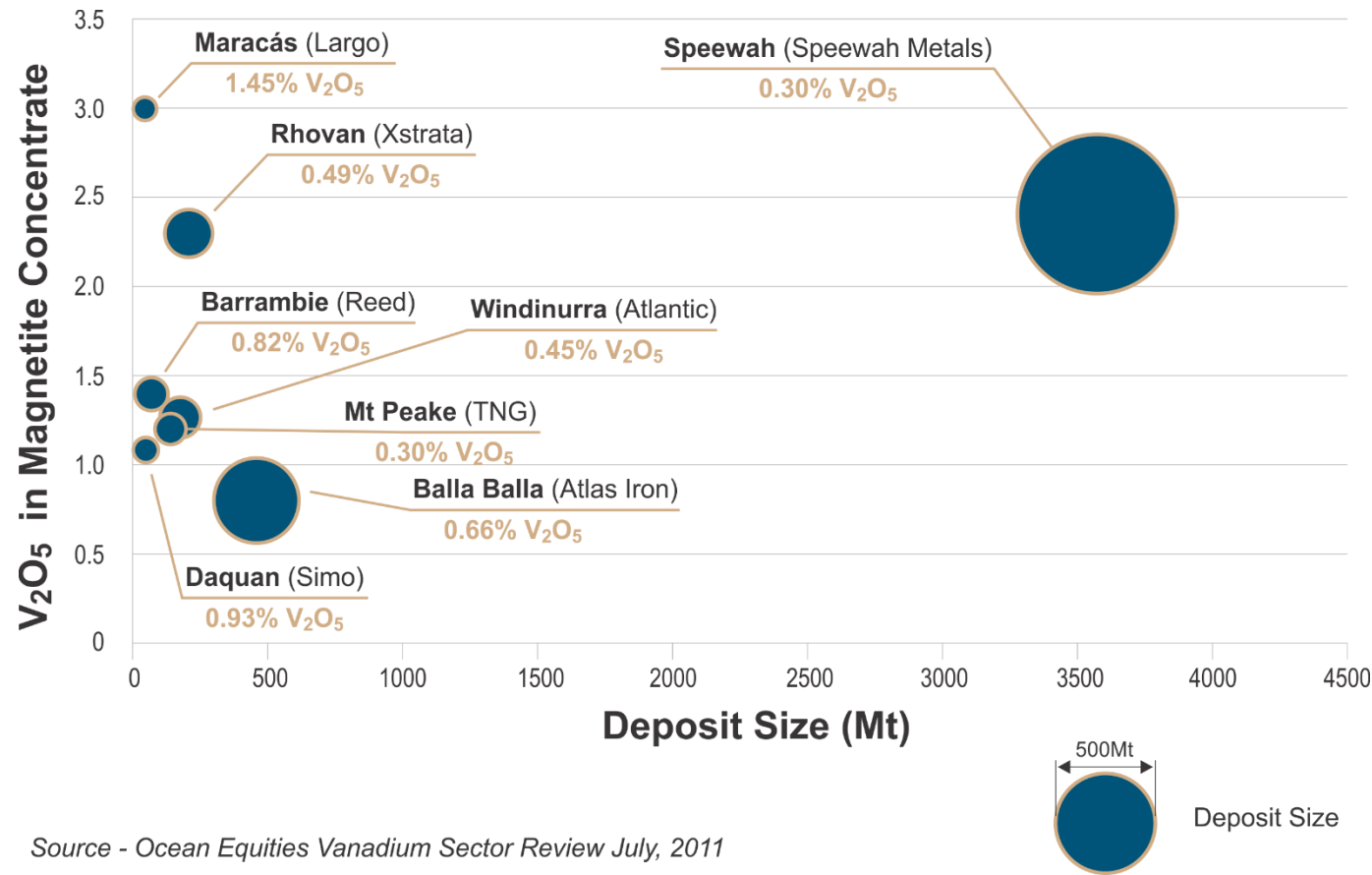


# Characteristics of a Quality Vanadium Project

- Tenor of vanadium in magnetite concentrate
  - Glencores Rhovan Project (South Africa) 2.3%  $V_2O_5$  and Largo Resources Maracas Project (Brazil), 3%  $V_2O_5$  set the benchmark
- Mining costs and processing costs
  - Infrastructure and ease of access to project site
  - Power cost
- Capital intensity
- Deposit characteristics
  - Average grade of South African mines is 0.5%  $V_2O_5$
- Country risk
  - US\$600-700M capital cost for new vanadium processing plant
  - Off-take opportunities to reduce CAPEX



# Koitelainen – High-Grade Vanadium deposit



Koitelainen V Prospect high-grade drill holes produced a magnetite concentrate grading on average 2.3% V<sub>2</sub>O<sub>5</sub>\*

Source - Ocean Equities Vanadium Sector Review July, 2011

\* See Pursuit Minerals ASX Announcement 12 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.

