Our energy transition

VIVA EnergyAustralia

Viva Energy Australia

A leading retail, industrial and energy business with a history spanning more than 120 years in Australia

- **Largest single-branded, company-operated retail network in Australia**
  - operates a convenience and fuel network of almost 900 stores across Australia and supplies fuels and lubricants to a total network of nearly 1,500 service stations.
  - Current brands include: Shell (fuels and lubricants); OTR, Coles Express, Reddy Express, Liberty (convenience)
- **Leading positions in key commercial sectors, supported by deep customer relationships**
  - Strategic partner to Australian Defence force
  - Supplier to customers big and small across Australia with many customer relationships spanning decades
  - Committed to working with customers on their sustainability journey (carbon offset fuels, low carbon fuel trials and development)
- **Nationwide infrastructure connected to key markets, backed by Geelong Refinery and international capability of Vitol**
  - own and operates the strategically located Geelong Refinery in Victoria (1 of 2 remaining refineries)
  - operates bulk fuels, aviation, bitumen, marine, chemicals, polymers and lubricants businesses
  - supported by more than 20 terminals and ~80 airports and airfields across the country.
- **Significant national employer – around 15,000 employees**
  - Leading on D&I metrics with strong female representation in Exec team, Senior leaderships group and at Geelong refinery

Viva Energy supplies around 25% of the Australian fuel market[1]

We maintain a position at 55 fuel import terminals and depots and own major high-pressure pipelines in key locations

