



ENENERGY

The Green Oil Opportunity in Australia

The World **NEEDS NEGATIVE Carbon Emission Energy
Green Oil **CAN** be the Answer**

Green Oil IS Proven

Starkraft Biomass Plant, Norway.



What we need to understand about Green Oil.

Energy production from biomass (**Green Oil**) has long excited interest and development in the quest to effectively supply the world's mass energy requirements.

Refining biomass to produce **energy** products and **fuels** has the potential to **replace substantial**, if not **all**, fossil fuels on a global scale.

Particularly:

LIQUID REPLACES OIL



LIGNIN REPLACES COAL



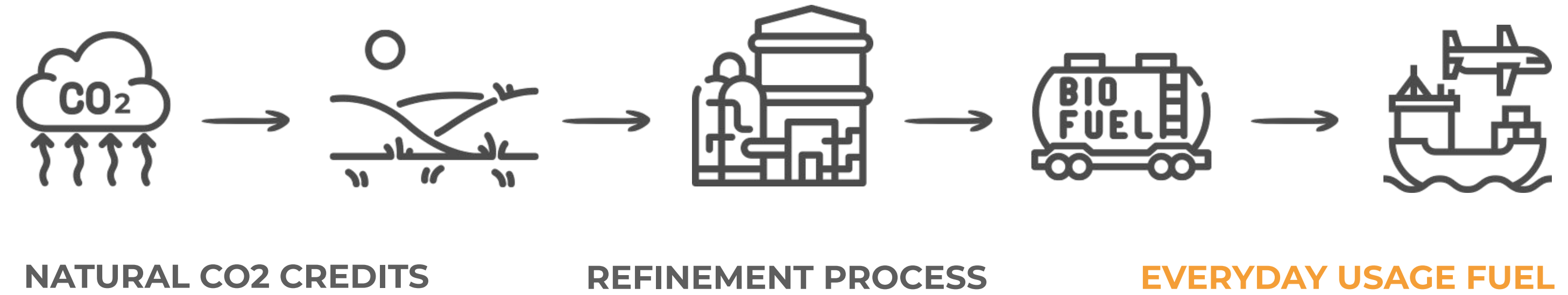
What has changed?

Making energy and fuels from Biomass has been around for centuries – while there are plenty of ways to convert plant matter to energy, the technology and capabilities have made quantum leaps this century.

It all starts with the same: **biomass**, and ends up with the same: **liquids** and **lignin**. **Production** though is surprisingly different.

This century has seen new processes and technologies in oil and energy production from biomass. Now seawater and previously arid land can be combined to produce biofuels at scale, efficiently and cheaply. New and improved refining processes have changed the use case scenarios.

Green Oil **IS** our Future



4 TONNES of carbon goes into the ground for **1 TONNE** of refinable biomass. It is the **ONLY** solution that can replace **ALL** fossil fuels while delivering negative carbon outcomes.

BioMass energy generation projects are happening around the world.

- Poet DSM Project Liberty - Iowa, United States - [PDF](#)
- Enna Biomass Project - Sicily, Italy - [SOURCE](#)
- Borregaard BioRefinery - Norway - [SOURCE](#)
- Drax BioRefinery - United Kingdom - [SOURCE](#)
- BP Western Australia Refinery construction - [SOURCE](#)
- Rio Tinto in the Pilbara - [SOURCE](#)
- Biomass and Fuel Projects developments globally - [SOURCE](#)
- Trial Projects in Australia - [SOURCE](#) and [SOURCE](#)



Green Oil **CAN** relief Crude Lignin **CAN** fill Coal's role



Substantial demand for Biofuels.

In Australia alone, there is **substantial** demand and use cases for “Green Oil” products - this is particularly so in areas where high emitting fuels are currently used.

- Aviation and Shipping Fuel
- Heavy Transport
- Manufacturing

The Australian market is currently 600,000 barrels per day and the global market is in excess of 60 million barrels a day... effectively **unlimited demand**.

Lignin has enormous potential to replace coal.

