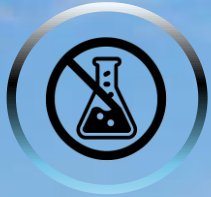


Hydrogen Shuttle

A novel approach to reducing Enteric Methane



No Chemicals



Low COGS
<1 cent per day



Game Changer



Hydrogen
Shuttle Capsule



Single Application



Hydrogen Shuttle

“Removes hydrogen from the rumen so that it can’t be used to make methane”

- Administered into the animal
- Designed to reside in the rumen
- Made from FDA-approved materials
- Resilient to biofouling
- “One of a kind” non-chemical device
- For additional information click QR Code



Proof of Concept

EVALUATION VIA ROBOTIC RUMEN

- *in vitro* testing using the Rumenaut Robotic Rumen
- The Hydrogen Shuttle resulted in a **reduction in methane emissions of 20 %**
- Increase in hydrogen emissions
- **No change in VFA production**



Scale of the Opportunity

COMMERCIAL OPPORTUNITY (GWP100)

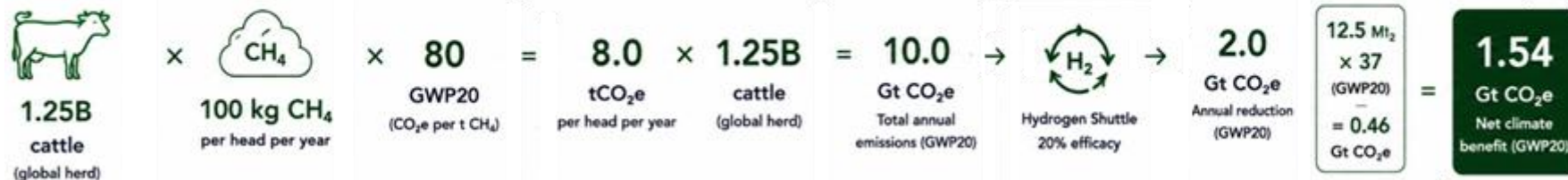


* Reduction in CH₄ is slightly offset with increase in H₂ emission

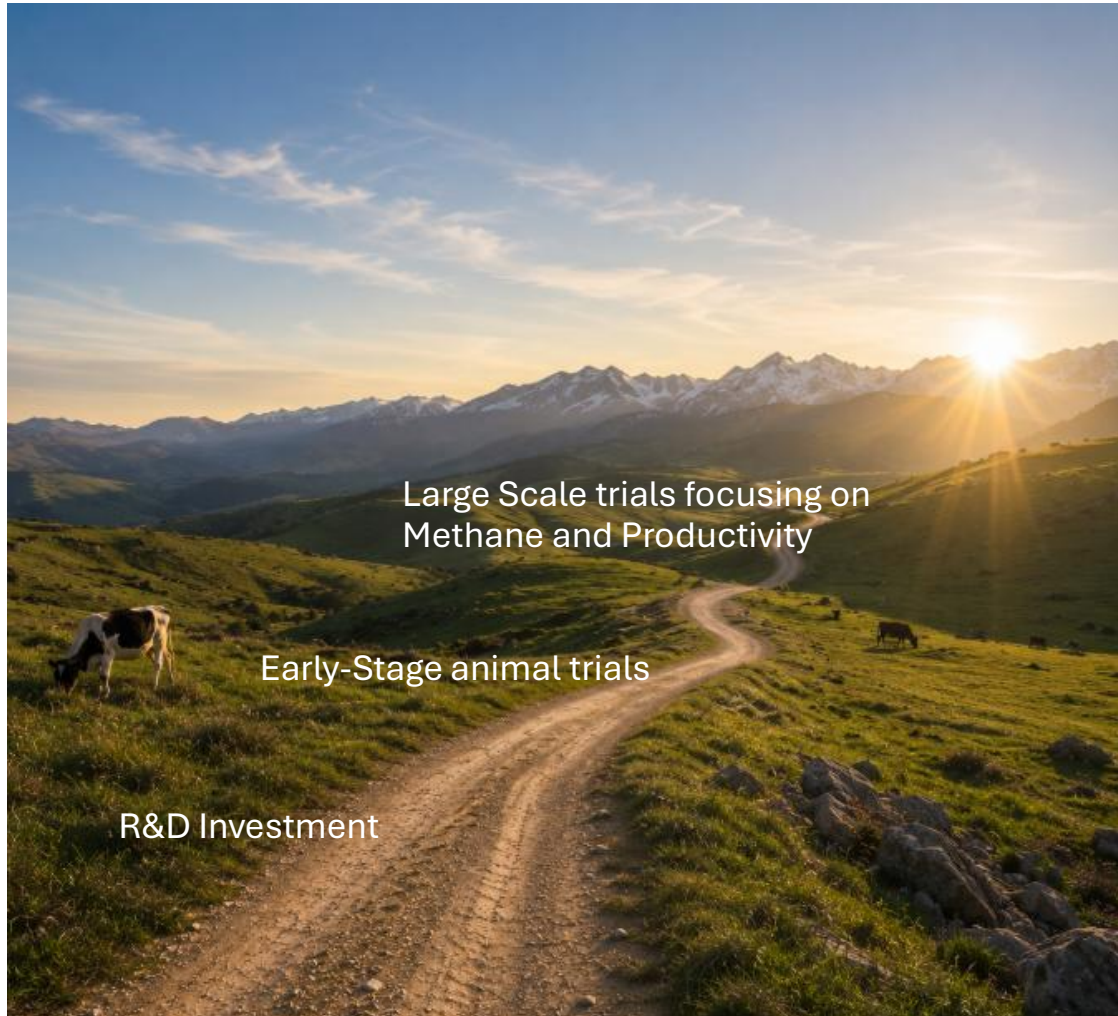


PLANET IMPACT (USING GWP20)

Climate impact of global cattle methane and the Hydrogen Shuttle solution



Where to from here?



Future Focus

1. Expand the **R&D investment** in materials science, increased in-vitro capacity. Product development.
2. Conduct **early-stage animal trials** targeted at safety and efficacy
3. Conduct larger-scale cattle trials **targeted at methane and productivity**

Enquiries

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Team

A passionate team of scientists and commercial experts
driving innovation for a more sustainable future

Rumenaut Science Team

Dr Peter Fennessy



Director

Peter Fennessy has been involved in businesses in the biotech and agritech sectors for the last 30 years following a career in R&D. He has expertise as a ruminant biologist working in the areas of physiology, nutrition and genetics.

Dr Stephen Sowerby



CSO

Stephen Sowerby has been involved in applied technology conception, research, and development for over 30 years and is inventor on multiple granted patents from 11 diverse patent families.

Dr Martin Jones



CTO

Martin Jones has spent over 30 years taking novel technology from research to market and leading the multi-disciplinary teams behind it. He specialises in analytical robotics and software.

Rumenaut Commercial Team

Tom Sturgess



Director

Founder of [MMV](#) majority shareholder of Rumenaut, owner of Lone Star Farms, investor in [Lumina Lamb](#) plus chair of [Regeneration.vc](#) IC.

US and NZ domiciled, Tom invests heavily in decarbonization technologies globally to deliver compelling economic outcomes.

Juan Di Varo



CEO-Designate

He has over 20 years' leadership experience across the medical, scientific, technology, and compliance sectors. Juan has experience in building business from the ground up.

Adrian Barker



Director

Adrian heads up the ventures arm of the Sturgess family office, is a director of MMV (involved in JV's & commercialisation) and sits on the [Regeneration.vc](#) investment committee. Adrian has 35 years in CEO, founder and senior management roles in new ventures.