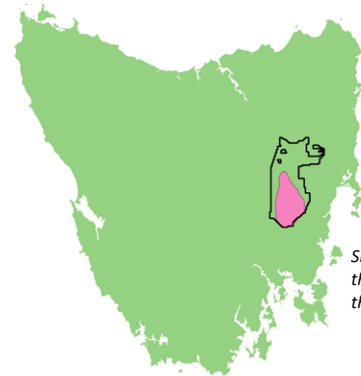


## RESOURCES

**Project title:** Lemont GeoLithium  
**Location:** Eastern Tasmania, Australia  
**Tenement ref no.:** SELA 21/2022  
**Project proponent:** Direct Lithium Pty Ltd  
**Current status:** Inferred Geothermal Resource  
**Operating structure:** Australian registered private company  
**Current valuation:** A\$8 million  
**Supporting documents:** Corporate presentation, June, 2023  
**Website:** <http://directlithium.com.au/>



SELA 21/2022 enclosing the Lemont inferred geothermal resource (pink)

### PROJECT DESCRIPTION

The Company is developing a Direct Lithium Extraction (DLE) operation from geothermal brine in permeable fractures within lithium-bearing, heat-producing granites in eastern Tasmania. The Lemont GeoLithium Project will be powered by its own geothermal electricity with excess power sold to the National Electricity Market (NEM).

Lemont is expected to meet the three requirements for a successful geothermal DLE operation: 1) **high temperatures**, 2) **high lithium** content, and 3) **high flow rates**. The project has the potential to be a Tier-I lithium resource.

Some of Australia's highest temperature gradients (up to 50°C/km) and highest heat flows (up to 118mW/m<sup>2</sup>) have been recorded at Lemont. High lithium values, 10-100 x global background in outcropping granites in the NE corner of the licence suggest that Lemont brines will be comparable to similar projects in the UK and the Upper Rhine Graben in Europe, with values of around 200mg Li per litre.

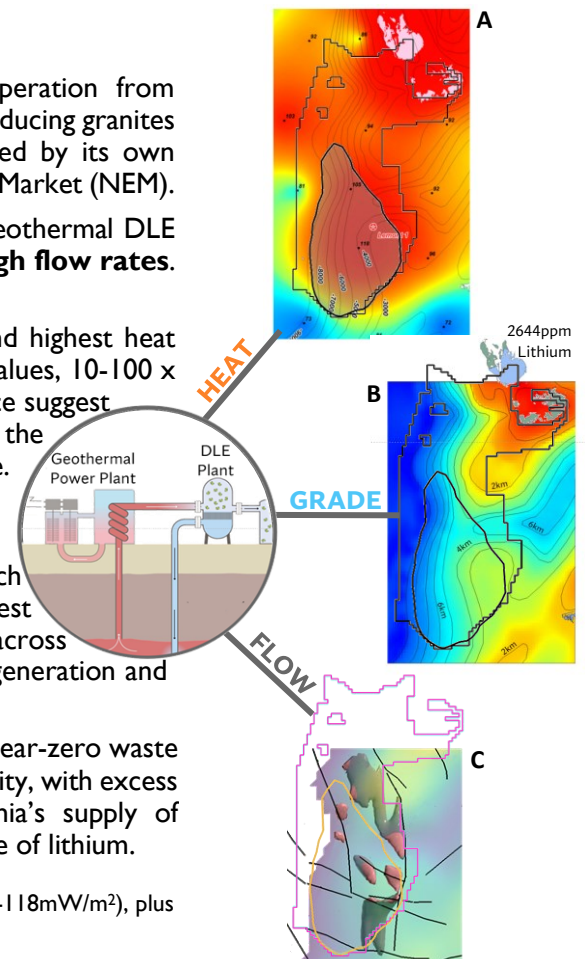
Electrical resistivity should be a good proxy for permeability at Lemont: the higher the permeability, the lower the resistivity. Extensive zones of low resistivity, <<1.0ohm.m, associated with a series of major faults which extend deep into the granitic basement, have been defined. These suggest that numerous couplets of production and reinjection wells distributed across the 2,179 sq km licence, will sustain a high flow of brine for electricity generation and lithium production.

The DLE process will produce high purity lithium with high recoveries, near-zero waste from a small footprint. Using its own emission-free baseload 24/7 electricity, with excess power exported to the NEM, Direct Lithium will enhance Tasmania's supply of renewable energy while producing a potentially globally significant source of lithium.

A. Footprint of the Lemont inferred geothermal resource on heat flow image (range 50-118mW/m<sup>2</sup>), plus contours of depth (in metres) to granite surface.

B. Granites, similar to the hot lithium-enriched plutons in the NE corner, are interpreted to form the basement across most of the licence. Image of granite topography from outcrop to 9km below surface.

C. 1.0ohm.m iso-surfaces and major faults superimposed on granite topography. The iso-surfaces (grey within granite; pink above) total ~1000km<sup>3</sup>, implying a very large volume of fractured reservoir rocks.



# TASMANIAN INVESTMENT OPPORTUNITY



The next steps include a ~3km slimline confirmatory hole starting late 2023 following grant of title and funding. The hole will confirm the geological interpretation, quantify the level of lithium in the brine and provide an estimate of flow rate. Results and further analysis will provide the input data for a scoping study.