National infrastructure

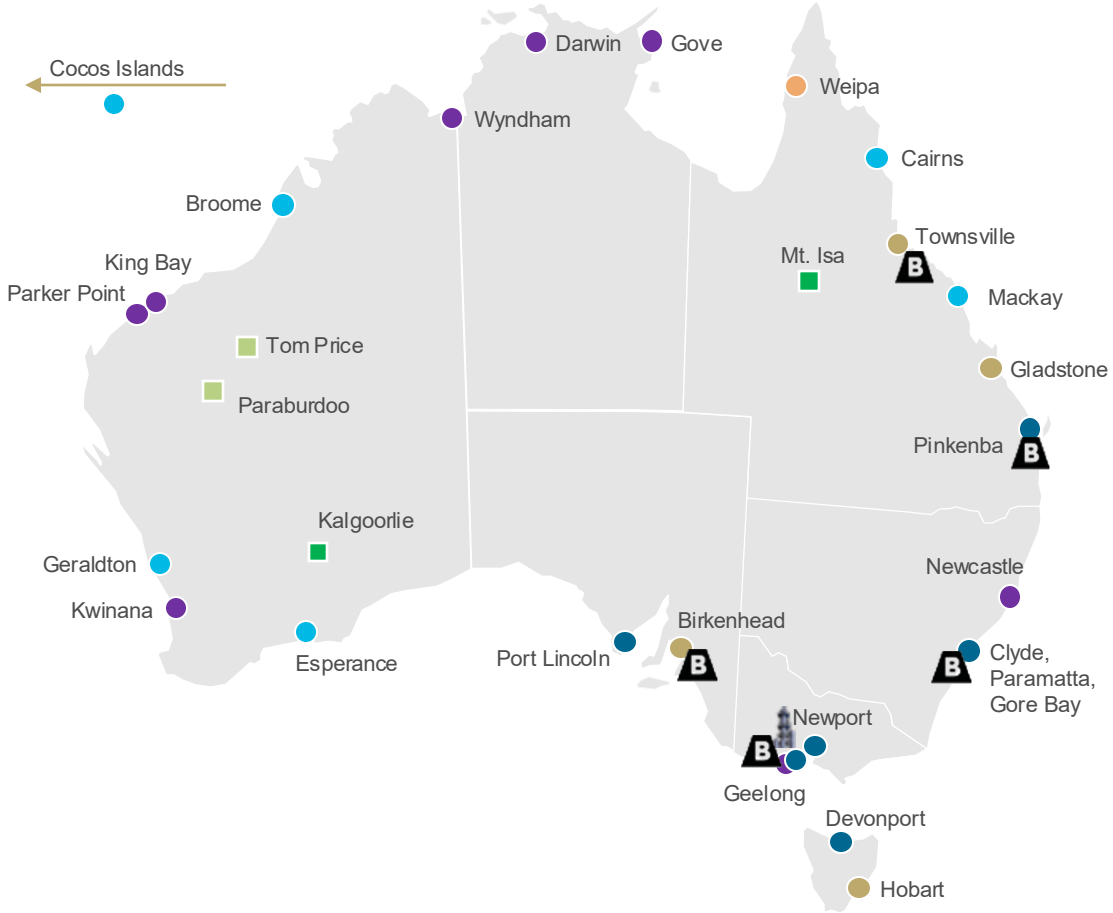
- Geelong Refinery
- Bitumen facility

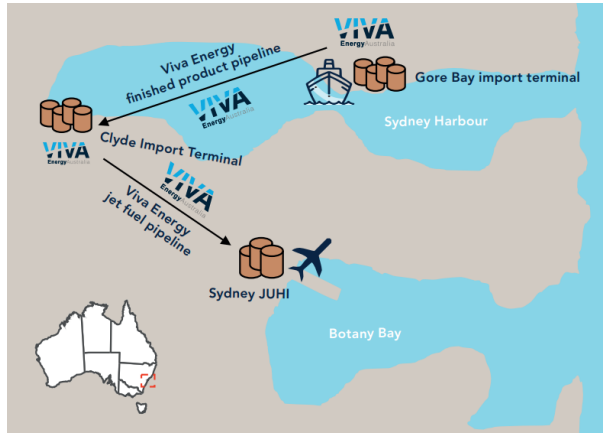
Terminals

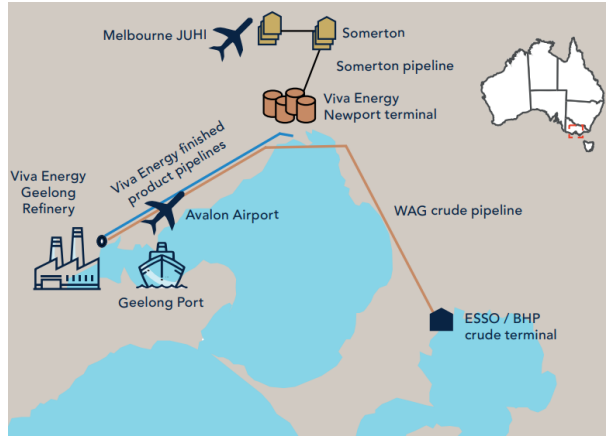
- Freehold
- Leasehold
- Joint-venture
- Third-party (VEA operated)
- Third-party (access)

Depots

- Inland depots
- Third-party depot (VEA operated)







1. Market share based on total Company fuel volume sales over total industry fuel volume sales. Source: Australian Petroleum Statistics (APS).

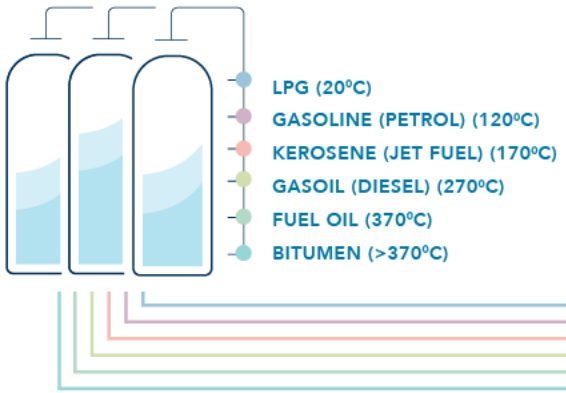
The refining process

1. Delivery

Crude oil arrives at the refinery by ship, road tanker and pipeline.

