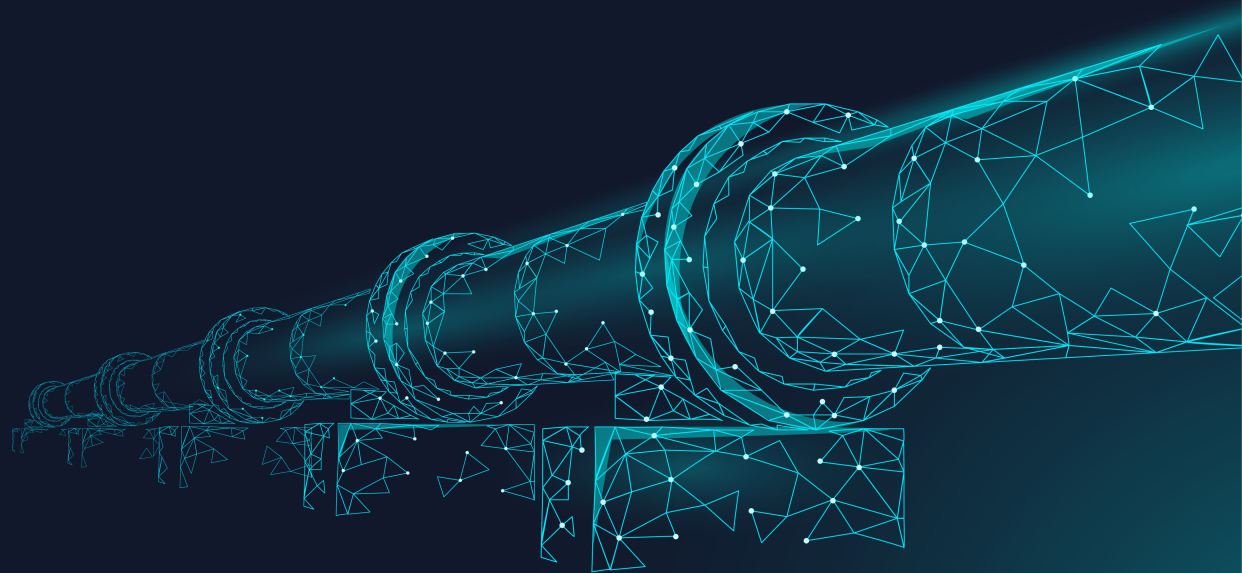


# Australian Future Energy



**Harnessing Australia's 'Blue' and 'Green' hydrogen expertise**



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# Who is AFE?

**AFE** is a private Brisbane-based company with global rights to the Gas Technology Institute (GTI) Gasification Technology (excluding China) – the foundation asset of AFE.

**AFE** is focused on clean energy production to meet growing domestic and international demand.

**AFE** is managed by a board with a proven history in gasification and major resource infrastructure projects.

## **Our projects:**

- **The Gladstone Energy and Ammonia Project**, due to reach a Final Investment Decision in 2022

(A comprehensive PFS has been completed in conjunction with SNC Lavalin)

- **Surat Basin Hydrogen Hub (SBHH)** future delivery
- **Pentland Hydrogen Hub (PHH)** future delivery

## **Our vision:**

To be a leader of Australia's growing hydrogen industry by producing a range of products including; ammonia, methanol, hydrogen rich gas, and by-products (sulphur and CO<sub>2</sub>).

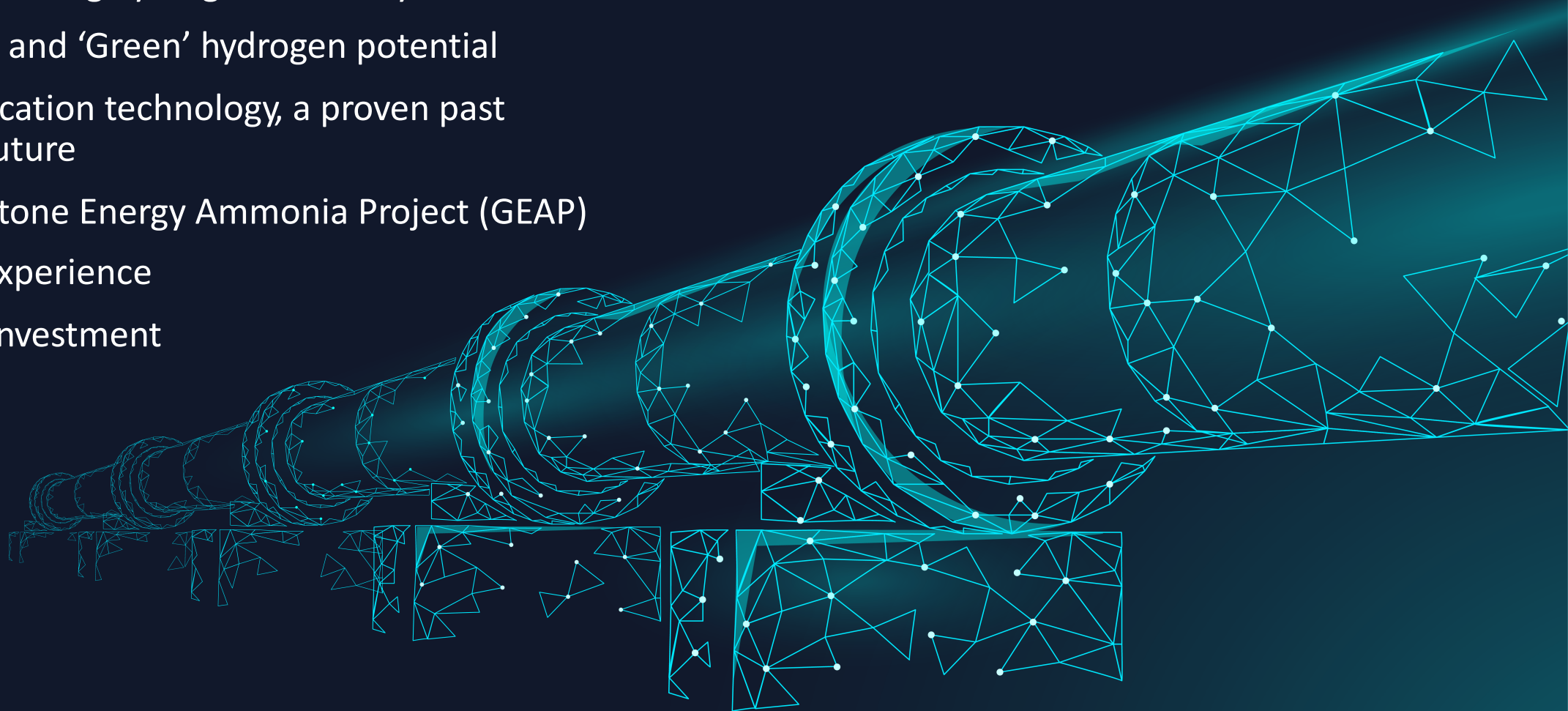
**AFE is seeking up to \$USD 20 million in new equity capital for the planning, approvals and structuring to deliver its Queensland Hydrogen Hub project pipeline.\***

\*(Funding able to be in tranches).