## COMPANY PROFILE

Direct Lithium Pty Ltd was registered in Tasmania to provide a corporate vehicle for the Lemont GeoLithium project. The company's executive chairman, Dr John Bishop is a geophysicist who has founded and co-founded several resource and energy development companies, both public and private. He has been based in Tasmania since 1980 and has consulted widely via his geophysical consultancy (Mitre Geophysics). His interest in geothermal energy began in 2007 when he co-founded KUTH Energy (ASX: KEN) which defined several inferred geothermal resources, including Lemont.

## TASMANIA PROFILE

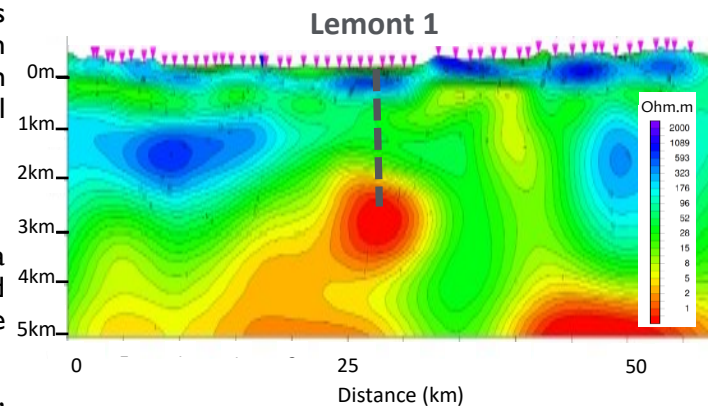
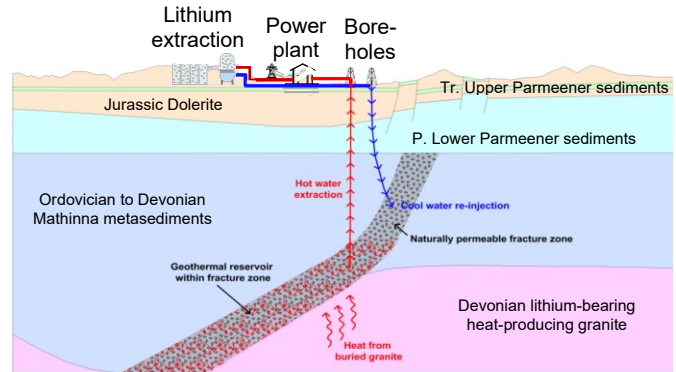
As one of the most mineralised places on the planet, Tasmania has a remarkable geological diversity and abundance of rich and high-grade mineral deposits that are easily accessible, and close to transport and infrastructure.

With supportive legislation for exploration and development, Tasmania presents many untapped opportunities for exploration, extraction and downstream processing of mineral resources.

Through its mining regulation and exploration division, Mineral Resources Tasmania, the Tasmanian Government is proactively encouraging investment from companies which recognise the importance of sustainable, wealth generating opportunities in mining and mineral processing.

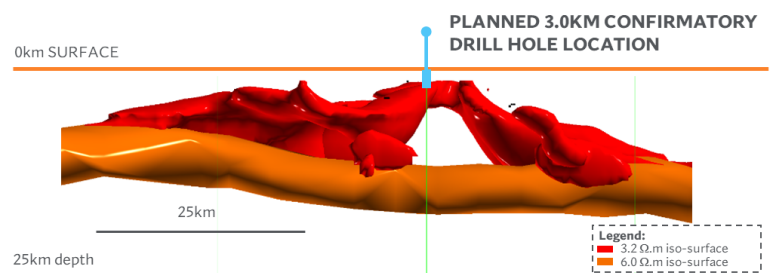
## CONTACT:

Dr John Bishop  
 Executive Chairman  
 Direct Lithium Pty Ltd  
 2/186 Warwick St, West Hobart, Tas, 7000  
 Phone: +61 418 373 429  
 Email: john.bishop@directlithium.com.au



Upper. Schematic geology: hot, lithium-rich brine is extracted from a wide, permeable fracture. Electricity is generated via a standard off-the-shelf turbine and lithium is extracted via a DLE plant before the brine is reinjected back into the ground.

Lower. A resistivity cross-section, produced by 3D combined inverse-modelling of magnetotelluric data sets, is in good agreement with the schematic geology.



Long-section of resistivity iso-surfaces indicates the potential scale of the project, V:H = 1:1

For general information on Tasmanian mining and mineral processing investment opportunities visit [www.cg.tas.gov.au](http://www.cg.tas.gov.au) or contact the Office of the Coordinator-General on +61 3 6777 2786 or email: [cg@cg.tas.gov.au](mailto:cg@cg.tas.gov.au)

For technical information visit Mineral Resources Tasmania at [www.mrt.tas.gov.au](http://www.mrt.tas.gov.au)

Disclaimer: The information in this paper has been prepared with care, but no warranty is given as to the information's correctness, completeness, currency or suitability for any purpose. No liability is accepted for any advice given, omissions or however else arising, including but not limited to negligence for any loss resulting from the use or reliance on any information. Readers should seek their own independent legal and financial advice.