# Vanadium Project Portfolio

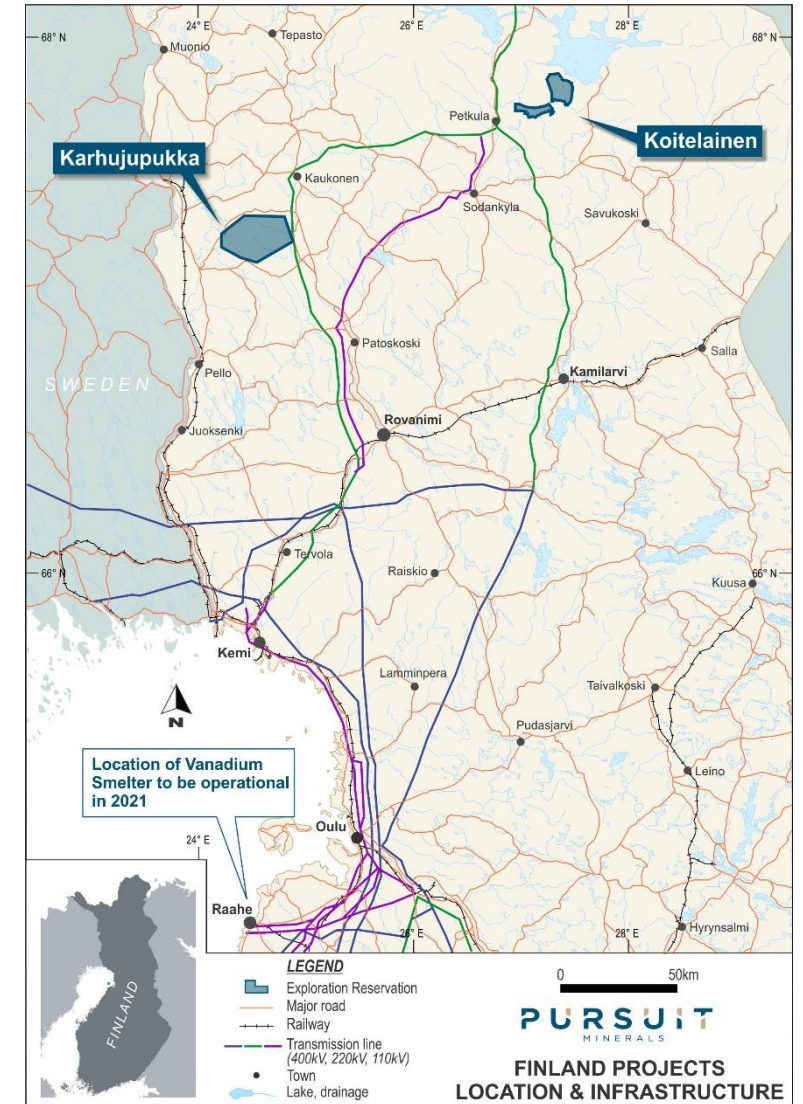
- Projects acquired by pegging open ground
- No underlying vendor deals
- Pursuit has 100% Interest
- Finland is number 1 mining jurisdiction in latest Fraser Institute Survey
- Existing historical mineral deposits
- 2 year Reservations in Finland
- 3 year Exploration Licences in Sweden
- No annual expenditure commitments
- New vanadium smelter planned for Finland
- Finland previously produced 10% of global vanadium supply



