

# Quarterly Report 30 June 2023

Cradle Resources Limited (**Cradle** or the **Company**) provides an update on its activities for the quarter ended 30 June 2023.

Subsequent to the end of the quarter, the Company announced it had entered into a binding agreement to acquire Volt Geothermal Pty Ltd ("Volt") and Within Energy Pty Ltd ("Within"), with geothermal assets in Queensland and South Australia (the Projects).

Geothermal energy is widely used throughout the world and is one of the only renewable energy solution capable of operating continuously irrespective of the weather conditions. The proposed Managing Director of the Company will be Matt Kay, an equity holder in both Volt and Within and the former Managing Director of ASX 200 company Beach Energy Limited (ASX:BPT).

## **Highlights**

- Cradle has completed a placement of \$850,000 at \$0.02 per share. These funds will be used to complete the transaction and for working capital purposes
- The Company is transitioning into the renewable energy sectors, by signing a binding agreement to acquire 84% of all the issued shares in Volt Geothermal Pty Ltd ("Volt") and Within Energy Pty Ltd ("Within")
  - o Consideration for the acquisition is 220,360,329 Cradle shares
- Geothermal energy is a renewable energy solution that creates energy from heat sourced from within the earth. Unlike other renewable energy sources, geothermal energy is available 24 hours per day
- The Australian Government has set a renewable energy target of 82% by 2030. Renewable energy accounted for 35.9% of country's total electricity generation in 2022
- The Projects comprise of prospective geothermal exploration licences in South Australia and Queensland. These areas are surrounded by key existing infrastructure for electricity generation, including powerlines and sub power stations
- Cradle plans to undertake a capital raise of \$6 million to fund the Projects work programme and for working capital purposes, subject to shareholder approval for the transaction
- As part of the transition into the energy sector, the Company will appoint Mr Matt Kay as Managing Director and Dr Trey Meckel as Head of Subsurface
  - Mr Kay is a seasoned energy industry executive with more than 30 years of experience, most recently as Managing Director of Beach Energy, an ASX 200 company
  - Dr Meckel is a senior geologist with more than 30 years of experience in the global energy sector. He is Secretary of the Australian Geothermal Association and a Global Ambassador for the Geothermal Energy Advancement Association
- The Company's securities will remain suspended until after shareholder approval has been obtained and the Company re-complies with Chapters 1 and 2 of the ASX Listing Rules as an energy company



#### **Overview**

Following disposal of its main undertaking (the interest in PHT) in the September 2021 quarter, the Company was advised by ASX that, in their opinion, the Company's current operations were not sufficient to warrant the continued quotation of its securities. Trading in the Company's securities was suspended on 13 January 2022.

On 7 July 2023, Cradle announced it had entered into a binding agreement to acquire Volt Geothermal Pty Ltd ("Volt") and Within Energy Pty Ltd ("Within"), with geothermal assets in Queensland and South Australia (the Projects).

Cradle plans to focus on systematically exploring early-stage geothermal targets and developing geothermal resources. This will involve a fit-for-purpose exploration programme analysing subsurface geology to identify thermal resource potential at different well depths, undertaking preliminary survey and resource assessments based on offset well data, exploration location definition and exploration drilling. This will determine priority targets for exploration drilling for geothermal resources.

The Company's strategy is to follow a typical path for the maturation of an exploration play through the following stages:

- 1. Exploration and appraisal activities to confirm existence of the resource and demonstrate the commercial viability;
- 2. Study work such as pre-feasibility and definitive feasibility as part of the commercialisation of the resource; and
- 3. Project development which involves drilling of production wells and installation of surface facilities for delivery of energy to market.

Success with the strategy outlined above will determine future exploration and funding programmes to advance the projects being acquired.

The proposed acquisition will be the platform on which the Company grows its resource base, with the strategy to participate in the significant growth opportunities in the renewable energy industry via a focus on geothermal opportunities, given its unique ability to provide a base-load alternative that produces energy 24/7. Geothermal energy therefore plays an important role in the future energy transition towards zero carbon emissions given its ability to provide system's security and reliability.

Cradle intends to explore and exploit geothermal energy for the purpose of generating renewable energy to be connected to regional electricity grids or supporting standalone developments.

The Projects comprise highly prospective geothermal exploration licences with significant discovered resources in South Australia at G1 + G2 (P50) of 5.2PJth and potential future developments in the discovered area of G1 + G2 of 842 PJth. Prospective Resources in exploration areas U50 (G4.1 + G4.2) is estimated at 235,102 PJth classified in accordance with UNFC Geothermal Specifications<sup>1</sup>. For reference, a 10MW plant would require approximately 1.5 PJth of geothermal resource per annum.

Geothermal energy is a carbon neutral renewable energy from the natural source of heat contained within the earth. It can be extracted for uses including heating, drying and electrical generation. Unlike other renewable energy sources, geothermal energy is available 24 hours per day. The geothermal energy industry has a more than 100-year history and is used for electricity generation across 30 countries.