AS **ENERGY**

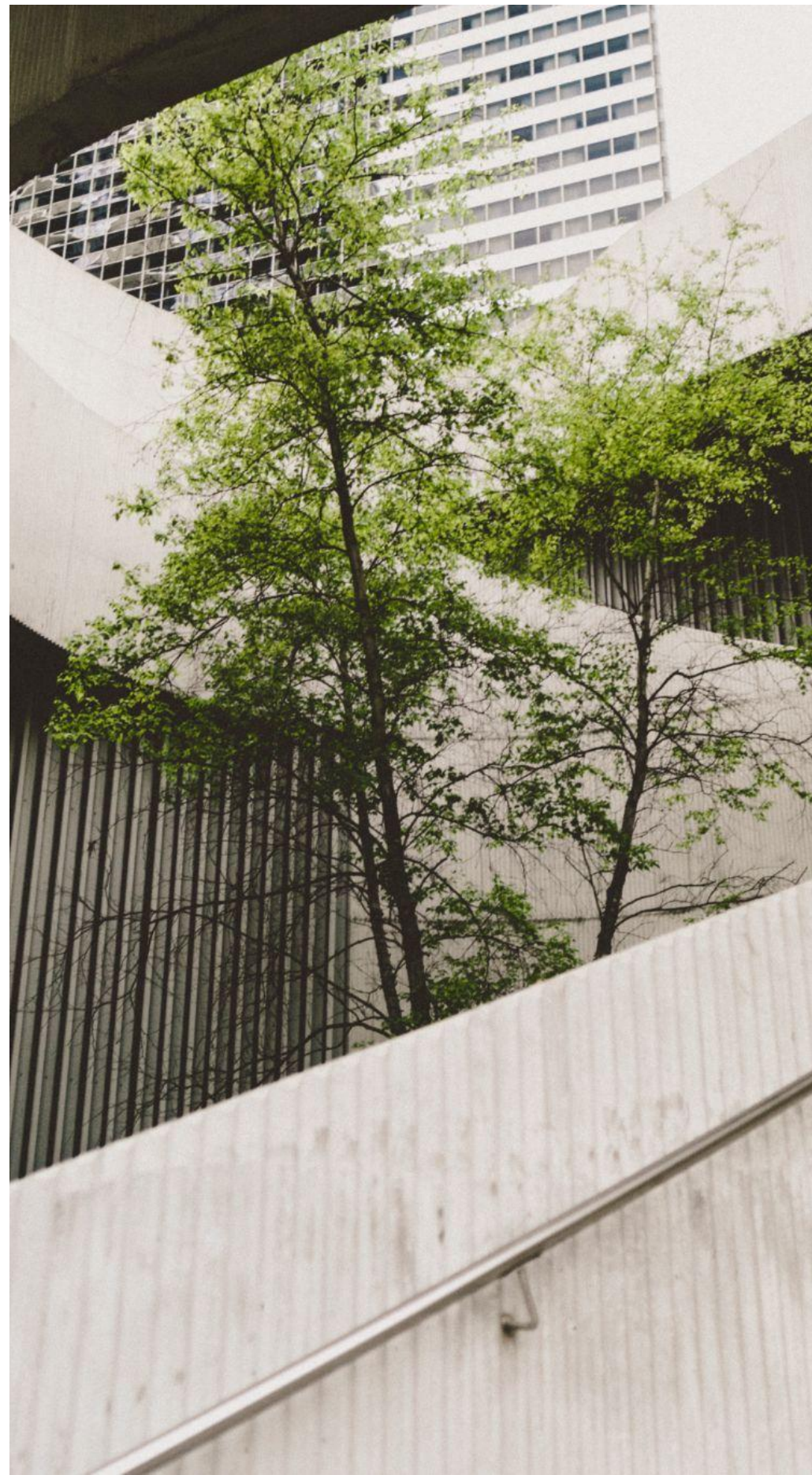


AS **POWER GENERATION**



- A substitute for metallurgical coal in the steel making process
- A base fuel for power generation in Australia
- A base fuel for various other heavy industry processes such as papermaking