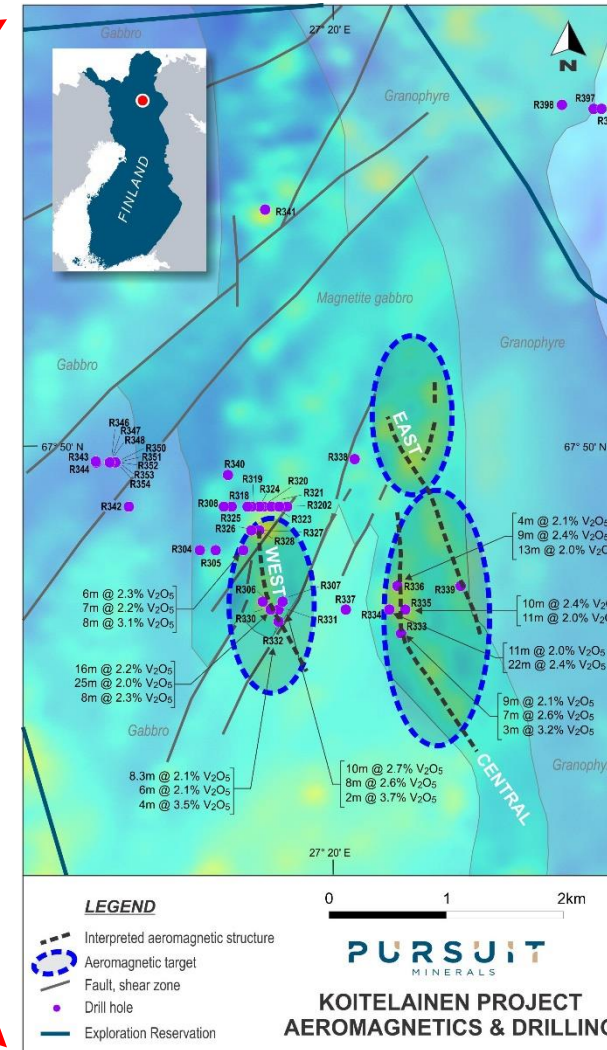
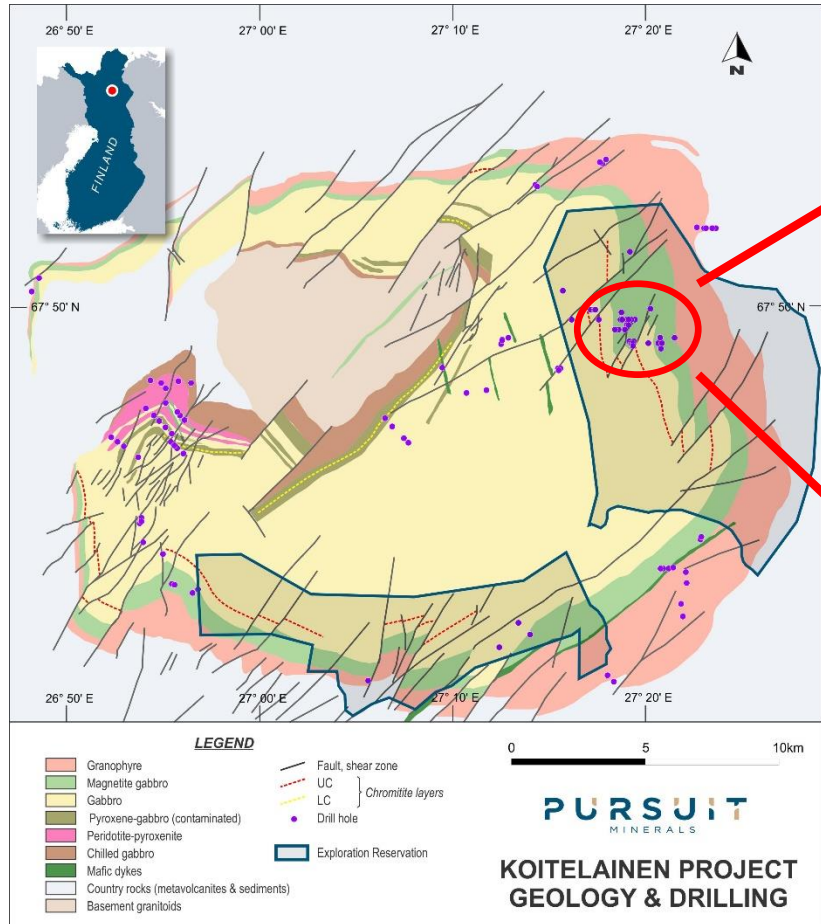
# Finland Vanadium Projects

- Koitelainen
  - 70Mt @ 0.7% V<sub>2</sub>O<sub>5</sub>, 14.4% Cr, 1.1% PGE's (Koitelainen UC)\*
  - 15Mt @ 0.4% V<sub>2</sub>O<sub>5</sub>, (Koitelainen V)\*
- Karhujupukka
  - 5.2Mt @ 0.43% V<sub>2</sub>O<sub>5</sub>, 32% Fe, 6.2% Ti, 0.02% Co\*
- Excellent access to road and power infrastructure
- Power costs 11c/kWh (Aust off-grid diesel is 33c/kWh)
- Vanadium smelter is planned for Raahe

*\*The historical mineral estimates for the Koitelainen and Karhujupukka Projects are historical estimates and are not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimates as Mineral Resources in accordance with the JORC Code. It is uncertain that following evaluation and/or further valuation work that the historical estimates will be able to be reported as Mineral Resources in accordance with the JORC code. See Pursuit Minerals ASX Announcement 12 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.*



