

The logo for RENERGEN, featuring the word "RENERGEN" in a bold, white, sans-serif font. The letter "R" is stylized with a yellow square at its top-left corner, and the letter "N" has a yellow square at its bottom-right corner. The background of the slide is a high-contrast, black and white image of a rocky, cratered celestial body, possibly an asteroid or a moon, with a bright light source from the right creating a sharp shadow and highlighting the surface texture.

**RENERGEN**

FUTURE ENERGY, TODAY

# Quarterly Activity Report

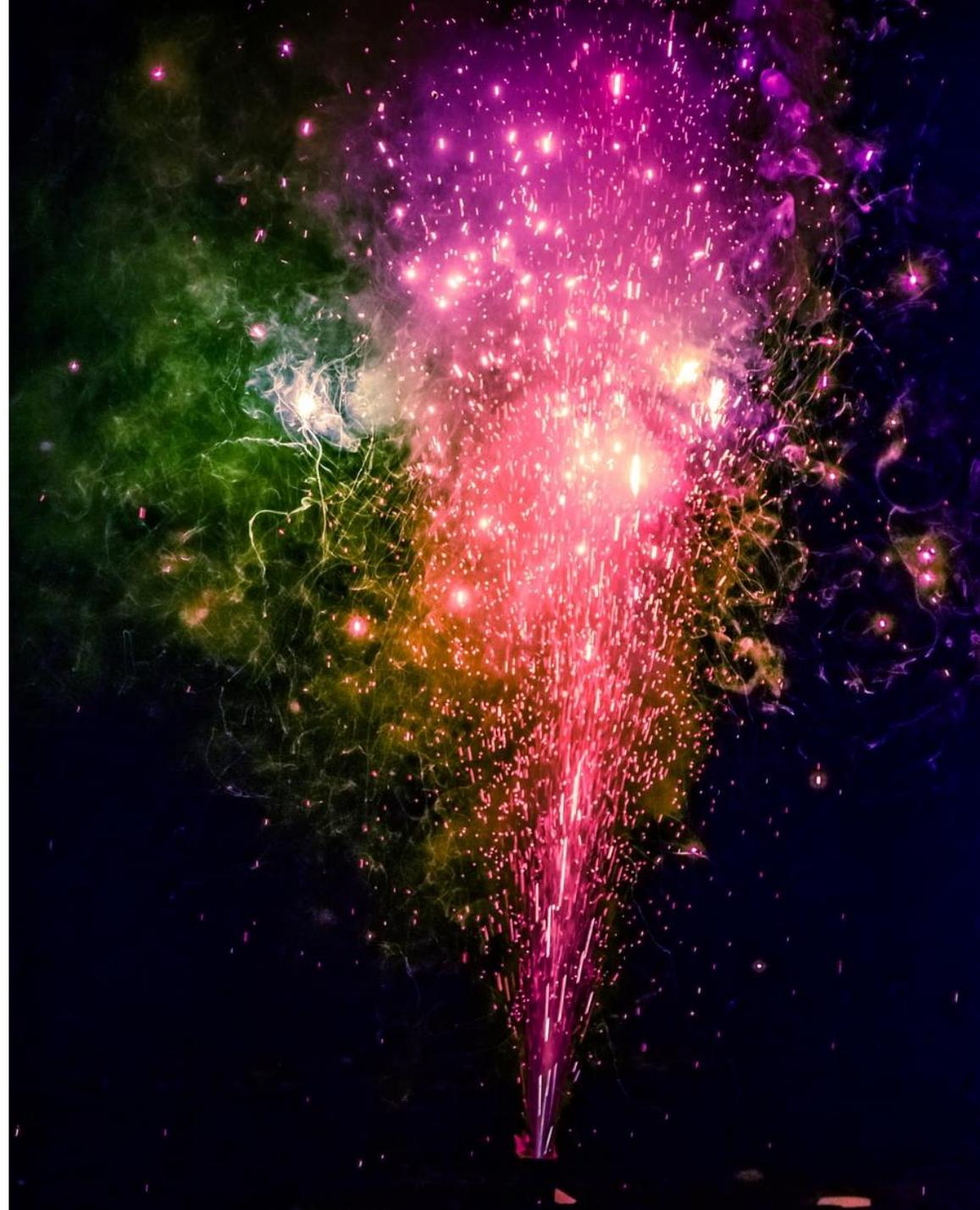
Helium and LNG Producer

December 2021

## Highlights

Significant highlights from this quarter, in chronological order, include:

-  Facilitation of helium spot market
-  R2D2 records strong flow, 1.9% helium
-  Updated Reserves, 1P helium up over 600%
-  David King elected chairman
-  Cryo-Vacc™ successfully delivered close to 1m vaccines in SA
-  Project Schedule



