Kalahari GeoEnergy Ltd

("**Kalahari**", "**KGE**" or the "**Company**")

Kalahari GeoEnergy Ltd announces the granting of a Reconnaissance Licence for the Chiweta Geothermal area in northern Malawi

Kalahari GeoEnergy Ltd, the Zambian geothermal exploration and energy development company whose objective is to be a regional producer of sustainable baseload power, is pleased to announce that the Malawi Ministry of Natural Resources, Energy and Mining has granted the Company's Malawi registered subsidiary a Reconnaissance Licence for the Chiweta Geothermal target in the northern region of Malawi.

The Chiweta target is 370 Km north of Lilongwe in Rumphi District, proximate to the western shoreline of Lake Malawi. It is within the northern portion of the Malawi Rift, a branch of the East African Rift System, which is widely considered to be very prospective for geothermal.

A prefeasibility study conducted by ELC-Electroconsult of Italy in 2017 under a credit from the International Development Association of the World Bank to support the implementation of the Malawi Energy Sector Support Project established that the granitic Basement Complex is overlain by Karoo (Permian) era sediments and a thin level of Quaternary deposits, which would create the conditions for a caprock for a geothermal system. The geoscientific investigations conducted during the study included geological, geochemical, gravimetric and geoelectrical surveys, the data from which were used to create a conceptual model of the field. A volumetric estimate of the electric potential of the Chiweta system indicates a likely value of 13.5 MW electrical and a highly probable value of 10.5 MW electrical. No drilling was undertaken.

The Company will now verify earlier exploration results and reassess the model, which is likely to define targets for an exploratory drilling programme, aimed at proving the existence of a geothermal system and defining its thermodynamic, hydraulic, and chemical features. Concurrently, the Company will also sample for gases and instigate feasibility studies in selected direct applications. The initial objective is to assess the viability of commercial power generation with an associated hub for direct applications and if viable undertake development and commercial operation.

Kalahari Director, Dr Moses Banda, who has led the negotiations with the Malawi Authorities commented: *We thank the Malawi Ministry of Mining for the opportunity to assess the Chiweta geothermal target. We believe our experience with our Bweengwa River target, which is in a similar geologic setting, and our experience of operating in the region gives us the ability to conduct and effectively manage the exploration work required to be able to develop Chiweta.*
Even at a modest scale, sustainable baseload power generation, would have an impact on power availably and reliability in the Northern Region, which largely relies on hydro power from the Shire

River in Southern Region and diesel generation. This is particularly pertinent given increased uranium exploration and mining around Livingstonia, some 12 km to northwest of Chiweta.
Direct applications of thermal energy are likely to lead to greater food security, social uplift, and climate adaption

The inclusion of Chiweta is a further step in the Company's objective of being a regional energy producer.

Geothermal Energy
Geothermal energy is the heat produced by sub-surface materials of the earth. It is contained in the rocks and fluids beneath the earth's surface, heated by hot molten rock, magma, deeper in the earth's crust and mantle. To produce electrical power from geothermal energy, wells are drilled to access underground reservoirs and the pressurised steam and hot water contained there, this can then be used to drive turbines connected to electricity generators. At the identified temperatures in Malawi, Kalahari is likely to use binary technology to produce power, wherein the geothermal fluid heats a secondary liquid with a lower boiling point and is then pumped back into the reservoir feed zone, ensuring a closed system. The secondary liquid flashes to vapour to drive the turbine and produce electricity. The hotter and more pressurised the geothermal fluid, the greater the electricity generated.

Geothermal power is sustainable, operates at a high capacity and is environmentally benign. In addition to this, the direct application of heat for agro-industrial processes may have a significant impact in strengthening food security at a time of uncertainty as to the ongoing effects of climate change.

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About Kalahari GeoEnergy Ltd:
Formed in 2010, Kalahari GeoEnergy is a privately owned, Zambian-registered exploration company whose objective is to be an Independent Renewable Energy Power Producer. The management and their consultants have wide-ranging experience in exploration, development and energy utilisation.

The Company is currently undertaking a Feasibility Study at is Bweengwa River geothermal project in southern Zambia on the Kafue Rift. It is anticipated that a pilot power and direct application units will be developed in 2022 with commercial development once regulatory permits and funding are in place.

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