# Koitelainen Vanadium Project

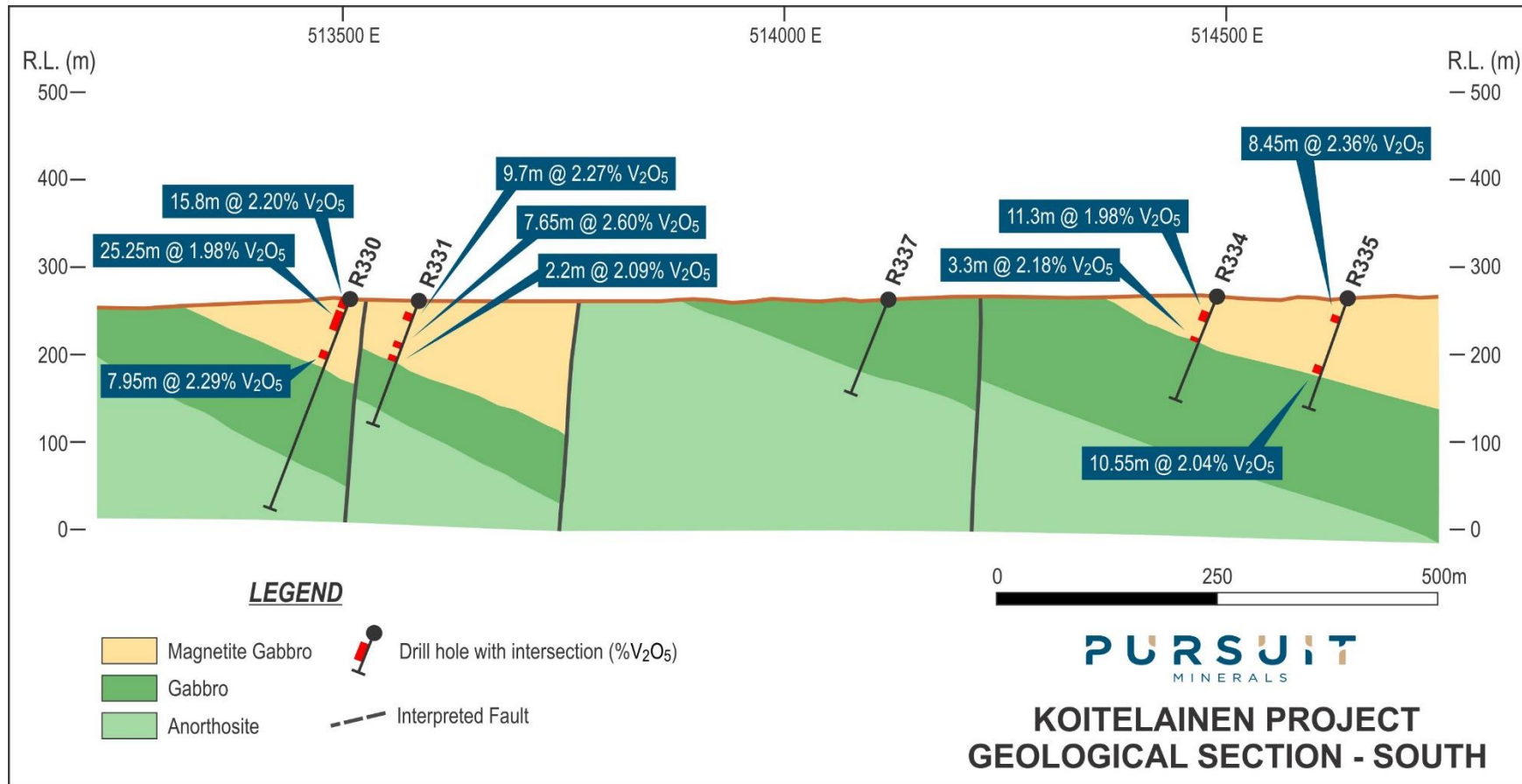


## Koitelainen V Prospect

- 15Mt @ 0.4% V<sub>2</sub>O<sub>5</sub>
- 9 holes with high grade V<sub>2</sub>O<sub>5</sub> associated with magnetic anomalies\*
- Magnetic anomalies extend a further 2-2.5km from known drilling\*

*\* See Pursuit Minerals ASX Announcement 10 May 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.*

# Koitelainen Vanadium Project



## Koitelainen V Prospect

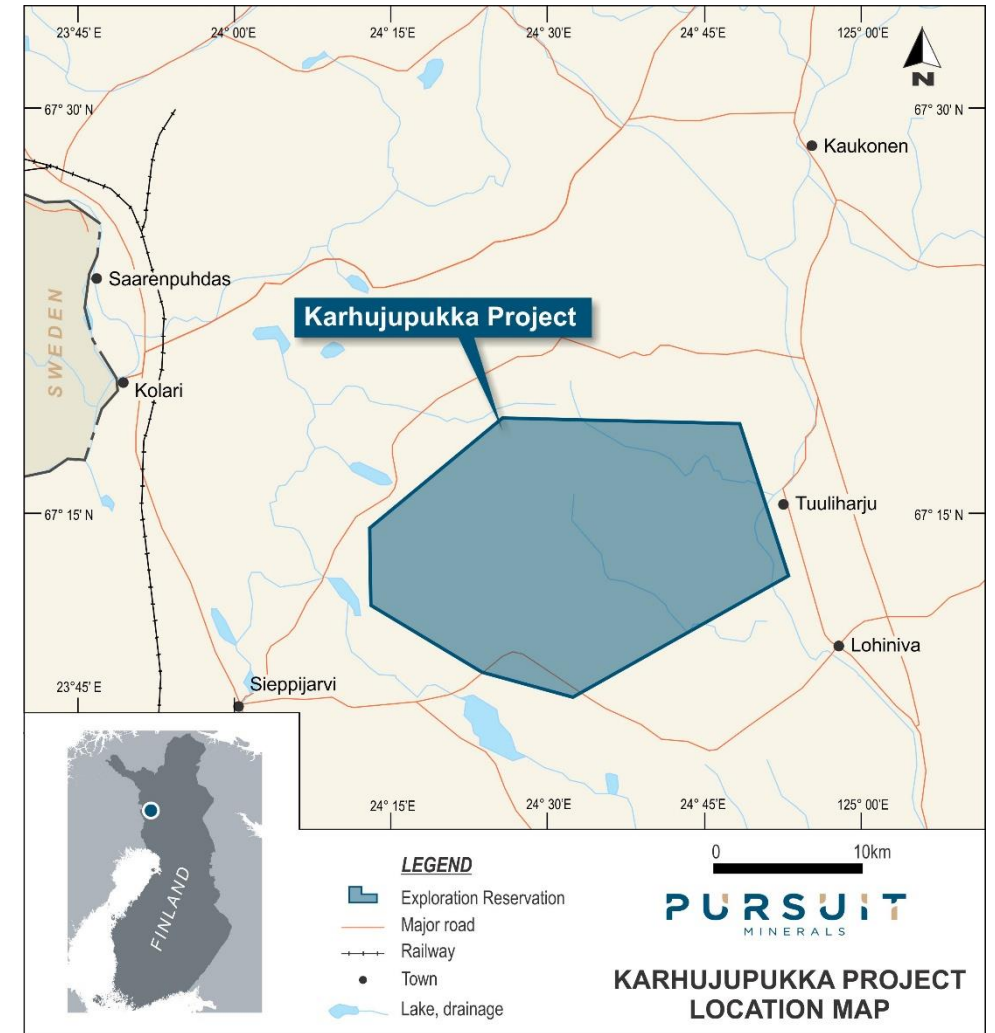
- Southern section of prospect produces extremely high grade V<sub>2</sub>O<sub>5</sub> in magnetite concentrate, in the top echelon globally\*
- Only two mines produce V<sub>2</sub>O<sub>5</sub> in magnetite concentrate above 1.5%\*
- Mineralisation comes to surface and is open, north, south and east\*
- Drilling being planned for northern hemisphere winter

