# Mid-West Geothermal Power Project Inferred Resource Statement

- The Mid-West Geothermal Power Project's Inferred Resource has been independently assessed by Monteverde Energy Consultants and endorsed by EarthConnect Consultants.
- Mid case estimate of 203 PJe of net electrical energy, equivalent to 226 MWe of power generation for 30 years, is assessed to be present in Strike's acreage that has been submitted under its right for permit conversion.

Strike Energy Limited (Strike - ASX: STX) provides an update on its 100% owned proposed zero carbon Mid-West Geothermal Power Project in WA's Perth Basin.

Strike and its consultants have completed the incorporation of its Perth Basin database into its Mid-West geothermal energy model, which has been independently analysed and interpreted by Monteverde Energy Consultants and endorsed by EarthConnect Consultants.

Strike has used this Geothermal Inferred Resource mapping to inform the areas of the best hot sedimentary aquifer geothermal resource potential, where gas is not present (and brines are), and the surface areas which have the highest likelihood of supporting a future commercial development. This analysis has formed the basis of Strike's application to the regulator for the conversion of its Geothermal Special Prospecting Authority (GSPA) area (3,513km²) to a Geothermal Exploration Permit (GEP) of 1,826km<sup>2</sup> as outlined in the map below. The GEP issuance as per its right under the GSPA remains pending at the date of this release.

#### Inferred Resource

Kingia Sandstones (30-year model)		P90 (low)	P50 (mid)	P10 (high)
Original GSPA Area	Mapped Area (km²)	3,513		
	Net Energy Resource (PJe)	76	244	517
	Equivalent Power Resource (MWe)	85	271	575
GEP Application Area	Mapped Area (km²)	1,826		
	Net Energy Resource (PJe)	69	203	422
	Equivalent Power Resource (MWe)	77	226	470

## Inferred Resource Estimate Cautionary Statement:

Refer to the end of this release for the key assumptions on which the above estimates are based. The figures above represent the probabilistic estimate of the amount of net electrical power that could potentially be generated over an assumed 30-year project life from heat energy that can be recovered from the Kingia Sandstone by the application of future appraisal and development project(s); the resources are currently untested and undrilled.



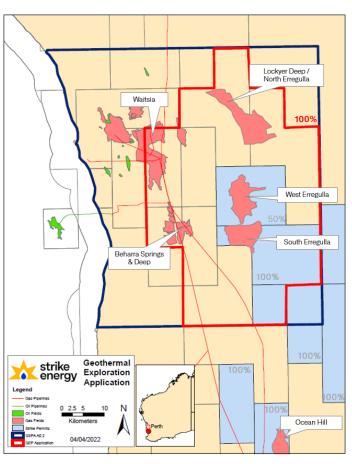
These estimates are reported in accordance with the last version of the Australian Geothermal Code and are un-risked, incorporate a standard Organic Rankine Cycle binary power plant energy conversion factor (13-15%) to estimate the conversion from thermal energy to electricity and have both an associated risk of appraisal and a risk of development. Further drilling, appraisal and evaluation is required following grant of the GEP to determine the existence of a significant quantity of commercially recoverable energy. Stated values are Strike's estimated 100% equity share of recoverable energy. The above stated values are calculated by reference to the total area of the GEP applied for by Strike (minus rock volumes for known gas accumulations) and may be subject to change dependent upon the GEP area granted by the WA regulator. The values reported for the original GSPA area have not been reduced to account for the known gas accumulations and are reported solely for the purpose of demonstrating Strike's application for a GEP is over those areas within the original GSPA where Strike has assessed there to be the most prospective geothermal resource potential.

Dr. Trey Meckel from Monteverde Energy Consultants will be presenting on the work he has completed at the upcoming APPEA conference in Brisbane in May. The presentation is entitled: 'Conceptual Model of the Lower Permian Kingia Sandstone as a Geothermal Resource' and will include his findings from Strike's Mid-West Geothermal Power Project.

# Strike's Managing Director & Chief Executive Officer, Stuart Nicholls said:

"The booking of this independently certified inferred resource for our proposed zero carbon Mid-West Geothermal Power Project is the first of a series of exciting milestones to come in proving a commercial development at this unique and highly complementary renewable asset.

"This resource booking will facilitate Strike planning the drilling of the proposed Future State-1 which will be the first physical test of the region's Geothermal potential and was recently awarded a Clean Energy Future Fund grant. Success at this project could provide Strike with 226 MWe of base load, 24/7, dispatchable zero carbon electricity to integrate into its planned and growing power consumption across its domestic gas and downstream fertiliser and ammonia facilities. This integration will support Strike's Net Zero 2030 target and drive down associated carbon of its products thereby increasing their global competitiveness."



Upon grant of the GEP on conditions acceptable to Strike, Strike will be in a position to schedule the testing program, where the drilling of the proposed Future State-1 well (which was recently the subject of a successful grant award by the Clean Energy Future Fund¹) would be used to confirm, amongst other things, the unsupported and artificially supported brine flow rates, resultant surface temperatures of the brine (and inversely temperature loss in the well bore), final brine chemistry and injectivity rates of returning of the brine to the reservoir. At the

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement dated 8th April 2022 titled "Strike awarded clean energy future fund grant".



conclusion and on success of this testing, Strike will possess the required information to pursue the first stage of commercialisation via a pilot development.