<sup>&</sup>lt;sup>1</sup> Independent geothermal assessment by THREE60 Energy in January 2022 classified according to the UNFC (United Nations Framework Classification) scheme.



#### **About Geothermal Energy**

The geothermal energy industry has been active globally for over 100 years and geothermal power plants have been installed in 30 countries<sup>2</sup>. While well developed in other countries, the Australian geothermal industry is in infancy, given Australia's historic abundance and acceptance of fossil fuels.

Geothermal energy has seen a strong increase in demand over the past decade as the world moves towards zero carbon emission targets. Compared to other renewable energy solutions, geothermal energy is unique given it provides a base-load alternative that produces energy 24/7, which is the major challenge for alternative renewable energy solutions, such as solar and wind. Geothermal energy therefore plays an important role in the future energy transition towards zero carbon emissions given its ability to provide network security and reliability.

Geothermal energy is estimated to contribute more than 8% of the world's electricity generation capacity. As of January 2023, global geothermal power generation capacity stood at 16,127 MWe with 154 MWe capacity installed during 2022.

#### **Project overview**

Cradle is proposing to acquire geothermal projects in South Australia and Queensland, led and supported by proven leaders in the resources and energy industries. The strategy is supportive of Federal and State government policies to reach Australia's climate targets and reduce the East Coast energy challenges.

Initial work will focus on preliminary survey and resource assessments based on offset well data, exploration location definition and exploration drilling. Subject to exploration success, the focus will shift to resource estimates, field development and production drilling.

It is expected that the future development plans will focus on multiple 10 MWh facilities with scalability and regional diversification to manage risks. The "cookie cutter" approach to these projects will manage financing risks by staggering capital requirements. For reference, a 10 MWh development can power approximately 7,000 homes.

The Company will release further details on the Projects and work programmes in the notice of meeting and prospectus to be sent to all Shareholders - refer to the indicative timetable on page 5.

#### **Commercialisation pathway**

#### Advantages of geothermal energy in Australia

As Australia transitions to a Net Zero economy and reduces its reliance on fossil fuels, there are significant advantages from the use of geothermal energy, including:

- Reliable and dispatchable source of energy available 24 hours per day
- Clean energy with low environmental impact
- Small acreage area required for geothermal plant and facilities
- No storage or transportation requirements
- Energy extraction without the use of fossil fuels
- Broad public support in countries in which it operates
- The highest renewable energy capacity and generation of all renewable energies

<sup>&</sup>lt;sup>2</sup> https://www.thinkgeoenergy.com/geothermal/geothermal-energy-production-utilisation/



The pathway for the maturation and potential commercialisation of geothermal assets are not dissimilar to an onshore oil and gas project, with total project risks diminishing through each phase:

- 1. Preliminary survey and inferred resource assessments based on offset well data;
- 2. Exploration location definition and basic design;
- 3. Verification drilling to feed into detailed design;
- 4. Project review and planning;
- 5. Field development and production drilling;
- 6. Construction; and
- 7. Start-up and commissioning.

As an example, in a 10 Mwh development scenario with a circa A\$50 million total spend, only approximately 15% of that spend is prior to Final Investment Decision and development/construction, i.e. during the highest risk phase.

#### **Acquisition structure**

The Company is seeking to acquire 84% of all the issued shares in the target companies with the consideration to be paid being 220,360,329 Cradle shares.

Cradle will also have the right to acquire, and require each Seller to sell, their respective proportions of shares retained by them ("**Retained Shares**") at any time from the third anniversary of Completion.

The Shareholders Agreement will contain a 'drag-along' mechanism whereby if a Seller or Sellers holding more than 50% of the Retained Shares wish to exercise this option, the holders of the other Retained Shares will be required to sell to the Buyer on the same terms. Any exercise of this option must be in respect of all of the Retained Shares.

The Shareholders Agreement to be entered into to reflect these matters will also provide a mechanism for cash-calls to the Sellers to fund the work programme on the basis that:

- 1. Cradle will contribute the first \$15,000,000 towards the work programmes following Completion before cash calls are made in respect of the Retained Shares (such that the Retained Shares will be free carried during this period); and
- 2. from the time Cradle has contributed the amount of \$15,000,000, the cost of the work programmes and all other activities shall be borne by the Sellers on a proportionate basis.



#### Indicative timetable

An indicative timetable to complete the acquisition is set out below.

Event	Indicative Date
Dispatch Notice of Meeting to shareholders	September 2023
Lodge Prospectus with ASIC and ASX	September 2023
Public Offer opens	October 2023
General Meeting	October 2023
Public Offer closes	November 2023
Completion of the Acquisition	November 2023
Satisfaction of Chapters 1 and 2 of the Listing Rules	November 2023
Recommence trading on the ASX	November 2023

The dates in this timetable are indicative only and subject to change.