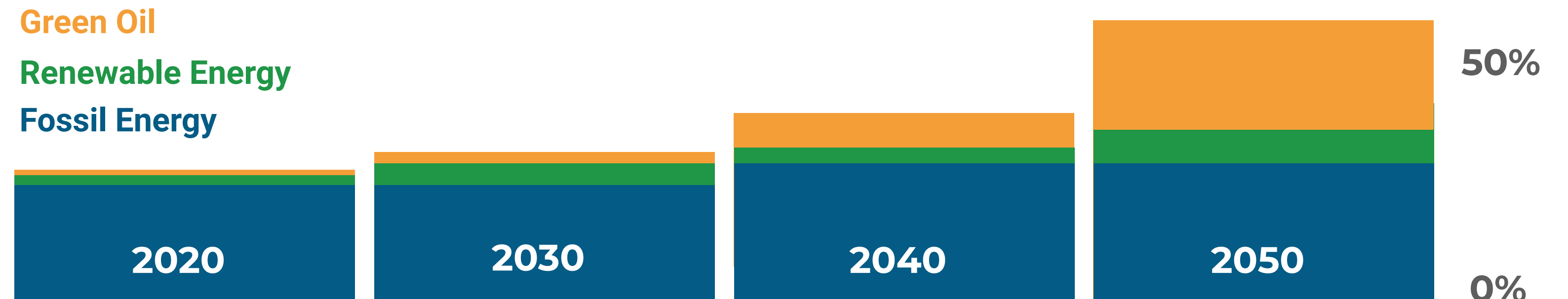
ACHIEVING Net Zero



The World needs **CARBON NEGATIVE** energy sources.

Renewable energy generation **won't get to 50% reduction by 2030** or negative by **2050**. Even if you believe that as yet undeveloped new technology will materialise, **it's still below the line**.

If we are to get anywhere near ambitious renewable generation and emissions cuts targets locally and globally, we need to develop mass market sources of negative (i.e. reducing carbon emissions) energy.



Green Oil **CAN** substantially help fill that void.

Large scale BioMass production **needs to happen** if Australia, and the World, is to come anywhere close to realising carbon abatement goals.

The extra advantage is that **current processes and uses will not need to change** - in most cases biofuels just replace fossil fuels ... users systems, plants and engines remain the same.

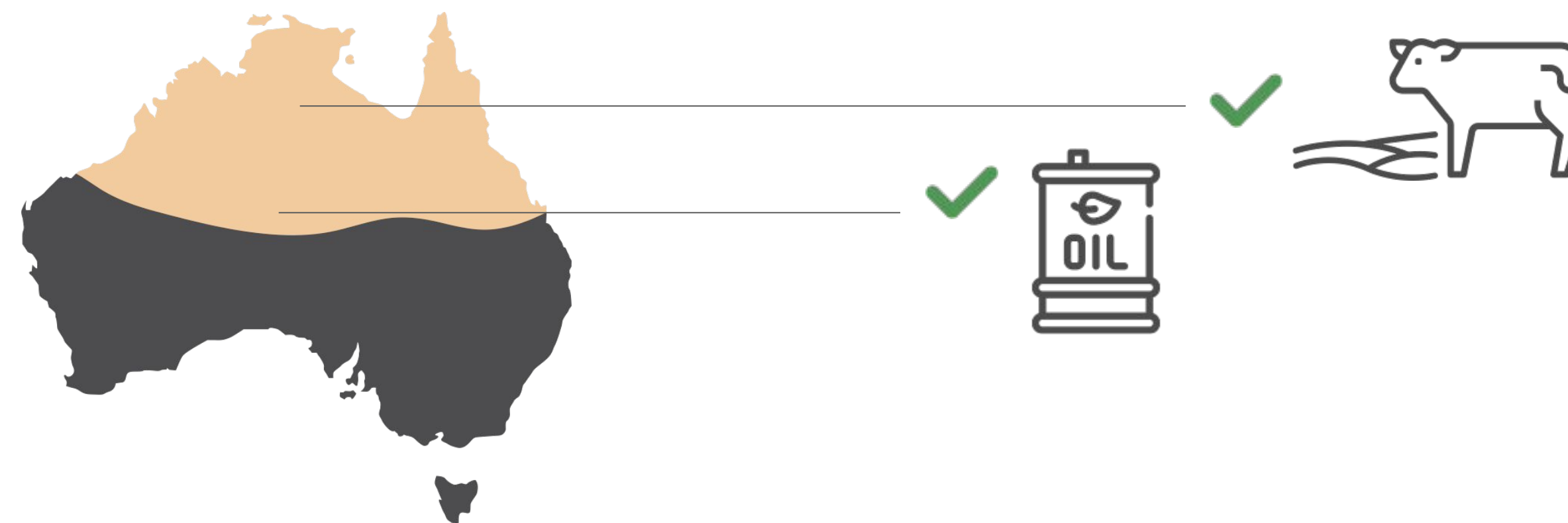
WHERE can we Produce Green Oil?



