

Barton and SensOre Ltd Form Strategic Gawler R&D Partnership

HIGHLIGHTS

- Strategic R&D Partnership to adapt and refine SensOre’s AI and machine learning technologies for application to an area surrounding Barton Gold’s operations.
- Exclusive partnership trialling Discriminant Predictive Targeting (DPT) for gold and copper mineralisation over 60,000km² of the central Gawler Craton

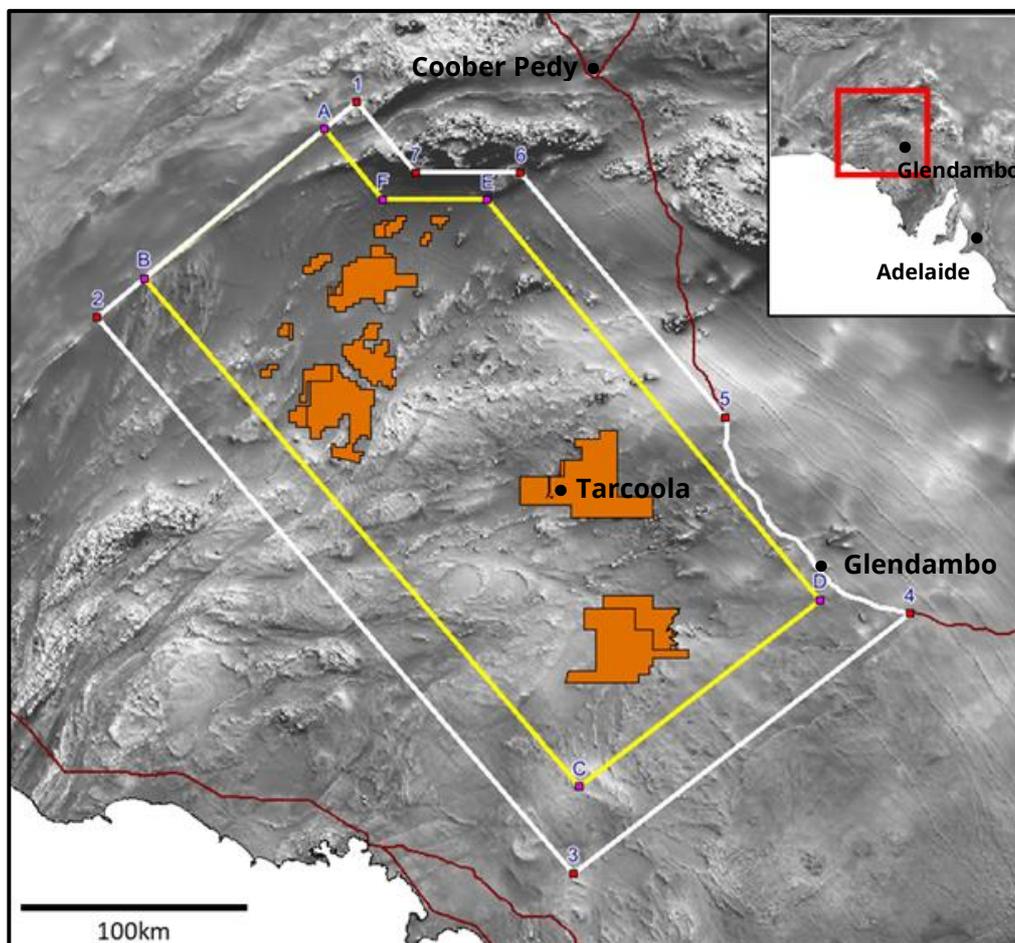


Figure 1 – Barton Tenements with Phase I (Yellow) & Phase II (White) Areas of Exclusivity

Barton Gold Holdings Limited (ASX: **BGD**) (**Barton** or the **Company**) is pleased to announce that it has signed terms with SensOre Ltd (ASX:S3N) (**SensOre**) for an exclusive R&D investment partnership surrounding its projects (**R&D Partnership**). Barton and SensOre will collaborate to adapt its artificial intelligence (AI) and machine learning (ML) DPT targeting engine to the central Gawler Craton in South Australia. Barton will then test and validate targets predicted by the South Australian DPT module, with a focus on gold and copper mineralisation with in a ~60,000km² area surrounding its tenements.