# Facilitation of Helium Spot Market

## Argonon Helium Token, or ArgHe

Argonon



### Helium Supply Agreement

Renergen has entered into a pre-paid forward supply agreement to Argonon Helium US Inc, a Delaware company

<https://argonon-he.com/>

### Mechanics

- Argonon has the right to purchase up to 100,000 mcf of helium from Renergen's Phase 2 plant at a pre-determined price, ranging from US\$230 to 270/mcf
- Argonon is issuing tokens through its website, using Ethereum, to provide the blockchain infrastructure for the tokens
- The tokens allow the holder to collect helium from Renergen
- The will be tradeable in early January 2022 on exchange BitGet (<https://bitget.com>), and will include additional crypto exchanges in due course



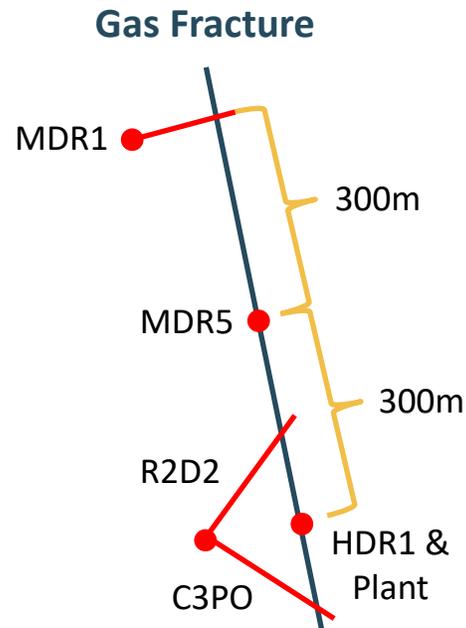
# R2D2 Completed

1.9% helium, strong flow

Planned at an inclination to intersect the main gas-bearing fracture midway between existing blowers MDR5 and HDR1, the latter being where the current CNG facility is in operation

The well was drilled using standard percussion techniques, but the drillers weren't able to maintain an inclination acceptable to the Company

R2D2 intersected gas along the main gas-bearing fault line as planned. Since flow testing the well, no impact to HDR1 or MDR5 have been recorded thus far, giving the strongest indication yet that wells can be spaced closer together

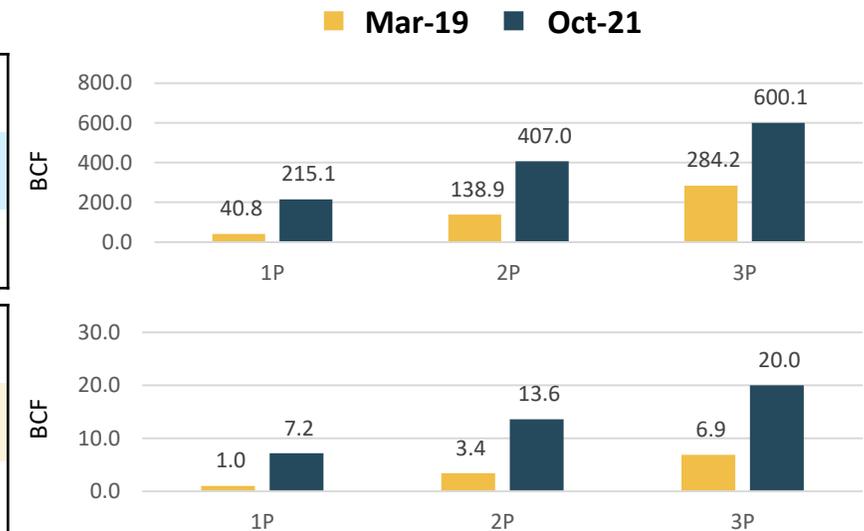


# Significant Growth in Reserves Since 2019

Significant results delivered with 1P helium reserves having increased by 610% to 7.2Bcf and 1P methane reserves by 427% to 215.1Bcf



