

11 April 2023



Barton & SensOre Form Gawler Craton Gold-Copper Partnership

Binding Agreement Follows 2022 Term Sheet & Phase 1 Analysis

HIGHLIGHTS

- Exclusive R&D partnership developing and trialling Discriminant Predictive Targeting (**DPT**) for gold and copper mineralisation over 60,000km² of the central Gawler Craton
- Phase 1 analysis identified multiple new gold and copper targets on Barton's tenements¹
- Execution of Binding Agreement kicks off Phase 2 development of the DPT module over the central Gawler Craton, and target generation for in-field drill testing and DPT validation

Barton Gold Holdings Limited (ASX: BGD) (Barton or the Company) is pleased to announce that it has signed binding terms with SensOre Ltd (ASX:S3N) (SensOre) for an exclusive R&D investment partnership across the central Gawler Craton in South Australia (R&D Partnership).

Barton and SensOre are collaborating to adapt its Western Australian artificial intelligence (AI) and machine learning (**ML**) DPT targeting engine to South Australia. With the execution of binding terms the team is now commencing Phase 2 development and validation of a South Australian DPT targeting model, focused on gold and copper mineralisation within a ~60,000km² area surrounding Barton's tenements.

A map of the R&D Partnership area, and further details of its terms, are detailed on the following page.

Commenting on the new Partnership, Barton Gold MD Alex Scanlon said:

"We are excited to be taking the next step toward the development and trial application of these technologies in the central Gawler Craton. This is a very richly mineralised domain with relatively low historical exploration.

"SensOre is on the cutting edge of new mineral exploration technologies and is an ideal partner for Barton. Successful development of this technology is expected to accelerate Barton's regional exploration successes, and further strengthen Barton's regional strategic development advantage in the central Gawler Craton."

Commenting on the new Partnership, SensOre CEO Richard Taylor said:

"With Phase 1 analyses indicating a large number of potential gold and copper targets across Barton's tenements and the surrounding central Gawler Craton, we are excited to move to the next stage of this partnership.

"SensOre is an active mining technology group partnering on ground which it has evaluated using its proprietary data and technologies. We are very happy to be working with a development team of Barton's calibre to leverage their significant existing development platform of 1.1Moz Au in a richly mineralised, but underexplored, domain.

"We anticipate that the combination of Barton's existing mineralisation, its ownership of the region's only gold mill, and the upside potential of our machine learning applications will present exciting future opportunities."

¹ Refer to Barton ASX announcement dated 14 June 2022

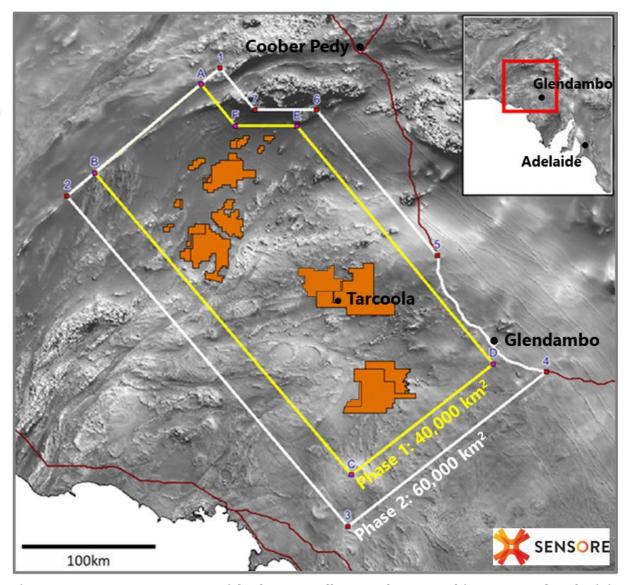


Figure 1 - Barton Tenements with Phase I (Yellow) & Phase II (White) Areas of Exclusivity

Under the R&D Partnership, Barton has already contributed \$45,000 to the development of Phase 1 regional prospectivity mapping, which has identified multiple prospective new gold and copper targets on Barton's tenements, and across the surrounding 60,000km² central Gawler Craton.²

With the commencement of Phase 2 works, Barton will contribute up to a further \$350,000 to development of DPT in the central Gawler Craton. Barton will also provide its extensive private data sets for integration into a South Australian 'data cube' to refine, and then drill validate, the DPT targeting model.