Australia has the **PERFECT** environment for Green Oil.

At ENEnergy we have spent years scouring the globe looking for “**the right hole**”. In other words, the best sites and conditions for substantial Green Oil production.

Remote Northern Australia



Northern Australia has

- Ample space and suitable (barren) land
- Right profile of sun, land and water
- Low alternative uses
- Modern infrastructure and capability
- Stability - Politically, Strong economy
- Huge projects and resources sites already - a strong heritage
- Resourceful, skilled and determined people

Green Oil **POTENTIAL**



Compelling Macro Financials... Australia **CAN BE the cheapest, and largest, producer in the world.**

“In WA alone, there is enough barren land that could be utilised to provide all the world’s crude oil requirements.”

We believe Green Oil can be produced in Australia at scale for circa \$30 a barrel.

- \$20 - \$25 a tonne to **produce** biomass
- \$50 - \$75 a tonne to **process** biomass
- Producing 2.5 barrels of oil *i.e.* \$25 - \$40 a barrel

However CO2 Credits alone will take production costs below zero.

We estimate that every tonne of production will deliver a CO2 credit equating to \$120 a tonne.

Plus generate other fuels and income.

- + Stock Feed
- + Solid Fuels (Lignin)
- + Water

How will we do this?



Australia's Remote **Cattle Stations**

IDEAL for Green Oil.

- Suitable large scale land ✓
- Suitable water resources and access ✓
- Most Permits and Regulatory Approvals in place ✓
- Agreements with Indigenous owners can be accommodated in the framework of current ownership ✓
- Large but independent land mass ✓
- Can be effectively scaled ✓
- Transport Capabilities ✓
- Capital availability and efficiency ✓

- + **Green Oil production can greatly enhance property value through CO2 credits, soil improvements and increased water resources.**



About **ENENERGY**

Committed
Visionary
Collaborative

Experience, knowledge and proprietary technology.

- **Deep Industry Knowledge and Experience** - we are oil industry veterans with the contacts and market knowledge to deliver a greenfield oil project - we know pricing structures, how to structure offtake agreements and working with the industry
- **Access to industry people and entities with established track records** - we have worked on several large oil projects around the world. We know the global oil sector.
- **World leading technology and capabilities** for Green Oil production via proprietary solutions enabling quicker and more efficient production of fuels (process overview available on request)

We intend to focus on speed instead of yield ... generating substantial sequestration income will take feedstock costs (the biomass) negative.

Our favoured production process focuses on speed and energy efficiency while others focus more on yield. We will be **4.5 times faster** than other biomass producers, but with less yield.

This is the right option for large scale operations processing **large quantities of cheap biomass fuels and products**. Our approach is very well suited to **Australia**.