For further information please refer to the Company's announcement dated 7 July 2023.

### **Funding**

The Company's cash balance at 30 June 2023 was \$4,877. On 7 July 2023 Cradle completed a placement to raise \$850,000 to fund the costs associated with the re-compliance process and working capital purposes, by way of the issue of 42,500,000 new shares at \$0.02 plus a free attaching option with an exercise price of \$0.05 and expiry of three years from date of issue. The issue of these options is subject to shareholder approval.

The Company will seek shareholder approval for the acquisition of the Projects and a capital raise of \$6 million to fund the work programme for the Projects and for working capital purposes. The Company does not expect that the Public Offer will be underwritten.

Matador Capital Pty Ltd ("Matador Capital"), a related entity of Mr Grant Davey, provides office space, general office services, bookkeeping and accounting services and IT hardware & infrastructure pursuant to the Cost Sharing Agreement and the Office Use Agreement. Matador Capital has agreed not to charge these costs to Cradle while Cradle does not have the financial resources to pay these costs.

The Company has a loan facility with Matador Capital of \$500,000 which remains undrawn. Refer to Appendix 5B section 7.6 for further details.

#### Payments to related parties of the entity and their associates

There were no payments to related parties and their associates during the quarter.



#### **Competent Persons Statement**

The information in this release that relates to resource estimates through the mapping of prospective areas and gross rock volumes, review of reservoir temperature and properties of rock formations, pore fluids and fracture systems within the metasediments and basement rocks of WITHIN Energy's South Australian assets is based on analysis of data provided by WITHIN and sourced from open-domain databases. These analyses have been performed by Dr. Arnout JW Everts who holds a PhD in Geology from VU University Amsterdam and has 32 years of industry experience and a proven track record of technical leadership, project management, and technical task and project delivery. His areas of expertise include techno-commercial project due-diligence, field (re)development, oil & gas reserve and resource assessments and geothermal resources and exploitation viability.

Through his career, Dr Everts has participated in and/or led over 100 energy projects spanning the entire project lifecycle, from frontier exploration to late field-life including unconventionals. In recent years his focus has shifted to renewables, mostly geothermal. Dr Everts is an Active Member of AAPG (American Association of Petroleum Geologists), EAGE (European Association of Geoscientists and Engineers) and GSM (Geological Society of Malaysia), a Professional Member of AGA (Australian Geothermal Association) and he has contributed as lead author or coauthor to around 30 research papers and extended abstracts in international scientific journals. As EuroGeologist title holder (registration no 1435) Dr Everts is entitled to sign off on Company Reserves and Resources reports submitted to regulatory bodies.

Dr. Everts has consented in writing to the inclusion in this release to the matters based on his information in the form and context in which it appears. Dr. Everts is engaged by WITHIN as an independent consultant and is not employed by the Company.

Authorised for release by the Board of Directors.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

# Name of entity

Cradle Resources Limited  ABN Quarter ended ("current quarter")  60 149 637 016 30 June 2023	rtaine or onary		
	Cradle Resources Limited		
60 149 637 016 30 June 2023	ABN	Quarter ended ("current quarter")	
	60 149 637 016	30 June 2023	

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	(60)
	(e) administration and corporate costs	(1)	(157)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	12
1.9	Net cash from / (used in) operating activities	(1)	(205)

)	Ca	sh flows from investing activities	
2.1	Pay	yments to acquire or for:	
	(a)	entities	-
	(b)	tenements	-
	(c)	property, plant and equipment	-
	(d)	exploration & evaluation	-
	(e)	investments	-
	(f)	other non-current assets	-

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other – refund of bank guarantee	-	62
2.6	Net cash from / (used in) investing activities	-	62

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(2)	(2)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(2)	(2)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	8	150
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1)	(205)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	62
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(2)	(2)

ASX Listing Rules Appendix 5B (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms.

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	5	5

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances <sup>1</sup>	5	8
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5	8

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	-
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.	

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	500	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	500	-
7.5	Unused financing facilities available at quarter end		500

- 7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.
  - Facility Limit of \$500,000
  - · Lender: Davey Management (Aus) Pty Ltd
  - Interest rate of 8%
  - Limited recourse The recourse of the Lender against the Borrower is limited to the assets of the Borrower after payment of all unsubordinated creditors
  - Subordination the repayment of the total outstanding amount shall be subordinated and postponed and made subject to all debts, claims, demands, rights and causes of action of all unsubordinated creditors
  - Repayment date is 31 July 2024.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1)
8.4	Cash and cash equivalents at quarter end (item 4.6)	5
8.5	Unused finance facilities available at quarter end (item 7.5)	500
8.6	Total available funding (item 8.4 + item 8.5)	505
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	505
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3	

Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:			

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

#### Answer:

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

#### Answer:

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

## **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 27 July 2023

Authorised by: Board of Cradle Resources Limited

(Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.