\* See Pursuit Minerals ASX Announcement 10 May 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.

# Karhujupukka Vanadium Project

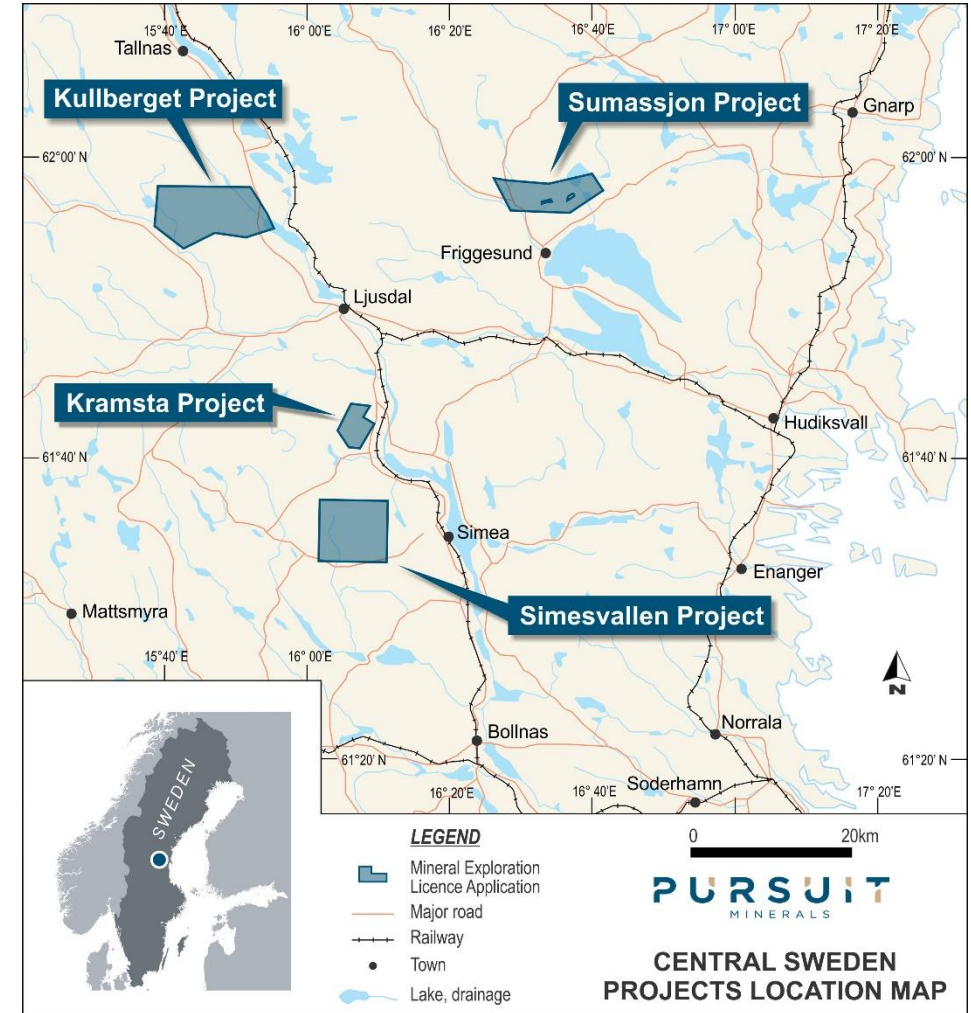
- 5.2Mt @ 0.43% V<sub>2</sub>O<sub>5</sub>, 32% Fe, 6.2% Ti, 0.02% Co\*
- Mineralisation is open east and west
- Excellent access to infrastructure
  - Railway line running south to proposed vanadium smelter at Raahe
  - 220kV powerline at Tuuliharju
- Drilling planned for northern hemisphere winter