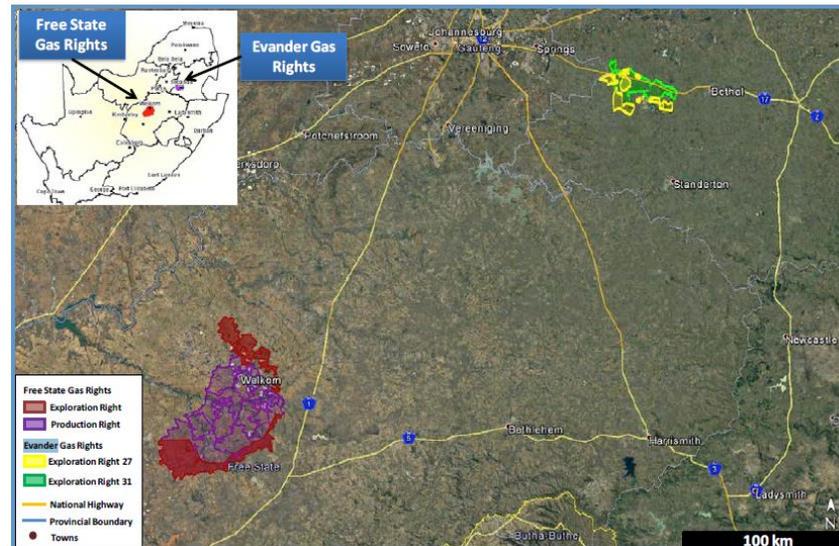
		Mar-19	Sep-21	% Change
<b>Methane Proven</b>	Phase - 1P	40.8	215.1	<b>427%</b>
	<b>Phase - 2P</b>	<b>138.9</b>	<b>407.0</b>	<b>193%</b>
	Phase - 3P	284.2	600.1	<b>111%</b>
<b>Helium Proven</b>	Phase - 1P	1.0	7.2	<b>610%</b>
	<b>Phase - 2P</b>	<b>3.4</b>	<b>13.6</b>	<b>298%</b>
	Phase - 3P	6.9	20.0	<b>192%</b>



*Following successful drilling campaigns in 2021, Renergen engaged Sproule to estimate the methane and helium reserves and resources at the Virginia Gas Project*

## Other Items of Business

- Dr David King was appointed new chairman of the board on 1 December 2021, following Brett Kimber's resignation after 7 years
- Cryo-Vacc™ has undergone stringent field trials, delivering close to 1 million doses of Pfizer in South Africa. Following a series of modifications and enhancements to the units, they are now being prepared for commercial roll out
- The Virginia Gas Project Production Right and Evander Exploration Rights are highlighted in the map below. No new rights were acquired or disposed of in the period
- Expenditure has not exceeded the projected Use of Funds from the Offer document for the listing on the ASX in June 2019