Strike is currently working with the WA regulator on the process of managing overlying rights/ tenements for different energy products that come from similar geological horizons but different geographical areas. Testing interaction and pressure dynamics of the Kingia Sandstones will be a major objective of the proposed Future State-1 well. Strike notes several other international jurisdictions have successfully navigated these dynamics already and both energy sources can co-exist which can allow for the full strategic benefits of both the gas and this zero-carbon baseload geothermal energy to support the States decarbonisation targets.

Once the timing for the testing program is planned, Strike will begin to assess future business development opportunities for partners to participate in this potential geothermal energy resource. In the interim Strike is initiating well design optimisation, surface technology assessments and artificial lift studies, in order to progress the inferred resource to an indicated/measured resource once testing is complete and (subject to those results) propose a scalable pilot development.

## **Key Assumptions for Inferred Resource Calculations**

	low	mid	high	
Area (km²)	274	626	980	
Thickness (m)	59	67	74	
Reservoir volume (km³)	16	42	72	
Temperature (°C)	163	172	181	
Specific heat (J/kg*°C)	1,273	1,285	1,297	
Bulk density (kg/m <sup>3</sup> )	2,499	2,506	2,513	
Cut Off Temperature (°C)	150	138	125	
Thermal Energy in Place (PJ-th)	4,856	13,592	25,763	
Heat recovery factor (%)	13%	18%	22%	
Recoverable Thermal Energy (PJ-th)	836	2,348	4,551	
Electricity Conversion Efficiency (gross %)	13%	14%	15%	
Net After Parasitic Losses (%)	57%	62%	68%	
Project Life (years)	30			
Temperature Cut-off (°C)	70			
Plant Capacity Factor (%)	95			



# **Company Contact**

**Georgina Fraser**Investor Relations
georgina.fraser@strikeenergy.com.au

### **Media Contacts**

Paul Ryan (Citadel-MAGNUS) Phone: 0409 296 511 pryan@citadelmagnus.com

This announcement is authorised for release by the Managing Director and Chief Executive Officer in accordance with the Company's Continuous Disclosure Policy.

## **Competent Person's Statements**

About Monteverde Energy Consultants:

The information in this release that relates to resource estimates through the mapping of gross rock volumes, heat maps and total brine contents of the Kingia Sandstones within the North Perth Basin using Strike Energy Limited's Perth Basin dataset is based on information compiled by Dr. Trey Meckel. Dr. Meckel holds a PhD in Earth Sciences from the Swiss Federal Institute of Technology (ETH-Zürich) and an MA from the University of Texas at Austin (USA). Dr. Meckel has 30 years of experience in the energy industry, including large IOCs, private Operators, and start-up energy businesses, where he has held senior and executive leadership positions since 2008. He is a member of the Australian Geothermal Association, the International Geothermal Association, and the American Association of Petroleum Geologists, Dr. Meckel 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. Meckel is engaged by Strike as an independent consultant and is not employed by the Company.

### About EarthConnect Consultants:

The interpreted data provided by Strike and methodology used in calculating the inferred geothermal resource estimates in this release have been reviewed and verified as reasonable by EarthConnect director Mark Ballesteros. EarthConnect has not reviewed the seismic data or associated interpretation and mapping used for the calculations. Mr. Ballesteros has an MSc degree in Geology from the University of Tulsa (USA) and 40 years of experience in the resource industry, including over 10 years of experience in the geothermal sector focusing on Hot Sedimentary Aquifer resources. Previous roles include Exploration Manager and Business Manager, Mid-West Project at Green Rock Energy Ltd and he was a director of Mid-West Geothermal Power Pty Ltd. He is a member of the Board of Directors of the Australian Geothermal Association and is a member of the International Geothermal Association, American Institute of Petroleum Geologists, and a Fellow of the Australian Institute of Energy. Mr. Ballesteros has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he is undertaking to qualify as a Competent Person. Mr. Ballesteros has consented in writing to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr. Ballesteros is engaged by Strike as an independent consultant and is not employed by the Company. Mr. Ballesteros owns shares in Strike Energy.

## **Future Statements**

Statements contained in this release are or may be forward looking statements. Such statements relate to future events and expectations and as such involve known and unknown risks and significant uncertainties, many of which are outside the control of Strike. Actual results, performance, actions and developments of Strike Energy may differ materially from those expressed or implied by the forward-looking statements in this release. Such forward-looking statements speak only as of the date of this release. Refer to the 'Summary of Key



Risks' section of the release titled "Equity Raising and Corporate Update April 2021" released to ASX on 15 April 2021 for a summary of certain general, Strike specific and acquisition specific risk factors that may affect Strike. There can be no assurance that actual outcomes will not differ materially from these statements. A number of important factors could cause actual results or performance to differ materially from the forward-looking statements, including the risk factors set out in the aforementioned ASX release. Investors should consider the forward-looking statements contained in this release in light of those disclosures. To the maximum extent permitted by law (including the ASX Listing Rules), Strike and any of its affiliates and their directors, officers, employees, agents, associates and advisers disclaim any obligations or undertaking to release any updates or revisions to the information in this release to reflect any change in expectations or assumptions; do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence). Nothing in this document will under any circumstances create an implication that there has been no change in the affairs of Strike since the date of this release.