# Summary

1. The growing hydrogen economy
2. 'Blue' and 'Green' hydrogen potential
3. Gasification technology, a proven past and future
4. Gladstone Energy Ammonia Project (GEAP)
5. Our experience
6. Your investment





# The growing hydrogen economy

Hydrogen is a key ingredient in the manufacturing process for the food, agriculture and mining sectors and products.

Currently produced in large volumes, via Steam Methane Reforming (SMR), hydrogen can be used to meet industry need for ammonia, methanol, plastics and in metal processing and refinery operations.

Hydrogen supports technological developments that can be used to:

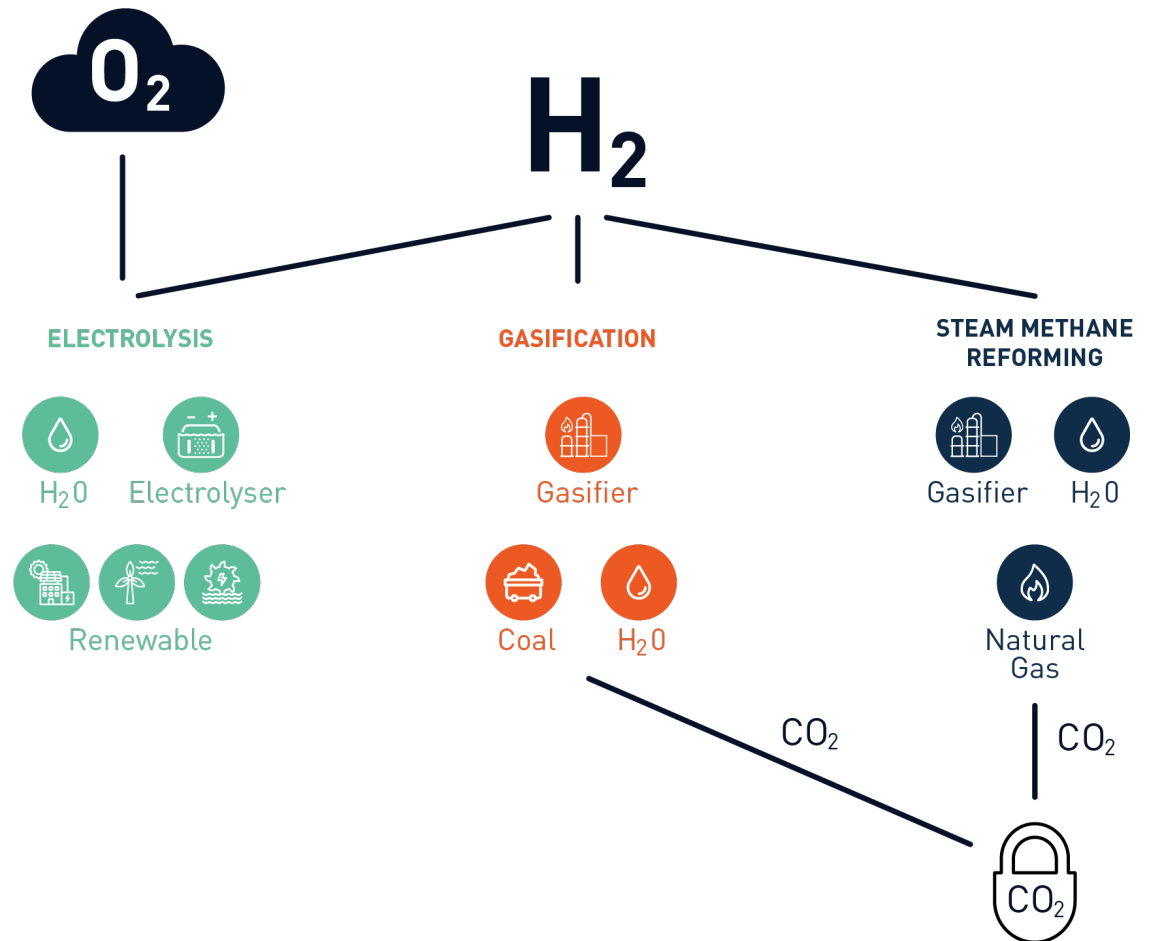
- Increase energy efficiency
- De-carbonise inefficient sectors – logistics, industrial heating, industry feedstock
- Improve energy system reliability
- Contribute to long-term emissions reductions

## A hydrogen powered future

Globally, the exploration of hydrogen as an energy carrier is expanding, with billions of dollars being spent worldwide on pioneering projects to integrate hydrogen into energy markets.

8% of global energy demand can be met by hydrogen at a production cost of \$USD 2.50 per kilogram, 15% at \$USD 1.80 per kilogram.

The hydrogen market is set to grow 10 times by 2050, a CAGR of 50 % per annum.



# Governments back hydrogen

There is broad Governmental recognition that hydrogen is a powerful and beneficial energy carrier and feedstock of the future.

Through specialised 'Hydrogen Hubs', both state and federal governments hope to reduce technical uncertainties and build up domestic supply chains and production capabilities in Australia.

AFE's **Gladstone Energy and Ammonia Project** has been listed as a 'Project of Significance' to the State of Queensland.



**A strong domestic hydrogen sector will underpin Australia's exporting capabilities, allowing us to become a leading global hydrogen player."**

