

# Think & Act Differently

## Benefits of Collaboration to Advance ISR Technologies at the Kapunda Copper Project

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## **Pillars of ISR**



#### Technical

- Hydrogeological
- Groundwater Modelling
- Fate Transport Modelling
- Fracture/Flow Modelling
- Benign Lixiviant



#### Location

- The Kapunda project sits 90 km North of Adelaide with an inferred ISR-amenable copper resource of 119,000 tonnes
- Historic mine site from 1840s, currently used primarily as a tourist site managed by local council
- Potentially one of the first non-uranium ISR projects in Australia, being developed in a fractured rock environment

#### Challenges

- Hydrogeological properties
- Managing ground water environmental risks
- Community acceptance being so close to town



EnviroCopper is leading the way in developing minimally invasive, low footprint exploration and mining techniques



## **Benefits of Working Together**

- 1. Access to people and skills you don't currently have in house
- 2. Potentially access additional funding for your project/technology

Since 2017 EnviroCopper have collaborated with;

- ✓ Cth and State Govt research grant \$3M, inc. Cooperative Centre Research Project (CRC-P)
- ✓ CSIRO Inground Vesi™ Sensors for commercialisation of continuous, automated environmental monitoring for Copper ISR operations
- ✓ 3 x MRIWA research programs benign lixiviant system design, fate transport modelling, and fluid/rock/lixiviant interactions
- ✓ MinExCRC Coiled Tube directional drilling
- $\checkmark\,$  In 2022 partnered with Think & Act Differently powered by BHP team with \$2.5M
- ✓ And this year research partner with Ekion Pty Ltd in developing EK for ISR hard rock potential



Cooperative Research Centres Program











**EXION** 

## **Benefits of Working Together**

Not just technical benefits.....

EnviroCopper have identified 900 deposits just in SA that could be ISR amenable for Gold and Copper but,

#### We can't do it all ourselves.

Many companies are in this space, some Tier 1s hold their cards close to their chest...... Developing Smarter Mines means employing Smarter Business Strategies Collaborating gives you industry credibility, providing for evidence-based decision making and comfort with investors and regulators.





# Think & Act Differently



**Anya Hart** Field Trials & Stakeholder Co-Design Lead Think & Act Differently

#### Looking at new ways to extract metals

#### Think & Act Differently

Partnership with EnviroCopper to investigate advances in In-Situ Recovery

Understand the economic extraction of copper from deposits that cannot be mined conventionally.

Develop a copper ISR demonstration site at Kapunda to enable both companies to employ similar approaches to explore undervalued orebodies



• A Modern Approach to Technology & Resource Development





