# ASX Announcement 10 February 2023



# REGIONAL TARGETING PROGRAM UNDERWAY AT PALMA PROJECT

## HIGHLIGHTS

- In CY22, Alvo's Phase 1 exploration program successfully confirmed & extended high-grade mineralisation at the C1 and C3 deposits at Palma
- In CY23 Alvo aims to incorporate this new drilling to expand the Palma Project Mineral Resource Estimate ("MRE") of 4.6Mt @ 1.0% Cu, 3.9%, 0.4% Pb & 20g/t Ag and utilise new data to make new discoveries at Palma:
  - Extensional drilling at C1 and C3, testing conductors identified by Down-hole Electromagnetic Surveys (DHEM) that highlight the potential to significantly expand known mineralisation
  - Combination of in-house auger drilling, geophysics and geochemistry to advance greenfield prospects to drill ready status with the aim of making new VMS discoveries
- Exploration to date has been focused on only two of more than 20 late-time conductors identified through the VTEM survey flown in 2008 covering over 60km of prospective strike
- In-house equipment purchases of mechanical auger drill rig, Electromagnetic ("EM") and Induced Polarisation ("IP") allows for flexible, fast and efficient exploration to progress targets:
  - Significantly less expensive than typical contracted exploration as only material expense is labour
- Nickel/Copper/PGE exploration to commence in Q2 CY2023 at Cana Brava for "Julimar Style" deposits
- Ongoing assessment of synergistic opportunities around Palma which could have potential to expand project significantly.

Alvo Minerals Limited (ASX: ALV) ("Alvo" or the "Company") is pleased to provide an update on its regional exploration program underway at the Palma Project ("Palma" or "the project") located in Central Brazil.

Alvo has commenced its first extensive regional exploration program across Palma which covers over 780km<sup>2</sup> of contiguous and highly prospective ground in a known Volcanogenic Massive Sulphides ("VMS") district. The district that is 80% controlled by Alvo has been largely idle for over 30 years since the first discovery in the 1970s and presents an extraordinary opportunity to make new discoveries by applying modern exploration techniques.

Exploration to date has been focused on successfully delivering exceptional results at the Company's existing deposits, being C1 and C3. These two existing deposits are only two of more than 20 late-time conductors identified through the VTEM survey flown in 2008 that covers over 60km of prospective strike.

VMS deposits typically occur in clusters, where multiple deposits are located in similar geological districts. These districts can host tens of VMS deposits that range in size from less than 1Mt to exceeding 100Mt.



REGISTERED ADDRESS Alvo Minerals Limited ACN 637 802 496

Level 4, 100 Albert Road, South Melbourne VIC 3205 Australia www.alvo.com.au **MANAGEMENT TEAM** 

Graeme Slattery – Non-Executive Chairman Rob Smakman – Managing Director Beau Nicholls – Non-Executive Director

E: info@alvo.com.au P: +61 3 9692 7222 PROJECT
Palma Project

Shares on Issue ASX Code 72,830,314 ALV



#### Rob Smakman, Alvo's Managing Director commented on the planned exploration at Palma:

"We took some steps towards exploring the Palma District in CY2022, however we are now accelerating regional exploration in CY2023. Our aim is simple and powerful; to significantly expand the known deposits and make new discoveries.

"We have built an expert in-house team that is enthusiastic and focussed on these goals, we have equipped them with the best exploration tools available and we have enhanced our knowledge of the typical type and style of mineralisation in the district through the study of known deposits. We believe this puts our team in a prime position to utilise modern exploration techniques to advance multiple regional exploration targets to drill-worthy status, with the aim of making new discovery in CY2023.

"We are confident that the Palma project has plenty more than the five mineralised prospects identified to date, and we are excited to unlock the district scale potential of the project."

# **Palma Regional Exploration Strategy**

Since estimating the Maiden Resource Estimate at IPO in 2021 of 4.6Mt @ 1.0% Cu, 3.9%, 0.4% Pb & 20g/t Ag based on historical drill results completed by the CPRM, Alvo has completed 17,356m of diamond drilling and 1,467m of Reverse Circulation ("RC") drilling. In addition, the Company has completed extensive geological logging, multiple geophysical surveys (IP, FLEM and DHEM) and studies of physical properties.

This information gathered has enhanced Alvo's technical team's knowledge and understanding of the Palma VMS district, enabling the team to effectively explore and assess regional target areas across the +780km<sup>2</sup> of contiguous landholding and 60km of prospective strike for similar deposits.