– COAG Energy Council on Australia's National Hydrogen Strategy



## Government hydrogen funding:

Australian Government  
National Hydrogen Strategy



Queensland Government Hydrogen  
Industry  
Development fund

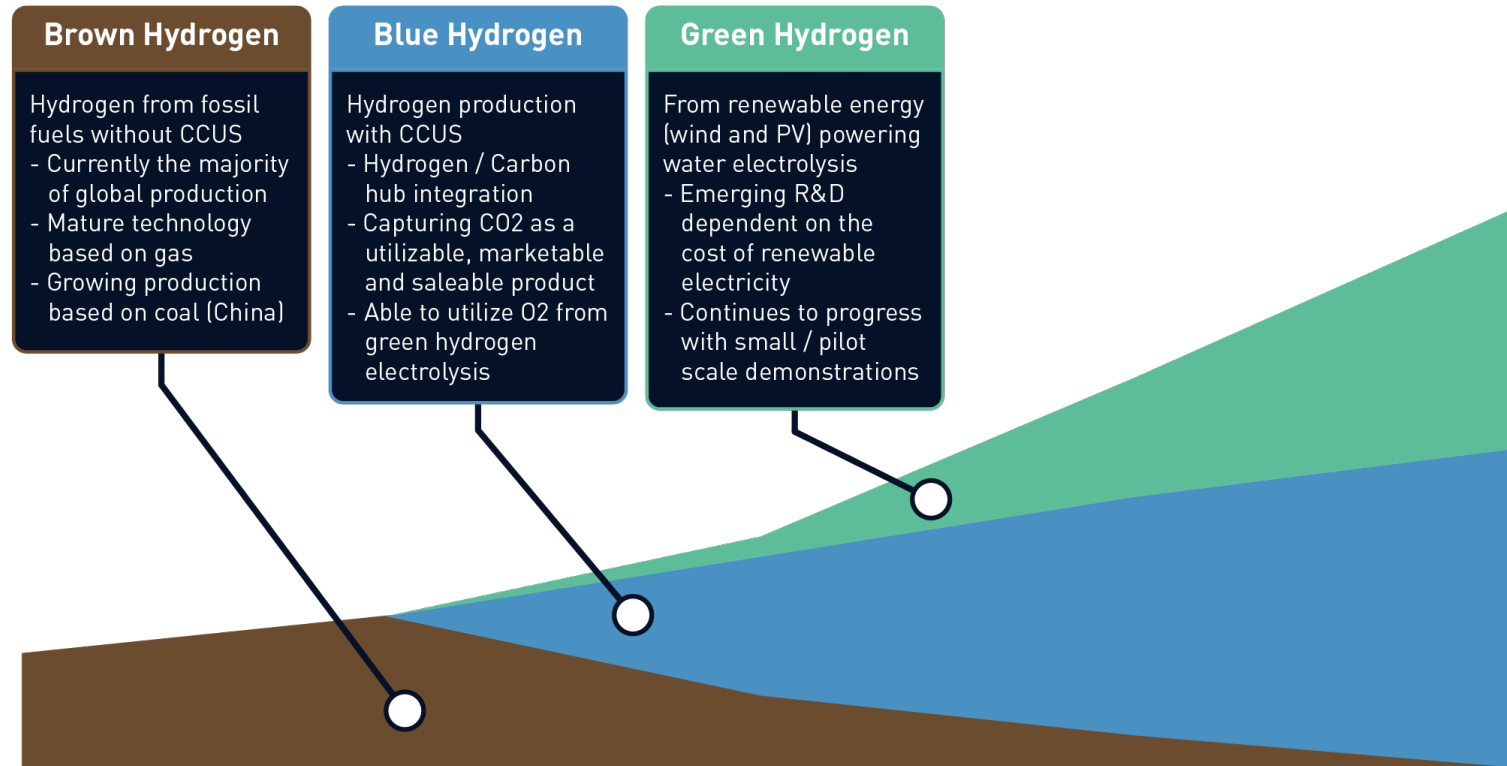
**‘Blue Hydrogen’** is produced from fossil fuel feedstock by means of technologies such as Steam Methane Reforming (SMR) and gasification in combination with Carbon Capture Utilisation and Storage (CCUS) technology.

- Production cost: \$USD 1.50 per kg, in most preferred regions in the near-term.
- Set to decline further to as low as \$USD 1.20 per kg by 2025.
- Dependent on the cost of Natural Gas feedstock.

**‘Green Hydrogen’** is produced from renewable power or renewable feedstock by means of technologies such as water electrolysis or biomass gasification.

- Production cost: \$USD 10-15 per kg in 2010 to \$USD 4-6 per kg in 2021.
- Set to decrease to as low as \$USD 2.50 per kg by 2030.
- Dependent on the cost of renewable energy and water.

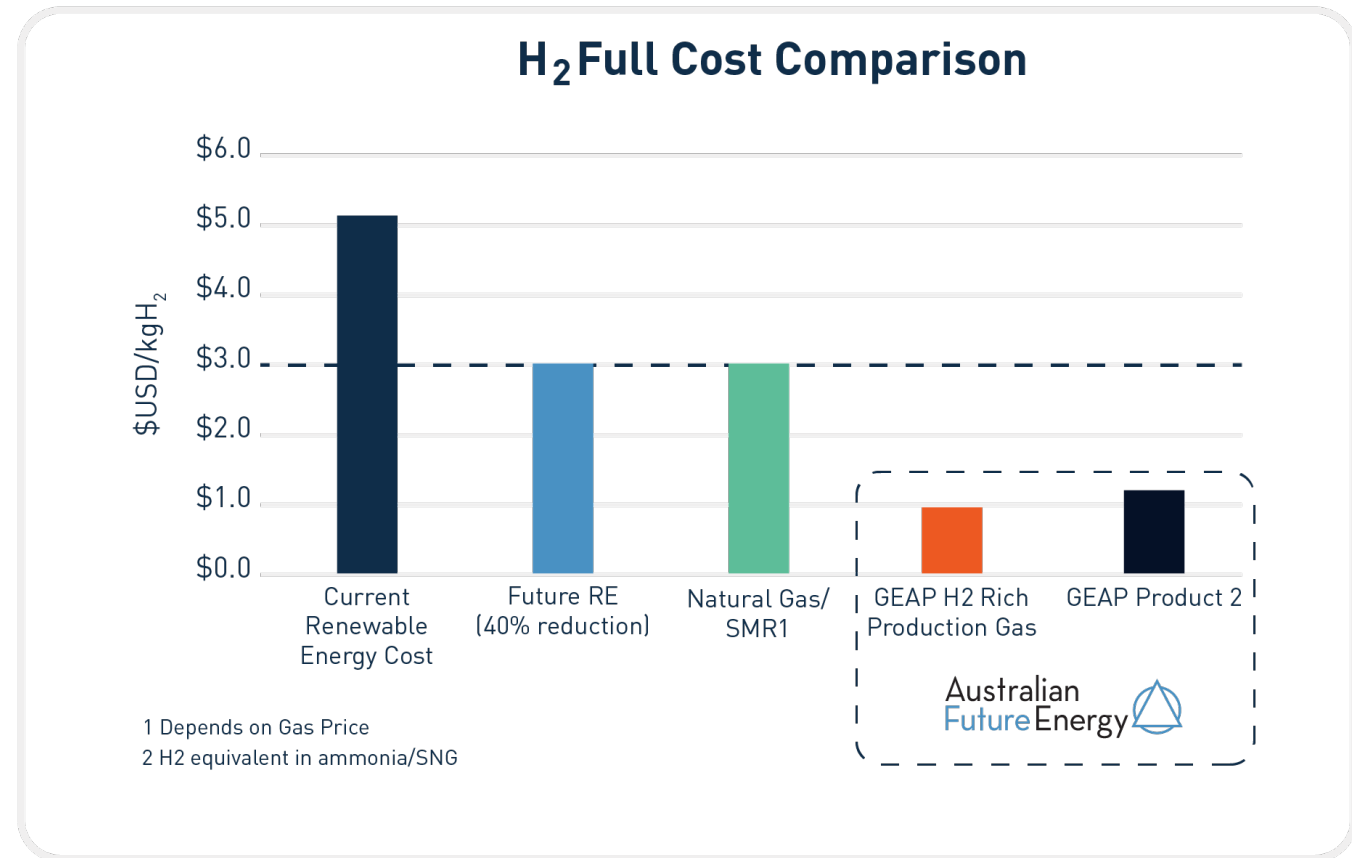
**AFE regards ‘Blue Hydrogen’ as a vital part of the hydrogen mix in the long term.**



# Cost competitive producer

AFE'S Gladstone Energy and Ammonia Project (GEAP) can produce 'Blue Hydrogen' at a cost equivalent to the gas / SMR cost using a low cost fuel source.

