

RENERGEN LIMITED

Incorporated in the Republic of South Africa
(Registration number: 2014/195093/06)

JSE Share code: REN

A2X Share code: REN

ISIN: ZAE000202610

LEI: 378900B1512179F35A69

Australian Business Number (ABN): 93 998 352 675

ASX Share code: RLT

("Renergen" or "the Company")



RENERGEN ANNOUNCES HELIUM POWERED TRANSPORT SOLUTION FOR VACCINES

Emerging domestic natural gas and helium producer Renergen has developed a ground-breaking device, named Renergen Cryo-Vacc, which will simplify logistics of moving vaccines at temperatures of between -70 and -150 Celsius for periods of up to 30 days, without the need for any power supply. The company has filed for the patent rights to its design (patent application number 2020/07629) and is calling on collaborators to use the design in the large-scale manufacture of these devices, to assist in the deployment of ultra-low temperature vaccines, such as the recently announced Pfizer COVID-19 vaccine.

The Renergen Cryo-Vacc has been initially designed to transport a minimum of 100 doses, whilst keeping the vaccine at the required cooling rate of -70 degrees Celsius. Importantly, by utilising the Renergen Cryo-Vacc, vaccines and biologics can be transported for up to 30 days, regardless of ambient conditions. This simplifies the logistics significantly and means the vaccines are able to be transported using traditional logistics chains.

The Renergen Cryo-Vacc device will be constructed of aluminium, providing durability and a long lifespan for end users. A reservoir has been built into the device, which is filled with liquid helium, the coldest liquid available globally. This is then boiled and released over a 30-day period to maintain the temperature at a constant level. Liquid helium is also 20% of the density of liquid nitrogen, making the device light enough to carry, with an overall weight of less than 20kg.

Commenting on the development of the Renergen Cryo-Vacc, Managing Director and Chief Executive Officer Stefano Marani said "At first, we attempted to find a solution using liquid nitrogen given it is significantly cheaper, but you only had four days to get the payload to its destination for the same weight. It became very clear that for delivery into remote areas and developing economies, helium was the only solution for the Renergen Cryo-Vacc. Fortunately, given helium's specific heat characteristics, it simplified the design substantially and will make the manufacture of the devices not only quicker but more cost-effective.

"As an emerging helium producer, we are proud to have developed this innovative concept, at a time when the world is seeking solutions on how to overcome the COVID-19 pandemic. Defeating it will take collaboration. For that reason we are inviting partners with the resources to roll-out large-scale manufacture of the Renergen Cryo-Vacc and global logistics companies who are able to transportation medical supplies. Importantly, with the devices in circulation, transportation can be completed in a cost-effective manner, given the relatively small size and weight of the devices. Depending on where the helium is sourced, the operating cost of the device should be under US\$0.07 per dose per day for the smallest device."

For personal use only

The device works to transport vaccines with liquid nitrogen too, but the vaccines must reach their intended destination within four days, unless the user is willing to increase the weight by an additional 15kg, which could stretch the timeline to around 20 days, but at significantly higher air-freight costs.

An explanatory video of the device may be seen at this link: <https://www.renergen.co.za/cryo-vacc/>

Johannesburg
10 December 2020

Authorised by: Stefano Marani
Chief Executive Officer

Designated Advisor
PSG Capital



PSG CAPITAL

To readers reviewing this announcement on the Stock Exchange News Service (SENS), this announcement may contain graphics and/or images which can be found in the PDF version posted on the Company's website.

To readers reviewing this announcement who wish to find out more about LNG, watch our LNG video, which is posted on the Company's website <https://www.renergen.co.za/videos/>

For South African investor inquiries, contact Renergen

info@renergen.co.za

+2710 045 6007

For South African media enquiries, contact OwnAlchemy

Michael Rubenstein

+2782 903 7797

michael@ownalchemy.com

For Australian Investors & Media, contact Citadel-MAGNUS

Cameron Gilenko

0466 984 953

About Renergen

Renergen is an emerging producer of helium and liquefied natural gas (LNG), with existing production and sales of gas to buses in the Free State. Renergen was listed on Johannesburg's AltX securities exchange in June 2015 as South Africa's first listed alternative and renewable energy company. Renergen listed on the Australian Securities Exchange (ASX) on the 6th June

For personal use only

2019, with the code RLT. Renergen's principal asset is its 100% shareholding in Tetra4, which holds the first and only onshore petroleum production right in South Africa, giving it first mover advantage on distribution of domestic natural gas, along with the potential to become one of the major global helium suppliers, making South Africa only the 8th country in the world to export this extremely rare gas.

www.renergen.co.za

For personal use only