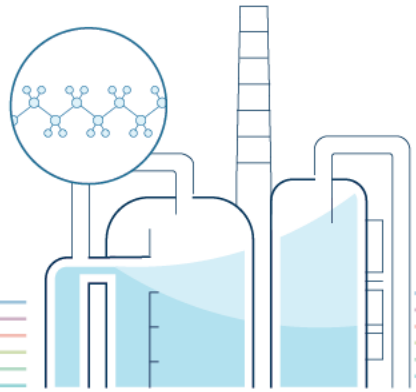
2. Distillation

The crude oil is heated and separated in crude distillation towers.



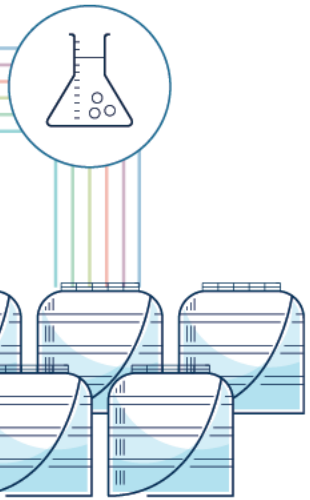
3. Conversion

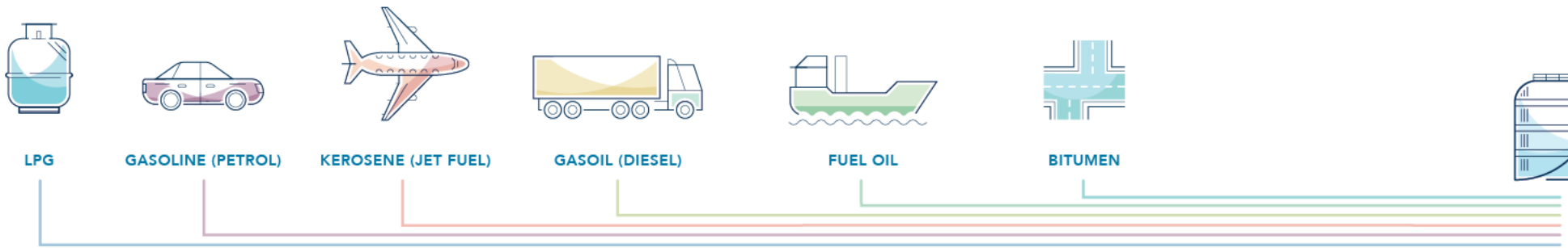
Conversion Units change the chemistry of the oil to make transport fuels.



4. Blending

Fuel components are blended and the fuels then tested in our laboratory.





5. Storage

Refined products are stored in tanks, ready for distribution.

6. Distribution

Ships, trucks and pipelines deliver our fuels to wherever they need to be.