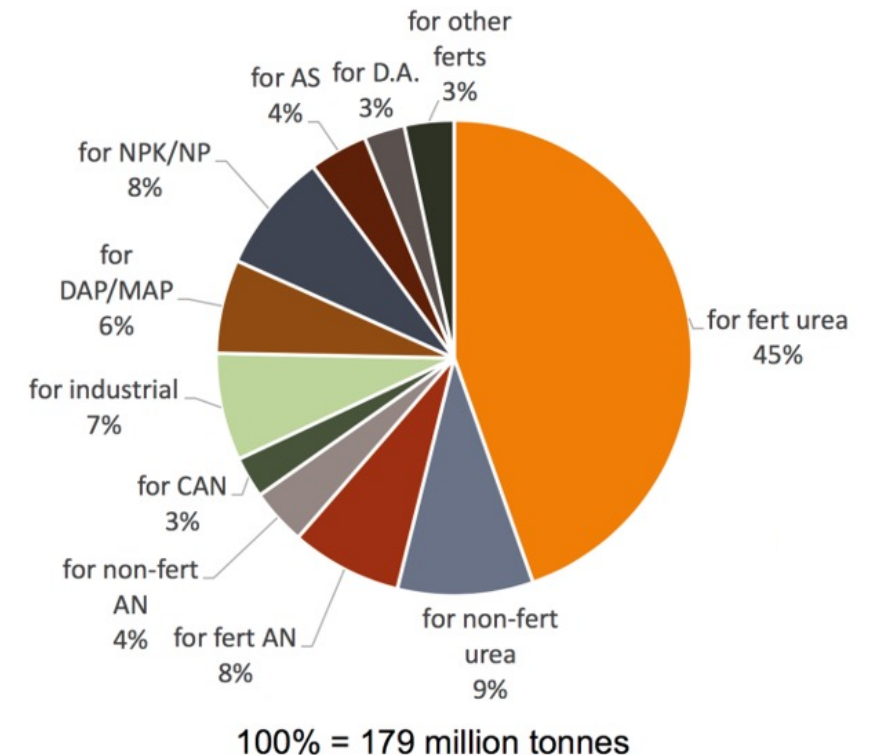
- 24% of the current full cost for 'Green Hydrogen'
- >50% lower than the long term Renewable Hydrogen unit cost target
- Phase 1 GEAP will produce ~91Kt of Hydrogen equivalent (contained in Ammonia / Pipeline gas) at <\$USD1.00/kg H<sub>2</sub> cash cost (US\$1.25/kg H<sub>2</sub> full cost).
- AFE's project pipeline, has the potential to produce in excess of 300,000 tonnes per annum of equivalent transportable hydrogen per annum.





- Commonly used as a raw material in the manufacturing of fertilizers and explosives
- **Liquid ammonia is one of the most promising methods for storing and transporting hydrogen**
- **Ammonia (NH<sub>3</sub>) actually packs in more hydrogen than hydrogen (H<sub>2</sub>) itself, making it the ideal hydrogen carrier and it burns cleanly and does not form soot or particles**
- **Ammonia is superior to hydrogen itself in every one of these areas. Given this, it stands to reason that proponents of hydrogen fuel cells should embrace ammonia as a valuable enabling technology that can elevate the feasibility and improve the economics of fuel-cell-based systems**
- **Up to 2018, the world ammonia market was in supply / demand balance, but the gap between demand and supply is growing rapidly, with the rapid take-up in demand for hydrogen**
- **It is also a highly effective energy carrier, increasingly being used as a clean burning fuel in both internal combustion engines and fuel cells**
- Ammonia Energy reported on three major developments in 2018 :
  - Toyota Motor Corporation's announcement of a multi-stakeholder plan to develop a hydrogen energy economy in its home region – with ammonia explicitly included as a carrier of hydrogen for consumer-oriented fuel cell applications
  - The Japanese electrical manufacturer Sawafuji stating that it had an explicit plan to commercialize a high-purity ammonia-to-hydrogen conversion system
  - Demonstration by Australia's CSIRO of its own high-purity ammonia-to-hydrogen conversion system for use at hydrogen fueling stations. Partners include BOC (a subsidiary of global industrial-gas powerhouse Linde Group), Toyota and Hyundai

**Ammonia demand by end use, 2018**



## Existing commercial operations

- GTI technology is a gasification process developed by the United States Gas Technology Institute (GTI) with a proven commercial track record.
- 13 commercial scale gasification systems are currently operating at 6 project locations around the world (USA and China).
- AFE has the exclusive world-wide (other than China) licensing and distribution rights to the GTI technology.
- Fluidised Bed Technology.

Project Name	Zao Zhuang	Yima	Chalco Shandong	Chalco Shanxi	Chalco Henan
Year commissioned	2008	2012	2015	2016	2016
# of gasifiers	2	3	2	1	4
Main product	Methanol	Methanol	Fuel Gas	Fuel Gas	Fuel Gas
Annual output	90,000 tpa	300,000 tpa	9.33 PJ pa	3.27 PJ pa	14 PJ pa