### Production Right:

- 12/4/07PR

### Exploration Rights/TCPs:

- 12/3/2/29ER
- 12/3/2/32ER
- 12/3/2/33ER
- 12/3/2/64ER
- 12/3/2/94ER
- 12/2/171TCP

# Project Schedule



Phase 1 Schedule



Mitigations Implemented



Project Delays



Unmitigated Risks



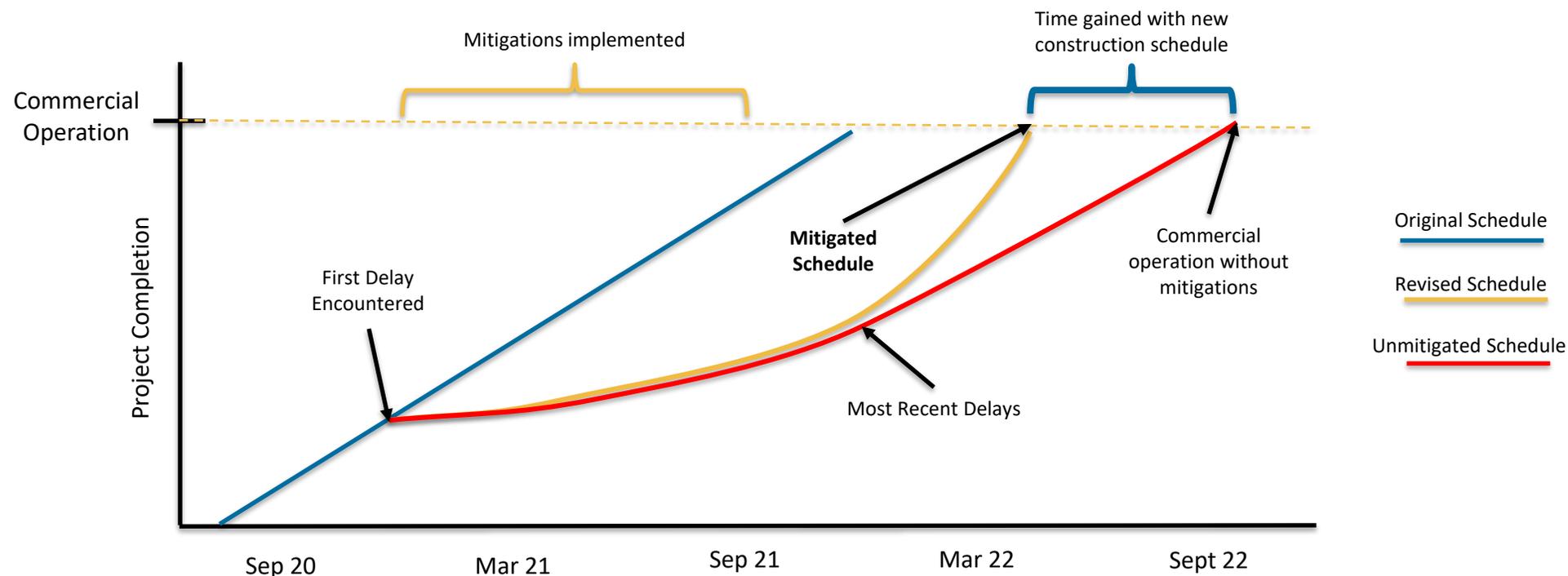
# Phase 1 Schedule Update

The Revised Phase 1 schedule updated as per forecasted completion dates

Milestones	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Gas Gathering Pipeline																
LNG/ Lhe Fabrication																
Shipping																
Onsite Installation																
Cold Commissioning																
Hot Commissioning																
Performance Testing																
Commercial Operation																

- In September 2021 we quantified the new commercial commencement date as March 22, with commissioning commencing in December 21, gas to plant in January 22, and tanks being filled in February 22
- In the last two weeks, the construction was hit with several delays including **COVID on site (18 cases this month)**, **adverse weather conditions (11 days of rain)**, **shipping delays (ship mechanical failure leading to unscheduled stops before reaching Durban)** and **construction delays**
- Despite these challenges, the team has implemented mitigation strategies to reduce risk and delays, and **commercial operation has only been impacted by a month as a result**

# Timeline before and after mitigations



- The graph above is a graphic illustration outlining the effect of the delays of shipping, rain and delayed delivery of refrigerants to the original Phase 1 schedule
- Following the mitigation strategies outlined, whilst we are still delayed, the impact on the commencement of commercial operation has been substantially reduced
- Given the revised schedule, the milestones tracker on the website will in due course be updated accordingly to reflect the revised schedule

# Mitigations implemented

The following mitigations have been implemented to reduce the impacts of delay on the project

## Permits



- Obtained Essential Service permit in May 2020 from South African Government to ensure our Contractors can continue working despite various lock down levels imposed by South African government

## Shipment



- Forced lockdown imposed by China. We split the LNG/ Lhe plant shipments from 2 into 8 separate shipments to realise the following benefits:
  - Reduced risk exposure from two large consignments into multiple shipments
  - Onsite installation work could commence as smaller batches were delivered
  - Installation of batches now runs concurrently with may other activities

## Exemption



- Applied for exemption with Department of Mineral Resources and Energy and Department of Labour to increase Working days across the project site from 6 to 7 days per week

## Insurance Claims



- The Company has notified Insurers of potential claims against both the Construction All Risks policy and Marine and Delay in Start-up Insurance Policy

# Project delays

Original start-up of commercial operations date was September 2021. If left unmitigated, the delay would have been 386 days, however with mitigation measures, this has been reduced to 233 days-including forecasted weather delays between December 2021 and April 2022.



## COVID-19 Forced Lock Downs

- Construction in South Africa experienced delay due to Government imposed forced lock downs
- Fabrication in China experienced the largest delay due to Government imposed forced lockdown

47% of total delay attributed to COVID-19 lock Down



## Shipping Delays

- LNG/LHE Plant batches has experienced delays across all shipments, in line with current global trends in relation to shipping delays from China
- Sourcing of refrigerants and chemicals has experienced delays from hazardous cargoes not been prioritised on shipping lines

18% of total delay attributed to global shipping delays



## Weather Delays

- Delays due to heavy rain have prevented access to site

19% of total delay attributed to actual and forecasted weather



## Strike Delays

- Protected strike action-National Union of Metalworkers of South Africa (NUMSA) and the Metal and Electrical Workers Union of South Africa (MEWUSA) in October 2021

2% of total delay attributed to legal strike action

## Unmitigated risks

The following risks threaten our planned project completion should we face larger impacts than anticipated



### COVID-19

- COVID-19 Delta and Omicron variant pose significant threats to the project site
- Where cases of COVID-19 are detected, people are isolated and close contacts groups are forced to isolate
- At present we have 18 cases of COVID across the site and relevant teams have been demobilised resulting in unmitigated delays



### Weather Delays

- A further 34 days of rain are expected in the Virginia/ Welkom region between 21st December 2021 and the end of April 2022
- The current timetable factors this into our commercialisation date. Worse weather could have an impact, but conversely less rain would bring commercialisation date forward



### Strike Action

- Future protected strike action in other industries can't be forecasted but continue to pose a threat to the project-none are known at this time
- Such actions tend to take place every 2 years as the bargaining council typically negotiates increases for 2 years in advance, and thus is a low risk

**Copyright**

Renergen all rights reserved. Renergen is the owner of the intellectual property contained in this document. This information is private and confidential accordingly any redistribution or reproduction of part or all of the contents in any form is prohibited; other than the valuation of this report. It shall be returned to us upon request. *All rights remain reserved.*