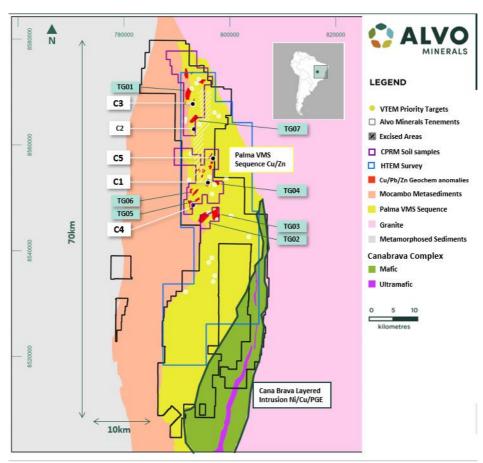
Exploration work is underway across multiple prospects with the aim of advancing prospects to drill-ready targets. Field activities including geological mapping, soil sampling, Auger drilling ("Auger"), Induced Polarisation Surveys ("IP") and Fixed Loop electromagnetic surveys ("FLEM") are being undertaken concurrently on various prospects within the district. Importantly through the Company's key equipment purchases purchase it allows for flexible, fast and efficient exploration and is significantly less expensive than typical contracted exploration as the only material expense is labour.

Exploration is focusing on the three main disciplines, being geology, geochemistry and geophysics. These disciplines generate data and information when combined and result in positive results will advance the prospects to being drill ready. These disciplines are expanded below:

- **Geology Field Mapping at New Prospects:** Mapping is completed as grid lines are opened with particular attention paid to gossanous outcrops (potential weathered VMS) and lateritic cover. All prospects discovered by the CPRM in the 1970s and 1980s were found as gossans.
- Geochemistry Soil sampling and Auger drilling: Alvo's geologists have mapped extensive laterite caps across Palma, which may be obscuring the deposits beneath. Auger drilling allows testing below this cap and will enhance the exploration efforts. Auger drilling will also be used on a regional basis to cover wide areas quickly. Soil sampling was used traditionally across the project and there are over 60km of co-incident Cu/Pb/Zn anomalies within the district being followed up.
  - **Geophysics IP and EM surveys**: IP (Gradient Array) is a fast and efficient method for defining new target areas. Deeper seeing pole-dipole IP is a powerful method for detecting disseminated sulphides. FLEM surveys are the jewel in the crown for targeting VMS prospects. This powerful tool can define conductive zones at depth and given the VMS prospects we have at Palma are conductive, most prospective orebodies will have an electromagnetic conductor associated with mineralisation.







**Figure 1:** Palma Project including known deposits (C3 & C1), advanced mineralised prospects (C4, C5 and C2<sup>1</sup>) and emerging exploration prospects. Outlines of geochemical sampling and VTEM surveys.

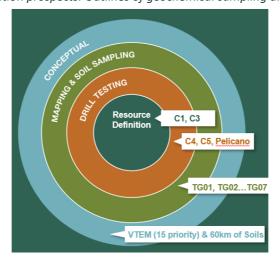


Figure 2: Palma Project Prospects and Targets ranked for level of planned CY23 exploration activity



 $<sup>^{1}</sup>$  C2 is not owned by the company - included as it is a known mineralised prospect within the belt.



## **Next Steps and Upcoming Newsflow**

- Extensional diamond drilling at C3 prospect targeting significant extensions along strike and at depth to high-grade VMS mineralisation – Ongoing
- Diamond drilling at new targets within the C3 cluster, including Ema and Pelicano Ongoing
- Auger Drilling using Alvo's new truck mounted mechanical Auger Underway
- DHEM surveys at C3 and C1, on diamond holes completed during phase 1 and phase 2 drill programs –
   Ongoing
- FLEM surveys on regional targets across Palma, defined by the previously completed VTEM surveys –
   Ongoing
- Geochemical sampling across known exploration prospects Ongoing
- Metallurgical test work at C3 Ongoing
- Metallurgical test work at C1 Proposed to commence in Q1 2023
- Induced Polarisation (IP) surveys at C3, C1 and regional targets Ongoing

This announcement has been approved for release by the Board of Alvo Minerals Limited.