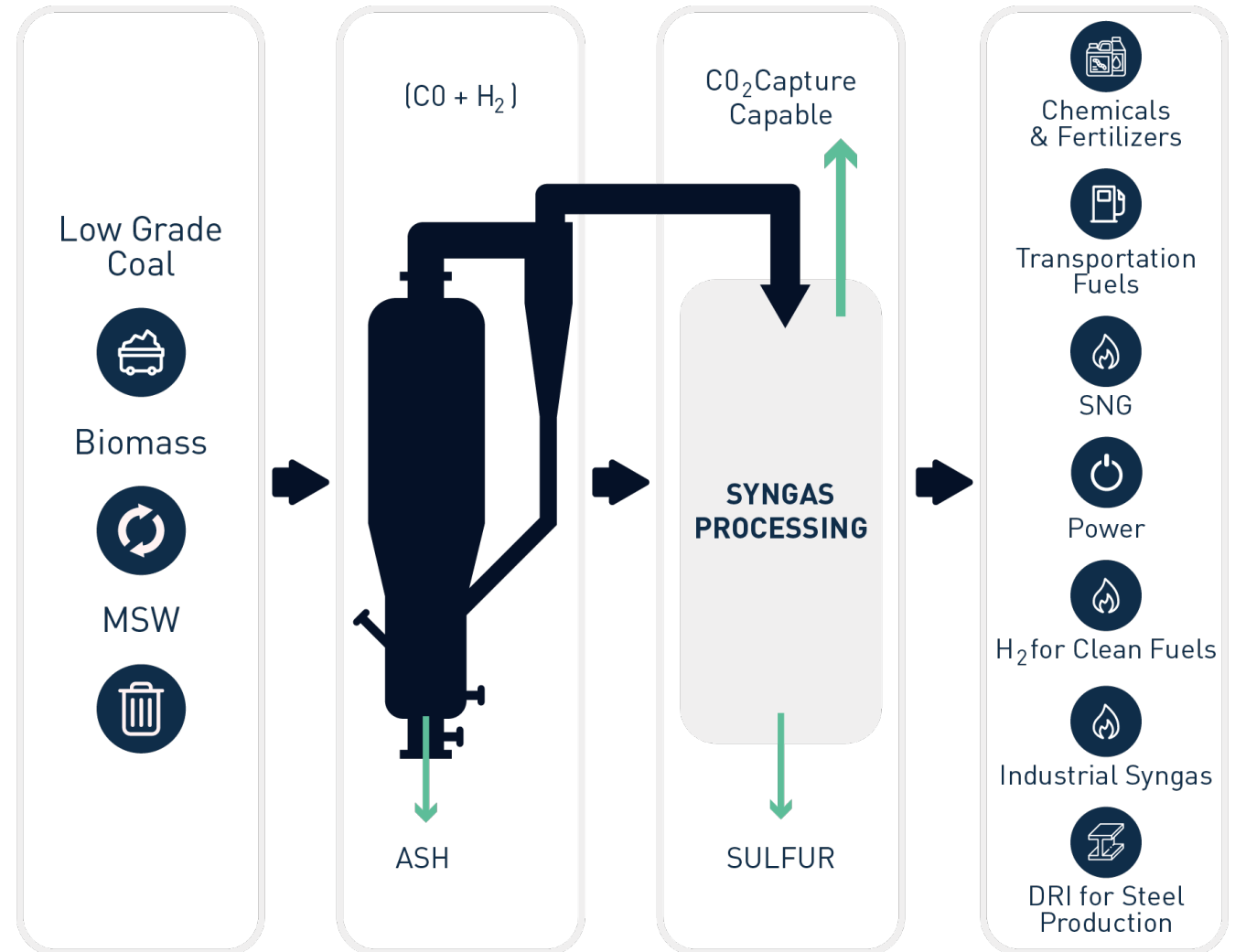


Zao Zhuang Plant, China

# Proven gasification technology

## GTI process offers

- Fuel flexibility – coal, biomass, municipal solid waste
- High operational efficiency
- Low maintenance (lower pressure and temperature, fewer moving parts)
- Carbon conversion efficiency – 99%
- High purity (> 95%) CO<sub>2</sub> as a valuable and saleable product – food grade CO<sub>2</sub>
- > 80% CO<sub>2</sub> capture



## Three major AFE projects

- Creating commercial products for EXISTING Hydrogen applications (Ammonia, Methanol, Synthetic Pipeline Gas and Power production)
- Developing Carbon Capture Utilisation and Storage (CCUS) for commercial food grade and industrial use.

### 1. Gladstone Energy and Ammonia Project (GEAP)

- Located in AFE's proposed Gladstone Hydrogen Technology Park
- Phase 1 prioritised to meet the domestic demand for ammonia and synthetic gas.
- Expandable to double production capacity for potential exports via the existing port infrastructure.
- Supports green hydrogen research, pilot and demonstration projects.
- Aggregating and value adding from other small scale projects producing green hydrogen.
- Enabler and aggregator for smaller green hydrogen projects.

### 2. Surat Basin Hydrogen Hub (SBHH)

Producing transportable 'Blue Hydrogen' as Ammonia or Methanol, and Electricity using CCUS Carbon Hub for enhanced oil recovery and geological storage.

### 3. Pentland Hydrogen Hub (PHH)

Located in far north Queensland adjacent to Pentland resource with direct access to rail between Mt Isa and Townsville port facilities.

**Future projects are proposed to be located at the feedstock source to deliver :**

**Ammonia** – growing demand worldwide for additional ammonia production for use as a transporter of hydrogen and for co-firing in power generation to reduce emissions.

**Methanol** - as a hydrogen transport medium OR as a chemical feedstock depending on the market demand  
Clean electricity generation (Allam cycle) further improving carbon capture.



# Gladstone Energy and Ammonia Project

Development of an **ammonia and gas production facility** for local industrial customers in Gladstone, Queensland:

- 230,000 tpa of ammonia
- 14.0 PJ of pipeline gas
- All production forward sold under HOA
- Strong support from Federal, State and Local Government
- EIS process is underway; Co-ordinated Project Status
- Compelling economics
- Scalable for future expansion
- First production in 2024

 <b>Revenue Secured</b> HOA for all produced ammonia and gas – Orica and Santos	 <b>Government Approvals</b> Co-ordinated project with Queensland Government – a smooth permit and approval path.	 <b>Project Site Secured</b> 129 hectare project site in Gladstone State Development Area.
 <b>Detailed PFS Completed</b> AFE predictions around capital / operating costs confirmed by SNC Lavalin in 2019. Detailed vendor submissions.	 <b>CO2 as a Valuable Product</b> High purity carbon captured (→ 95% purity). Saleable as “Food Grade CO2”. multiple HOAs in place.	 <b>Compelling Economics</b> IRR – 34%. NPV - → \$AUD 850 million. Annual EBITDA – app \$AUD 180 million.
 <b>Feedstock Supply</b> Secured from local regional mines.	 <b>Project Timeline</b> Environmental Impact Statement process underway. 2 year construction period. Production in 2024.	 <b>Blue Hydrogen</b> Blue Hydrogen technologies from coal, biomass with CO2 sale and utilisation. Project is an enabler for green hydrogen projects in Gladstone.