*\* The historical mineral estimate for the Karhujupukka Project is an historical estimate and is not reported in accordance with the JORC Code. A Competent Person has not done sufficient work to classify the historical estimates as Mineral Resources in accordance with the JORC Code. It is uncertain that following evaluation and/or further valuation work that the historical estimate will be able to be reported as Mineral Resource in accordance with the JORC code. See Pursuit Minerals ASX Announcement 12 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.*



# Central Sweden Vanadium Projects

- Simesvallen\*
  - 15km strike length magnetic anomaly
  - Historical mining 0.9%  $V_2O_5$
- Kullberget\*
- Summassjon\*
- Kramsta\*
  - Outcropping mineralisation 1%  $V_2O_5$ , 20% Fe
- Summassjon\*
  - 7.5km long magnetic anomaly
  - Seven historical drill holes intersected vanadium mineralisation
- Kramsta\*
  - Exploration Target defined is 10-12Mt @ 0.2-0.5%  $V_2O_5$ , 15-25% Fe, 3-5% Ti\*
- 300km northwest of Stockholm, excellent infrastructure

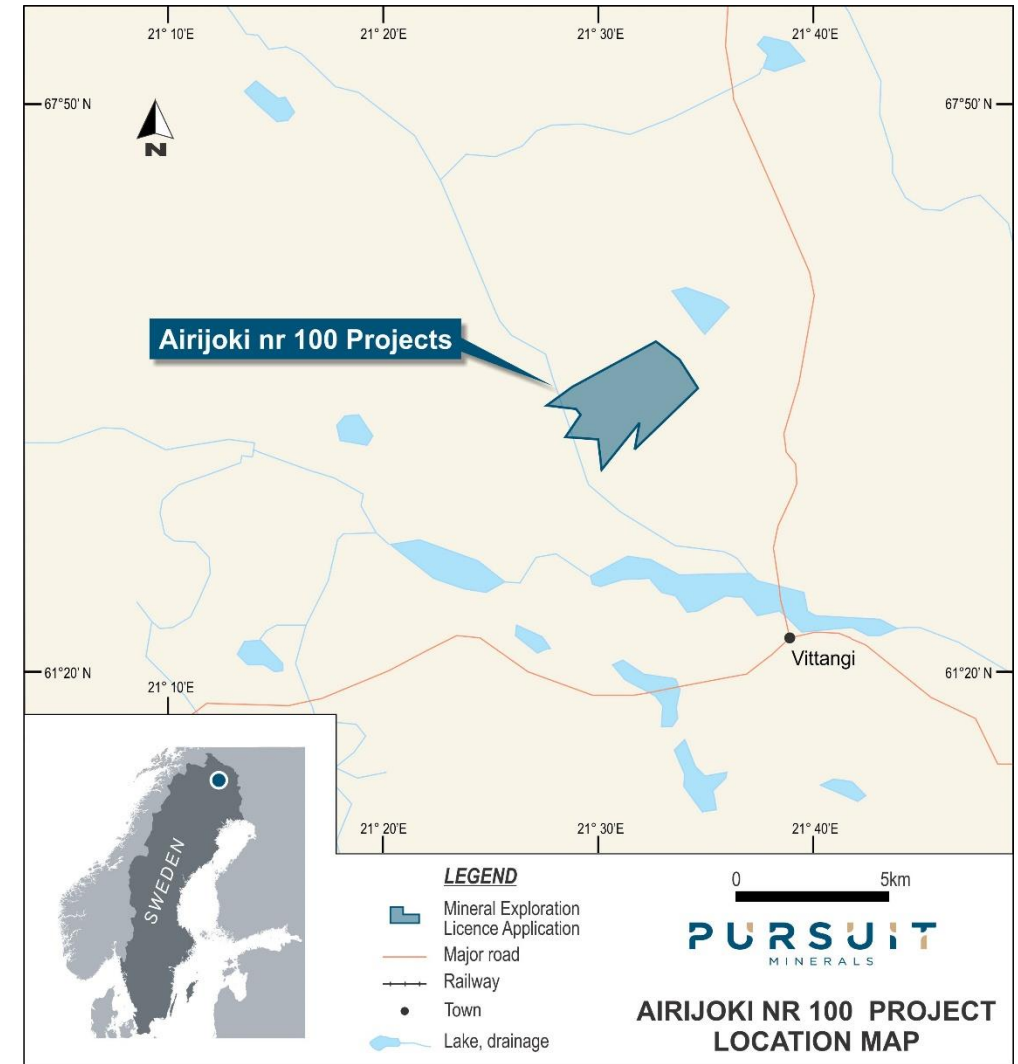


\* See Pursuit Minerals ASX Announcement 12 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement. The historical Exploration Target reported for the Kramsta Project is conceptual in nature and there has been insufficient exploration work completed to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

# Northern Sweden Vanadium Project

- Airjoki\*
  - 800 strike length magnetic anomaly
  - 6m @ 0.65%  $V_2O_5$ , 31% Fe (historical drill hole)
  - 18m @ 0.57%  $V_2O_5$ , 28% Fe (historical drill hole)
  - 7m @ 0.6%  $V_2O_5$  (surface sampling)
- 60km east of the industrial centre of Kiruna (home to Europe's largest underground mine)

*\*See Pursuit Minerals ASX Announcement 12 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.*