# **ENQUIRIES**

For more information contact:

**Rob Smakman** 

Managing Director

Alvo Mineral Limited

rob@alvo.com.au

+61 402 736 773

Media or broker enquiries:

**Fiona Marshall** 

Senior Communications Advisor White Noise Communications

fiona@whitenoisecomms.com

+61 400 512 109





#### **References to Previous ASX Announcements**

Reference in this report is made to previous announcements including:

As reported in the announcement "ALVO LAUNCHES MAIDEN DRILL PROGRAM AT C3" dated 26 October 2021 issued by Alvo Minerals Limited

As reported in the announcement "ALVO INTERCEPTS BROAD ZONE IN TE FIRST HOLE AT C3" dated 4 November 2021 issued by Alvo Minerals Limited

As reported in the announcement "ALVO TO INITIATE EM SURVEY AND SECURES ADDITIONAL RIG FOR 2022" dated 8 December 2021 issued by Alvo Minerals Limited

As reported in the announcement "C3 DELIVERS EXCEPTIONAL DRILL RESULTS INCLUDING 10.57m @ 6.27% COPPER & 14.76% ZINC" dated 14 February 2022 issued by Alvo Minerals Limited

As reported in the announcement "FURTHER OUTSTANDING DRILL RESULTS INCLUDING 36m @ 1.49% COPPER & 8.58% ZINC" dated 30 March 2022 issued by Alvo Minerals Limited

As reported in the announcement "MULTIPLE DISCOVERY AND EXTENSIONAL TARGETS HIGHLIGHTED BY EM SURVEYS" dated 8 July 2022 issued by Alvo Minerals Limited

As reported in the announcement "FLEM CONDUCTORS & MINERALISED GOSSANS DEFINE HIGH PRIORITY TARGETS, DRILLING UNDERWAY" dated 16 August 2022 issued by Alvo Minerals Limited

As reported in the announcement "ALVO DELIVERS DRILLING INTERCEPTS UP TO 4.3% CU, 17% ZN & 184G/T "AG" dated 30 August 2022 issued by Alvo Minerals Limited

As reported in the announcement "DRILLING AT PALMA EXPANDS POLYMETALLIC POTENTIAL" dated 18 October 2022 issued by Alvo Minerals Limited

As reported in the announcement "PRELIMINARY METALLURGICAL TESTWORK INDICATES EXCELLENT RECOVERIES" dated 9 November 2022 issued by Alvo Minerals Limited

In relation to the MRE and other exploration results or estimates cross-referenced above, these are extracted from the Independent Geologists' Report prepared by Target Latin America and others (the "IGR"), which is included in full in Alvo's prospectus dated 30 July 2021 (the "Prospectus") and which was announced to ASX within the Prospectus on 18 October 2021. Alvo confirms that it is not aware of any new information or data that materially affects the information included in the IGR and that all the material assumptions and technical parameters underpinning the Inferred Mineral Resource Estimate continue to apply and have not materially changed.





#### **Forward Looking Statements**

Statements regarding plans with respect to Alvo's Palma Project and its exploration program are forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside Alvo's control and actual values, results or events may be materially different to those expressed or implied herein. Alvo does not undertake any obligation, except where expressly required to do so by law, to update or revise any information or any forward-looking statement to reflect any changes in events, conditions, or circumstances on which any such forward-looking statement is based.

#### **Competent Person's Statement**

The information contained in this announcement that relates to recent exploration results is based upon information compiled by Mr Rob Smakman of Alvo Minerals Limited, a Competent Person and Fellow of the Australasian Institute of Mining and Metallurgy. Mr Smakman is a full-time employee of Alvo and has sufficient experience relevant to the style of mineralisation and 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 Mineral Resources and Ore Reserves" (or JORC 2012). Mr Smakman consents to the inclusion in this announcement of the matters based upon the information in the form and context in which it appears.

## **ABOUT ALVO**

**Alvo Minerals (ASX: ALV)** is a base and precious metals exploration company, hunting high-grade copper and zinc at its flagship Palma Project, located in Central Brazil. The Palma Project has a JORC 2012 Inferred Mineral Resource Estimate - 4.6Mt @ 1.0% Cu, 3.9% Zn, 0.4% Pb & 20g/t Ag.

Alvo's strategic intent is to aggressively explore and deliver growth through discovery, leveraging managements' extensive track record in Brazil. There are three phases to the exploration strategy – *Discover, Expand and Upgrade*.

Alvo is committed to fostering best in class stakeholder relations and supporting the local communities in which it operates.