# Gladstone Energy and Ammonia Project

## Phase 1: Gladstone Hydrogen Technology Park development

- The Qld Coordinator General approval process for the AFE project scheduled to be finalised by June 2022.
  - Australian Federal Government confirmation NO controlled actions, interventions or approvals required.
- Detailed Pre-Feasibility study (PFS) completed** (in conjunction with SNC Lavalin); FEED process about to commence. PFS outcomes are strong : NPV >\$AUD 850M and IRR of 34%.
- Site secured** (129 hectares) and will be integrated with adjacent gas, fertiliser, explosives, water and power infrastructure.
  - Site has direct access to Queensland Gas Pipeline, water pipeline, mains electrical power, and rail.
  - Located in the designated Qld Government preferred industrial site to facilitate third party Green Hydrogen production R&D and demonstration projects.

- Targeted ‘Blue Hydrogen’ production** technologies from coal, biomass and MSW with CO<sub>2</sub> sale and utilisation.
- AFE’s Gladstone project (Stage 1) intends to consume all products locally to lock in the economic sustainability / minimising the complexity of long-distance transport – **offtake arrangements for ammonia and gas are in place.**
  - Comprehensive Heads of Agreement (HOA) in place with detailed terms agreed for ammonia and gas – including volume, take or pay, pricing structure and term.

Project Inputs	Heads of Agreement - Offtake				
• GTI Technology Agreement	<b>Orica Limited</b>	<b>Santos Limited</b>	<b>BOC Gas (Linde Group)</b>		<b>Mineral Carbonation International</b>
• EPCM: SNC-Lavalin	<ul style="list-style-type: none"> <li>230,000 tpa ammonia</li> <li>12 year term</li> </ul>	<ul style="list-style-type: none"> <li>8.0 PJ / annum gas</li> <li>15 year term</li> </ul>	150,000 tpa Industrial grade CO <sub>2</sub>	300,000 tpa Food grade CO <sub>2</sub>	Up to 850,000 tpa CO <sub>2</sub>
<ul style="list-style-type: none"> <li>Gladstone Area Water Board</li> <li>3-4Gtpa for 25 yr term</li> </ul>	<ul style="list-style-type: none"> <li>3.5 PJ pa pipeline gas</li> <li>8 year term</li> </ul>	Site boundary connection to Queensland Gas Pipeline	Australian East Coast specialised gas markets		For conversion to building products – proven technology
<ul style="list-style-type: none"> <li>1.5Mtpa coal / Long term supply</li> <li>Direct rail receipt from multiple sources (risk mitigation)</li> </ul>	Term extensions and expansions	Term extensions and expansions	EOR / CCUS / future pipeline supply		

# Expansion and product offering

The Gladstone Hydrogen Technology Park (GHTP) expansion will primarily produce ammonia or methanol with the potential to reach power self sufficiency.

- This will be decided based on export market offtake interest and ongoing hydrogen R&D, transportation and utilisation requirements.
- ‘Blue Hydrogen’ technology will support agriculture, mining, marine transport and international export sectors.
- ‘Green Hydrogen’ research and development can also be supported by GHTP by utilising :
  - Wind and solar power when available.
  - Oxygen produced from green hydrogen water electrolysis.
  - Green hydrogen for downstream processing, via existing facilities, to transportable hydrogen options (ammonia and methanol).

Key Performance parameters	GEAP Phase 1:	Expansion Optionality (Total of phase 1 & 2)
Physical Inputs (pa)	Coal: 1.5Mtpa Biomass / MSW: (up to 10%) Water: 3.5 GL pa Electricity: 46 MW (ex Grid)	Coal: 3.0Mtpa Biomass / MSW: (up to 10%) Water: 7 GL pa Electricity: nil
Saleable Products (pa)	Ammonia: 230Kt Methanol: nil Pipeline Gas: 14Pj High purity CO <sub>2</sub> : 1.2Mt Sulphur: 3Kt Ash: 300Kt	Ammonia: 230Kt Methanol: 1,000Kt Pipeline Gas: 14Pj High purity CO <sub>2</sub> : 2Mt Sulphur: 6Kt Ash: 600Kt
Revenue (\$AUD pa)	\$300m	\$787m
Operating costs (\$AUD pa)	\$120m	\$264m
EBITDA (\$AUD pa)	\$180m	\$523m
Project Capital (\$AUD)	\$1,035m	\$1,678m
NPV (8%) Geared (\$AUD)	\$850m	\$2,963m
Internal rate of return (%)	34%	40%

Assumptions	Coal (fis)	Ammonia	Methanol	Pipeline Gas	CO <sub>2</sub> (99%purity)	Sulphur	Ash
	\$40/t	\$335/t	\$380/t	\$8.35/GJ	\$30/t	\$225/t	\$35/t

Detailed PFS outcomes led by SNC Lavalin

# Gladstone Energy and Ammonia Project (Phase 1)

## Key Project Milestones:

### December 2022:

Regulatory approvals, final feasibility

### March 2023:

Final Investment Decision (FID) and construction commencement

### December 2025:

Construction completion and commissioning

Unit Capital	Syn gas production: <ul style="list-style-type: none"> <li>Coal &amp; Ash Handling</li> <li>Gasifier</li> <li>Gas Scrubber</li> </ul>	H <sub>2</sub> rich production: <ul style="list-style-type: none"> <li>CO shift</li> <li>Acid Gas Removal</li> <li>Mercury, Sulphur</li> <li>CO<sub>2</sub> Capture</li> </ul>	Product specific costs: <ul style="list-style-type: none"> <li>Ammonia,</li> <li>Methanation</li> <li>Power</li> </ul>
	<b>\$231M</b>	<b>\$242M</b>	<b>\$174M</b>
Site Capital	Buildings, Water, Tanks, Civils, Electrical, External connections \$232M		
Project Capex	Contingency, EPCM and Owners Cost \$156M (18%)		
Total Capital	<b>\$1,035M</b>		

## Project Capital Estimate

- Capital cost estimate is based on detailed vendor submissions and estimates, equipment specifications, plot plan arrangements, and in-house data from similar projects.
- The estimate reflects current-market condition pricing for major equipment and local construction practices.