# Vanadium Project Summary

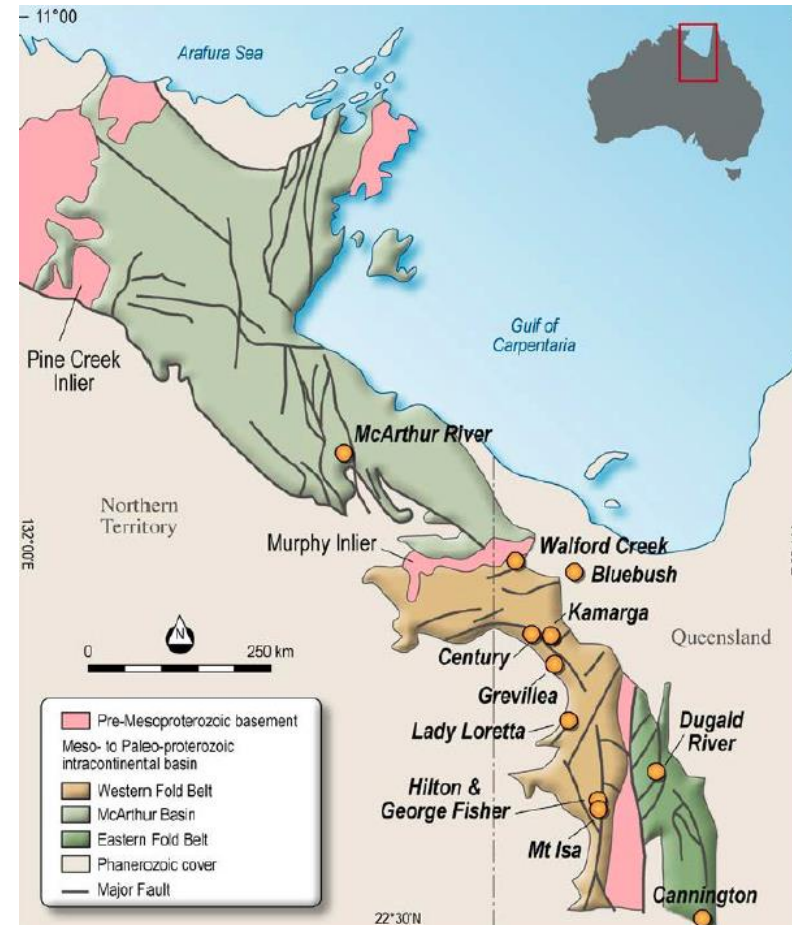
- Historical vanadium deposits
  - 70Mt @ 0.7%  $V_2O_5$ , 14.4% Cr, 1.1% PGE's (Koitelainen UC)\*
  - 15Mt @ 0.4%  $V_2O_5$ , (Koitelainen V)\*
  - 10-12Mt @ 0.2-0.5%  $V_2O_5$ , 15-25% Fe, 3-5% Ti\* (Kramsta Exploration Target)
- Deposits are open, major potential to expand
- Koitelainen V prospect produces extremely high grade  $V_2O_5$  in magnetite concentrate, in the top echelon globally
- Cheap power and excellent access to infrastructure
- Vanadium smelter is being developed at Raahe (Potential reductions for Pursuits Exploration Projects)
- Finland is the world's best mining jurisdiction
- Drill programs being planned
- 100% ownership by Pursuit, no underlying deals



\* See Pursuit Minerals ASX Announcements 12 April 2018 and 10 May 2018 . The Company is not aware of any new information or data that materially affects the information contained in that announcement.

# Mt Isa Super Basin – World's Premier Base Metal Province

- Mt Isa Super Basin is the world's greatest base metal province:
  - Six major zinc-lead SEDEX deposits
  - World class copper deposits
  - World class BHT deposit
- Close proximity to the soon to reopen Century Mine in an area of excellent mining-associated infrastructure
- Best global address for exploring for super-giant zinc deposits