Barton Gold Holdings Limited
ACN: 633 442 618
ASX: **BGD**

Registered Office
Suite 5
62 Ord Street
West Perth, WA, 6005 Australia

T +61 8 9322 1587
E contact@bartongold.com.au

Company Directors

Mark Connelly	Non Executive Chairman
Alexander Scanlon	Managing Director & CEO
Richard Crookes	Non Executive Director
Christian Paech	Non Executive Director
Neil Rose	Non Executive Director
Graham Arvidson	Non Executive Director

Background & Key Objectives

The R&D Partnership is focused on accelerating development of AI and ML technologies trained on and adapted to the target area, with a specific focus on the traditional challenge of exploration under cover.

SensOre has developed a novel AI and ML-driven Discriminant Predictive Targeting (DPT) system to analyse thousands of layers and billions of points of geological data, and predict target patterns within this data, essentially seeking to identify the 'fingerprint' of mineral deposits utilising big data.

The DPT system was originally developed in the context of Western Australia. In its support of ML in exploration, Barton proposes to collaborate with SensOre to adapt DPT to the central Gawler Craton of South Australia, where the successful utilisation of AI and ML to 'see between' data layers and 'defeat' the traditional challenge of surface cover would be exceptionally impactful to regional mineral development.

Key Terms

Under the R&D Partnership:

- Barton will contribute \$45,000 to the development of Phase I regional prospectivity mapping, and up to a further \$350,000 to Phase II development of DPT applied to the target area;
- During Phase II, Barton will work with SensOre to integrate Barton's extensive data sets into SensOre's South Australian 'data cube' to refine and further train the DPT targeting engine in the target area; and
- Barton will trial the South Australian DPT module and drill test / validate DPT predicted targets.

Further to the terms of agreement:

- Barton will be entitled to 10 year's 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.

Next Steps

Barton and SensOre will now prepare a detailed binding agreement incorporating the terms of the Terms Sheet along with other standard terms for an agreement of this nature. In the interim Barton will complete its Phase 1 Contribution and work with SensOre to prepare for Phase II DPT® development and trialling.

Commenting on the new Partnership, Barton Gold Managing Director Alexander Scanlon said:

"SensOre is on the cutting edge of new mineral exploration technologies and is a standout leader in its field. With strong foundations in practical applications, they are an ideal partner for Barton. Successful trials will further strengthen Barton's regional strategic advantage with exclusive rights to the DPT technology for gold and copper over ~15% of the Gawler Craton, as we accelerate and consolidate a major new gold district."

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

"We are excited to join with a leading South Australian innovation-driven gold explorer to demonstrate the tremendous upside potential that machine learning can bring to exploration. Barton's existing platform of 1.1Moz Au in a richly mineralised domain and ownership of the region's only gold mill provides an excellent platform for a large-scale discovery and a proof of concept for our DPT engine and its commercial benefits."



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

For further information, please contact:

Alexander Scanlon
Managing Director
a.scanlon@bartongold.com.au
+61 425 226 649

Shannon Coates
Company Secretary
cosec@bartongold.com.au
+61 8 9322 1587

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

Infrastructure

- 650ktpa CIP process plant, 240 person 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 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 qualify as a Competent Person as defined in the JORC Code 2012.

Activity	Competent Person	Membership	Status
Tarcoola Mineral Resource	Dr Andrew Fowler	AusIMM	Member
Tarcoola Exploration Results (until Nov 2021)	Mr Colin Skidmore	AIG	Member
Tarcoola Exploration Results (after Nov 2021)	Mr Marc Twining	AusIMM	Member
Tunkillia Exploration Results	Mr Colin Skidmore	AIG	Member
Tunkillia Mineral Resource	Dr Andrew Fowler	AusIMM	Member
Challenger Mineral Resource	Mr Dale Sims	AusIMM / AIG	Fellow / Member
Western Gawler Craton JV Mineral Resource	Mr Richard Maddocks	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 that an event or result "may", "will", "should", "would", "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.