# Offtake and Product Selection / Availability

- Non-Binding Heads of Agreement currently in place for ammonia and gas offtake for GEAP
- For investors proposing to come into this investment round, opportunities exist for negotiation of long term offtake arrangements for both ammonia and gas (and longer term, potentially other products) from GEAP
- Potential for planned GEAP to also prioritise the production of larger volumes of ammonia from Stage 1, and reduced gas volumes (potential for up to 730,000 tpa ammonia from Stage 1)
- GEAP Stage 2 could see an additional 730,000 tpa ammonia, or greater
- Port of Gladstone has capability for export of ammonia – one of the largest deep-water ports in southern hemisphere
- Port of Gladstone currently imports ammonia, so little difficulty or re-configuration required to export ammonia

# CO2 utilisation

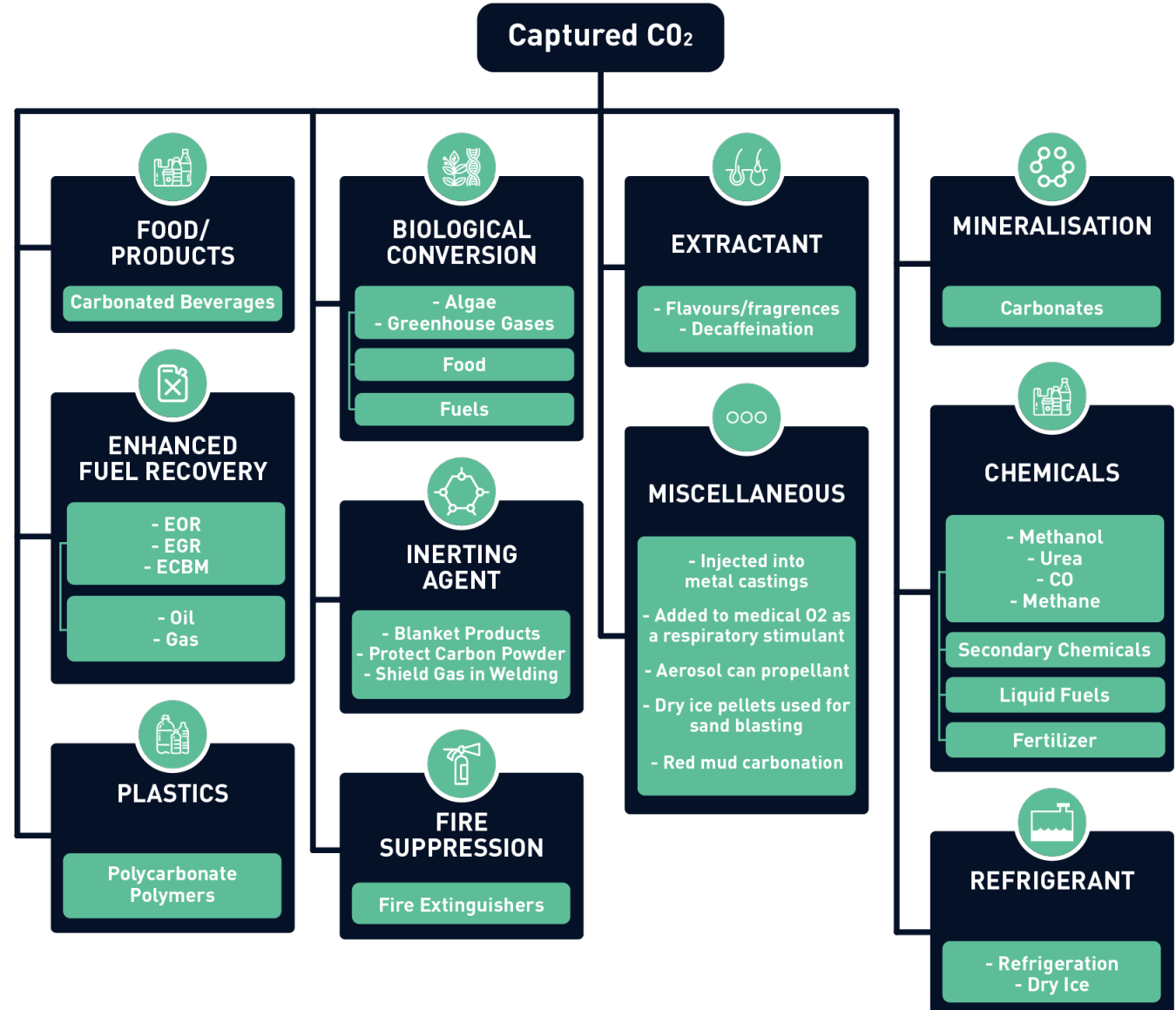
AFE is addressing the challenge of climate change through a long term, broad based strategy in which sustainable carbon dioxide (CO2) utilisation is key.

All CO2 produced in AFE facilities is captured, recovered and on-sold as a valuable product for use in a variety of sectors. In the **food and beverages** industry CO2 is used for carbonating drinks and conserving wine to modifying atmospheres for packaged foods. CO2 is also used in **the medical industry** for storage and transportation of temperature sensitive products, in construction for **building materials** and **enhanced oil recovery**.

The AFE GEAP Project gas treatment recovers, as a by-product, **>80%** of the CO2 at **~99% CO2** concentration meeting Food Grade and the requirements for the medical industry and enhanced oil recovery (EOR)



**\$USD 7.7 billion**  
**Global carbon dioxide market** (2019)  
 3.4% CAGR



# CO2 Sale Heads of Agreement (HOA) secured

## BOC Limited (part of the Linde group)



HOA in place for sales of up to 300,000 tpa of “Food Grade” CO2

- BOC ([www.boc.com.au](http://www.boc.com.au)) is a major distributor and marketer of food grade CO2 on the Australian East Coast.
- Linde ([www.linde.com](http://www.linde.com)) is a major world-wide distributor and marketer of food grade CO2.
- Strong interest from other international food grade CO2 distributors.
- Carbonation of drinks, conserving wine, dry ice, bulk food shipment and storage.

## Mineral Carbonation International (MCI)



HOA in place for sales of up to 850,000 tpa of CO2

- [www.mineralcarbonation.com](http://www.mineralcarbonation.com)
- MCI have developed a proprietary technology and process for the use of CO2 with serpentine (a mineral) to produce building products and material (bricks, pavers, etc).
- Large serpentine deposits located to the north of Gladstone.
- MCI seeking to co-locate their plant near to AFE’s Gladstone Energy and Ammonia Project.

**Gladstone Energy and Ammonia Project will be the cleanest manufacturing facility of its type anywhere in the world.**

# GEAP clean and efficient production

## 'Blue Hydrogen'

0.1 tonnes of CO<sub>2</sub> (per tonne of ammonia produced)

## 'Green Hydrogen'

0.38 tonnes of CO<sub>2</sub> (per tonne of ammonia produced)

– based on wind power and electrolysis in a Cambridge University study 2020.

## Minimal net Co2 emissions



Category	Amount (tpa)	Comments
Total CO <sub>2</sub> production per annum from GEAP	1,774,090	Per SNC Lavalin PFS
Total CO <sub>2</sub> Captured and Sold as Marketable Product	(1,361,000)	Sold as valuable market product – food grade CO <sub>2</sub> and for building products – BOC and MCI
Total CO <sub>2</sub> Captured and Sold as part of Waste Gas for Power Generation	(390,000)	Waste gases sold to Power Generator for power generation purposes
<b>Net Emissions From GEAP</b>	<b>23,090</b>	



# Development financing well progressed

## Project economics are compelling

GEAP can support significant project debt :

- Indicative debt to equity ratio 70 / 30.