About **ENENERGY**

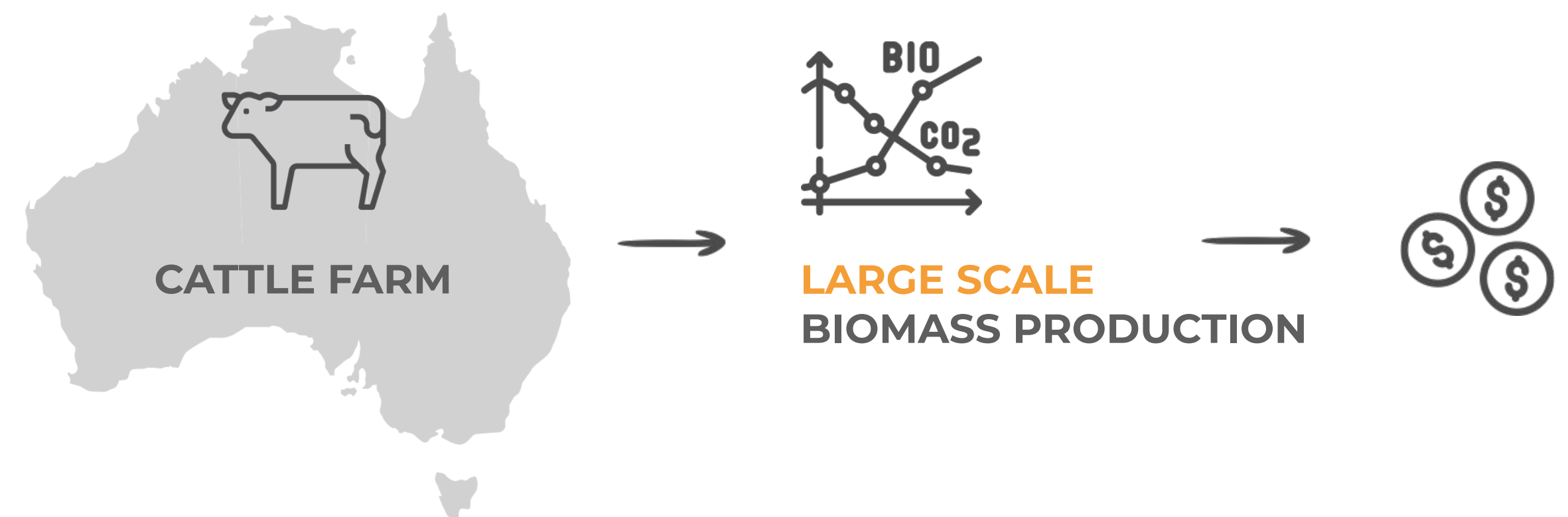
We have the experience and vision to bring this to fruition.

Our technology and Australia's landmass can deliver new fuel sources and massively reduce our carbon footprint.

We can partner with cattle station owners and operators to firstly conduct small scale trial operations and feasibility programs - then develop a large scale BioMass fuel production operation.

We are confident production and land usage costs can be effectively de risked through a combination of fuel production, land improvements and carbon sequestration income.

Once operating, producing feedstock (biomass) will actually be income producing independent of fuel generation, through delivering carbon credits.



Project Ginan



ENEnergy can project manage the establishment of a Green Oil production operation, developments, off takes, approvals, construction, feasibility.

This can coexist with existing cattle rearing activities on the stations, **effectively derisking the operation..**

Delivering

- Income through fuel sales, lignin production, carbon abatement instruments
- Also:
 - Enhanced productivity of the property - more water, more green, more cattle per hectare
 - Significant land use and infrastructure upgrade

Low risk

ENENERGY believes the Project can effectively be de-risked as the cattle stations can continue to operate side-by-side with Green Oil production - in fact operations and efficiency will be enhanced.

After permits, tenders and offtake are in place, **investor can choose** if they want to convert their assets into a share of the company or just use land developments to increase cattle operations and access carbon sequestration income.

Project **Ginan**. 5 Steps to a Bankable Project



1. **LAND** Identify and evaluate suitable sites and locations



2. **PERMITS** Indigenous Agreements, Land Use, Water



3. **EPC** Liaise, evaluate and manage engineering, procurement and construction contractor



4. **CO2 MODELLING** Independent auditor and assessment



5. **OFFTAKE AGREEMENT** Secure MOUs and agreements

Leading to - A Fully integrated Development Plan.
Ready for Project Financing.

The minimum required of **10,000 hectares** for scale and production with **7,500 barrels a day** output.

ENEnergy **will project manage** the establishment of this operation, developments, off take, tender & docs.. a full consultancy.

Big Blue Sky



JV with a major for large scale production and efficiency

ENEnergy brings proprietary know-how, established contacts and implementation experience with world leading and the latest technology in biofuel production.

The Opportunity

Establish first mover advantage in Australia's Green Oil industry.

Diversify and upscale the value of existing landownings (for existing property owners)

ENEnergy can advise and partner through the process

Ownership for go alone:

1. Land (cattle station purchase or long term lease, or particle access)
2. Plus 50 million USD (est) for our technology
(If JV invest 50, ownership will be 50/50)
3. ENEnergy also want five percent royalty of energy sales
4. Our early appraisal is that it will require circa US\$250 Mn to bring a site into production