Further to the terms of agreement:

- Barton will be entitled to 10 years' exclusive use of the South Australian DPT module for gold and copper within an initial ~60,000km² area indicated by the white polygon in Figure 1, during which time SensOre will also not compete with Barton to acquire gold or copper targets therein; and
- Subject to the successful production of gold and/or copper mineralisation at new targets predicted by the South Australian DPT module, SensOre will become entitled to additional benefits in the form of royalties linked to the quantum of gold and copper produced.

Barton will provide further updates as Phase 2 development and trialling progresses.

² Refer to Barton ASX announcement dated 14 June 2022

Authorised by the Board of Directors of Barton Gold Holdings Limited.

For further information, please contact:

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About Barton Gold

Barton Gold is an ASX listed Australian gold exploration company with **a total attributable ~1.1Moz Au JORC (2012) Mineral Resources endowment** (28.68Mt @ 1.2 g/t Au), a pipeline of advanced exploration projects and brownfield mines, and **100% ownership of the only regional gold mill** in the central Gawler Craton of South Australia.*

Tarcoola Gold Project

- Existing brownfield open pit mine within trucking distance of Barton's processing plant
- Significant mineral extensions
- Under-explored asset with untapped scale potential

Tunkillia Gold Project

- 965koz Au Mineral Resources (26.1Mt @ 1.15 g/t Au)*
- Host structure extends 7km north and 7km south
- District-scale structures with advanced satellite targets

<u>Infrastructure</u>

- 650ktpa CIP process plant, mine village, workshop, labs and airstrip
- Tarcoola ~40 person lodging to support mine operations
- Tunkillia camp to support dedicated project team



Competent Persons Statement & Previously Reported Information

The information in this announcement that relates to the historic Exploration Results and Mineral Resources as listed in the table below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears in the same row, who is an employee of or independent consultant to the Company and is a Member or Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), Australian Institute of Geoscientists (AIG) or a Recognised Professional Organisation (RPO). Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to quality as a Competent Person as defined in the JORC Code 2012.

4	Activity	Competent Person	Membership	Status
-	Tarcoola Mineral Resource	Dr Andrew Fowler (Consultant)	AusIMM	Member
-	Tarcoola Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
	Tarcoola Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
3	Tunkillia Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
	Tunkillia Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
/ []	Tunkillia Mineral Resource	Dr Andrew Fowler (Consultant)	AusIMM	Member
4	Challenger Mineral Resource	Mr Dale Sims (Consultant)	AusIMM / AIG	Fellow / Member
-	Western Gawler Craton JV Mineral Resource	Mr Richard Maddocks (Consultant)	AusIMM	Fellow

The information relating to historic Exploration Results and Mineral Resources in this announcement is extracted from the Company's Prospectus dated 14 May 2021 or as otherwise noted in this announcement, available from the Company's website at www.bartongold.com.au or on the ASX website www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results and Mineral Resource information included in previous announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus continue to apply and have not materially changed. The Company confirms that the form and context in which the applicable Competent Persons' findings are presented have not been materially modified from the previous announcements.

Cautionary Statement Regarding Forward-Looking Information

This document may contain forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "expect", "target" and "intend" and statements than an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions. Forward-looking information is subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Such factors include, among other things, risks relating to property interests, the global economic climate, commodity prices, sovereign and legal risks, and environmental risks. Forward-looking statements are based upon estimates and opinions at the date the statements are made. Barton undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such dates or to update or keep current any of the information contained herein. Any estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are based upon the best judgment of Barton from information available as of the date of this document. There is no guarantee that any of these estimates or projections will be achieved. Actual results will vary from the projections and such variations may be material. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future. Any reliance placed by the reader on this document, or on any forward-looking statement contained in or referred to in this document will be solely at the readers own risk, and readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof.

^{*} Refer to Barton Prospectus dated 14 May 2021 and ASX announcement 14 October 2021.