Significant progress on project debt :

- Construction Finance Facility Agreement \$USD 650 million (SDI Global) – engagement letter signed along with high level terms sheet.
- Strong interest from Northern Australia Infrastructure Facility (NAIF) – advanced discussions –\$AUD 300 million – draft Terms Sheet being progressed.

Strategic partners – industry participants are evaluating equity participation.

Key drivers of interest in development financing are :

- Long term offtake arrangements that are in place with local industrial users – Tier 1 ASX listed off-takers with scale and credibility.
- High quality and reputable EPC service provider on board (SNC Lavalin).



Yima Gasification Plant



## Environmental

- Use of process inputs such as water, biomass, coal and municipal wastes to produce clean hydrogen products whilst enabling carbon emissions reduction.
- Low carbon intensity feedstock for industry (ammonia, methanol, refineries, steel) and long - distance transport (aviation, marine).
- Clean Hydrogen from gasification comes from managing by-products in a socially responsible and ethical manner.
  - Sulphur – saleable commercial product to local and Asian markets offsetting the current import reliance
  - CO2 – high purity CO2 capture and processing ready
  - Ash – further manufactured for usable building products and infrastructure
- Meeting lower GHG emission criteria and other air pollutant standards.
  - Hydrogen has significant environmental and health benefits reducing CO2, tailpipe particulates, and NOx emissions.
  - AFE production has nil - minimal NOx / SOx / particulates.



## Social

- Each of the 3 projects deliver :
  - 1,000 direct jobs during construction and over 250 direct skilled jobs, located regionally during operations.
  - Estimated more than 1,280 sustainable indirect supply chain jobs (Queensland Resources Council).
- Establish a new export industry in line with Australian Government economic and fuel security objectives.
  - Its potential as an industrial and transport fuel contributes to broader sustainability criteria at regional and national levels.
- Promote Green Hydrogen Research and development in accordance with Governments Hydrogen Strategy.
  - Provide R&D and community education access facilities .



## Governance

- Queensland Hydrogen Strategy contribution from local and international investment and overview.
  - Delivering economically sustainable operations.



Ariel view of Gladstone State Development area





**Edek Choros – Chairman**

- Australian Future Energy Pty Ltd founder (2014).
- Geologist of 30 years with expertise in coal exploration, mine design, mine planning and management of 'turn around' operations in Australia and USA.
- Founded successful hard coking coal mine Millennium Coal Pty Ltd (1999) in Bowen Basin, QLD, sold to Excel Coal Ltd (2004).



**Richard Barker – Non-Executive Director**

- 30 years in investment banking and corporate finance.
- Director on private company and ASX listed boards in the resources sector.
- Corporate finance skills and corporate strategy expertise.
- Former Managing Director and Co-head Metals & Mining RBC Capital Markets.



**Duke Runnels – Non-Executive Director**

- Managing Director - TR Winston & Company
- Former President – Fort Properties Inc.
- Former Managing Director – CBRE investors
- Former Senior Vice President – Oxford Properties Inc.



**Jeff Gerard – Non-Executive Director**

- 40 years of international mining and investment experience.
- 25 years with Glencore in the resources sector.
- Corporate finance skills and corporate strategy expertise.
- Chief Development Officer, COO Americas, COO South Africa, MD / CEO for several private companies
- Non-executive Director for a number of ASX and TSX listed companies.

# Experienced Management



**Mick Spencer – Chief Executive Officer**

- 30 years in the mining and resources sector including executive roles with BHP and Wesfarmers.
- Mining Engineer with expertise in operations management, business development, feasibility studies, project management and corporate strategy development.
- Secured multiple major mine and port development investment and regulatory approvals.



**Luke Gracias – General Manager**

- 27 years in Environmental Management.
- Approvals Manager for \$6 billion Kevin's Corner and South Galilee Coal mines.
- Approvals Manager Carbon Energy - Coal Gasification Project.
- Lead Engineer Carbon Energy - Coal Gasification Project.
- Strategic Advisor Water APLNG Origin - \$30 billion Coal Seam Gas.
- Strategic Advisor GLNG - \$30 billion Coal Seam Gas.



# Investment opportunity

**\$USD 20 million investment required into AFE, for a 20% shareholding interest in AFE**

**Product offtake opportunities also available (ammonia)**

## **Use of Funds :**

- Obtain GEAP approvals and Final Investment Decision (FID) by mid 2022 (EIS complete, BFS complete).
- Advance other portfolio projects to PFS and approval commencement (Surat Basin Hub and Pentland Hub).
- Cost of Offer, Working Capital.

## **Structure :**

- Can be completed in tranches
- Proposed for issue of ordinary equity.

<b>Use of Funds</b>	<b>Amount \$USD</b>
Advance Gladstone Project to Final Investment Decision	16,500,000
Advance Surat Basin and Pentland Projects to PFS Stage	1,000,000
Costs of Offer	1,000,000
Working Capital	1,500,000
<b>TOTAL</b>	<b>\$USD 20,000,000</b>

# Strategy to Initial Public Offering

Key project and company deliverables include, but not limited to:

- Continued progression on EIS process and approvals
- Finalise long form offtake agreements
- Finalise BFS
- Terms Sheet Agreement for Green Hydrogen plant
- Progression on Construction Finance Facility
- Terms Sheet Agreement in place with NAIF
- Binding Terms Sheet Agreement with BOC and Mineral Carbonation around CO2 offtake
- Further Terms Sheet Agreement for additional Food Grade CO2 offtake



# Investment highlights and recap

## The growing hydrogen economy

**'Blue Hydrogen'** – providing sustainable and clean hydrogen, at scale, and at a competitive price.

**Favourable market dynamics** - Energy (ammonia and gas) supply concerns, AFE meeting a strong need.

**Competitive cost of production** – Delivered ammonia and gas prices are compelling.

**Proven gasification technology** - Exclusive rights, commercially operating large scale plants.

**Gladstone Hydrogen Hub** – well advanced, can provide scale, certainty and timeliness.

**Ammonia** – efficient and recognised transporter of hydrogen, and for agricultural use.

## Strong support

**Queensland Co-Ordinated Project** – 'Project of Significance' to State of Queensland.

**Strong State and Federal government support** – Plant site secured, recognise need for secure energy supply, jobs and growth.

**Strong local and community support** – Seeking further industry development and investment.

**Experienced board and management** – Strong successful track record.

**Key alliance partners** – SNC Lavalin, Orica, Santos, BOC, NAIF.

## Forward thinking investment

**Future growth opportunities** – expansion of Gladstone, and development of Surat Basin and Pentland; easily scalable and replicable.

**Development financing** – well advanced with construction finance facility and with NAIF.

**Multiple feedstock sources** - Access to several resources.

**Offtake advanced** – Agreed terms with Tier 1 off-takers for ammonia and gas.

**Attractive financial returns, strong investment case.**





# Australian Future Energy



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