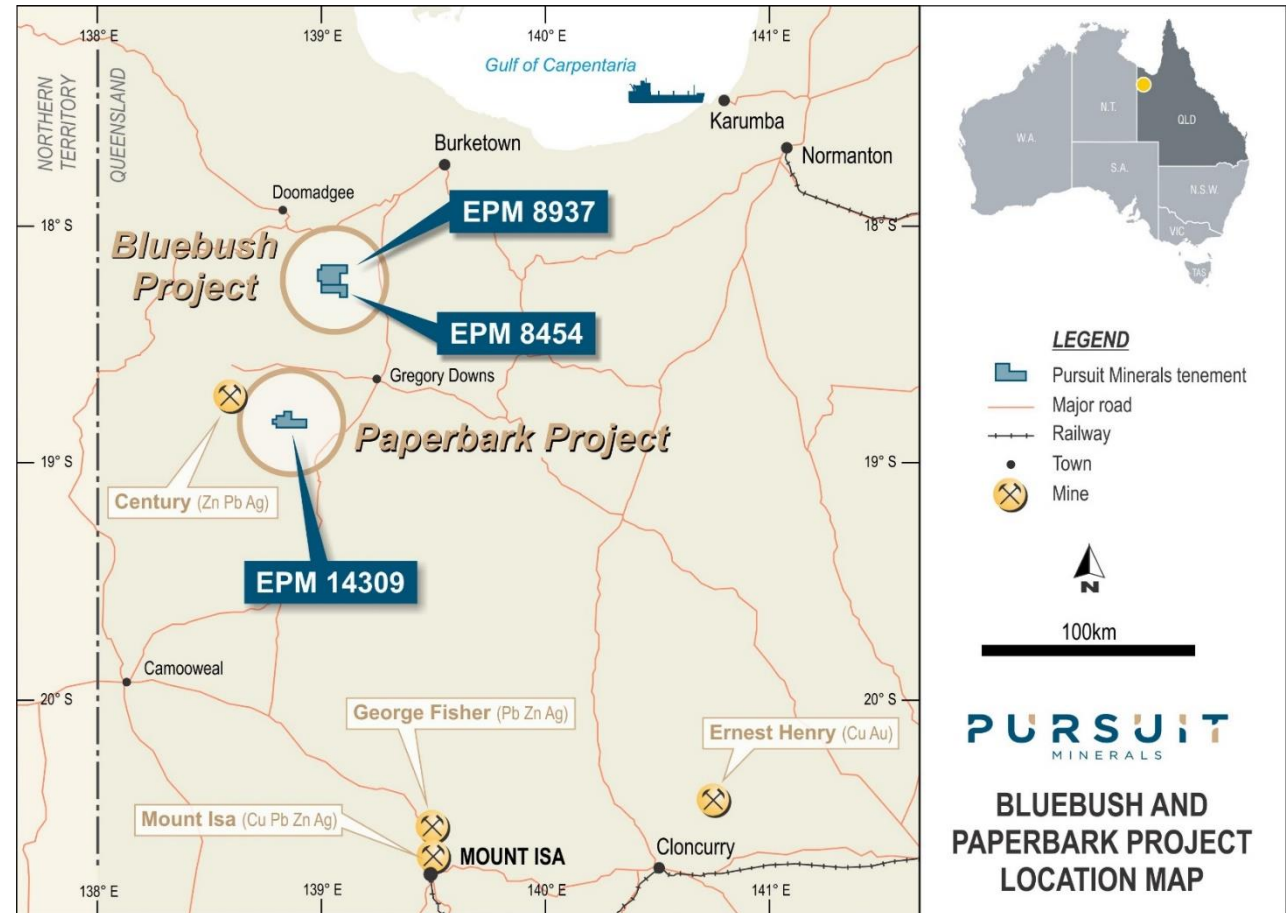
# North QLD Zinc

## Location

- Paperbark — 25km SE of Century Mine
- Bluebush — 72km NE of Century Mine

## Regional Infrastructure

- Road access
- Power line
- Concentrate pipeline to the coast



# North QLD Zinc

## Paperbark Project

- JORC inferred mineral resource of **10.4Mt @ 2.7% Zn, 0.2% Pb, 1g/t Ag at 1.5% Zn cut-off grade** defined at the JB Prospect\*
- Drilling currently in progress
- Follow up drill hole at JE Zone intersected 50m of zinc-lead mineralisation\*\*
- Results in June

## Bluebush Project

- Objective is to define globally significant SEDEX style Zinc deposit within the Bluebush mineralised system (10 x 12km of zinc mineralisation)
- Drilling in 2017 narrowed the area of interest down to 2km x 3km
- Drilling scheduled to commence in June

*\*Refer to ASX Announcement by Pursuit Minerals Limited, 24<sup>th</sup> April 2017. The Company is not aware of any new information or data that materially affects the information contained in that announcement.*

*\*\* See Pursuit Minerals ASX Announcements 17 May 2018 . The Company is not aware of any new information or data that materially affects the information contained in that announcement.*



# Competent Persons Statement

Statements contained in this presentation relating to exploration results, historical exploration results, historical estimates of mineralisation and Exploration targets are based on, and fairly represents, information and supporting documentation prepared by Mr. Jeremy Read, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 224610. The historical mineral estimate for Koitelainen magnetite-ilmenite-vanadium mineralisation, is an historical estimate and is not reported in accordance with the JORC Code. The Competent Person has not done sufficient work to classify the historical estimate as a Mineral Resource in accordance with the JORC Code, due to the unavailability of sufficient data. The historical mineral estimate for the Koitelainen magnetite-ilmenite-vanadium mineralisation have been widely reported in the geological literature and hence are easily accessible by members of the public. However, it is uncertain that following evaluation and/or further valuation work if the historical estimate will be able to be reported as a Mineral Resource in accordance with the JORC code. Mr Read is a full-time employee of the Company and has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the *Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012*. Mr Read consents to the use of this information in this announcement in the form and context in which it appears.

The data in this presentation that relates to the Mineral Resource for the JB Prospect is based on, and fairly represents, information and supporting documentation prepared by Mr Simon Tear, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), Member No 202841 and who has sufficient experience relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Tear is a director of H&S Consultants Pty Ltd and he consents to the inclusion of the estimates of the Mineral Resource for the JB Prospect Resource in this announcement in the form and context in which it appears.

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# ASX: PUR

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