Geelong Refinery

Providing critical infrastructure, jobs and energy security for Victoria

55% Victoria's fuel supplied by Geelong refinery

900+ high skilled and high paid jobs in a regional centre

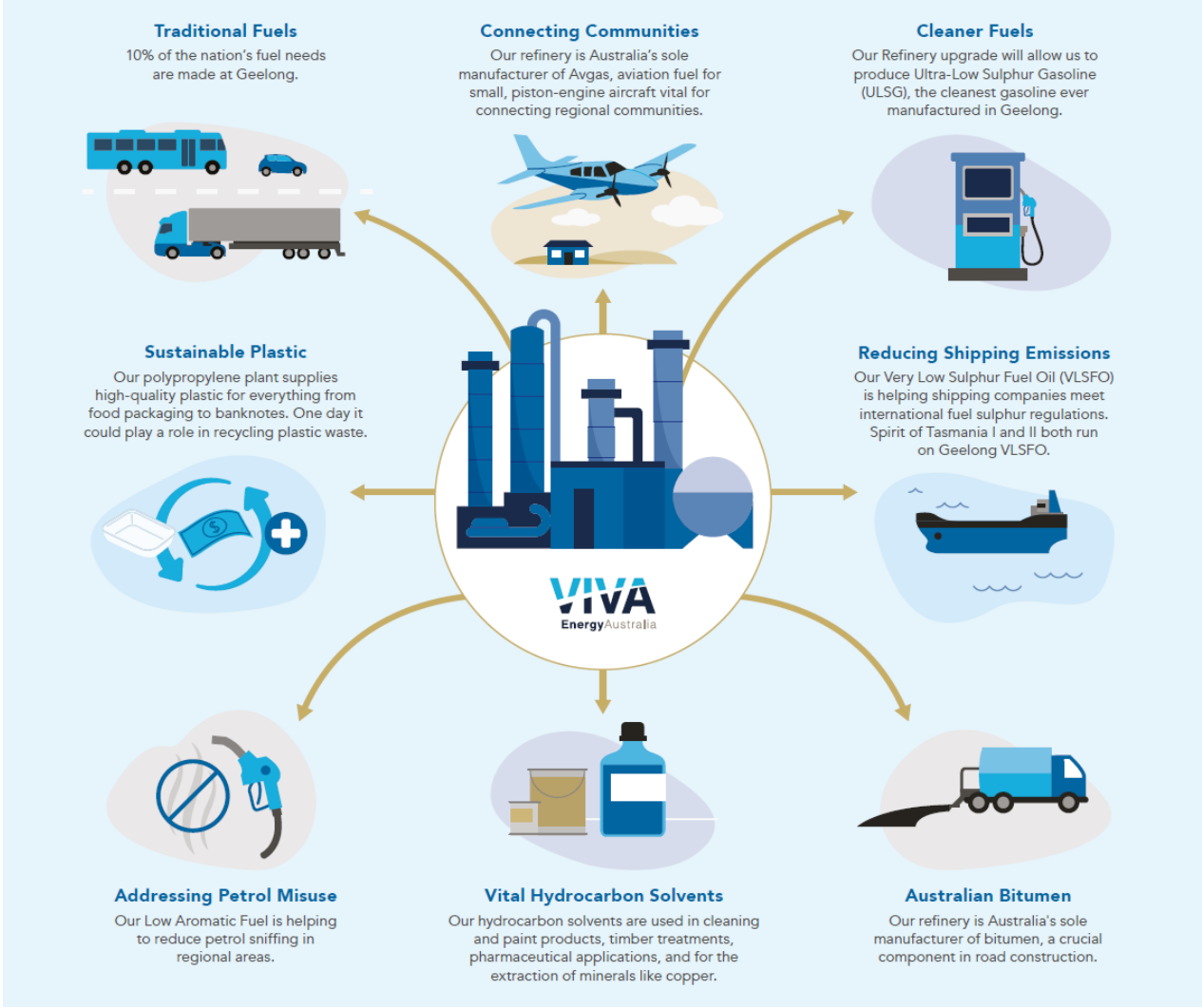
Last manufacturer of many specialty products

1 in 2 flights in Victoria fuelled by the refinery

Half of bitumen used for Victorian roads comes from Geelong

90% marine fuel oil needed in Victoria comes from Geelong (commercial shipping, cruise, Spirit of Tassie)

Two pipelines delivering fuel to Melb + pipeline connection to Melb airport



Long-Term Transition of Geelong Energy Hub

Opportunity for progressive transition to lower carbon fuels utilising existing infrastructure

Today → 2050

Existing Capability	Maximise production capability and efficiency of existing hydrocarbon refining facility	Repurposing Conversion (Terminal / Processing)
Co-processing	Co-processing bio and waste feedstocks to produce lower carbon fuels and recycled plastics	
Import and Blending	Importing and blending renewable fuels to meet growing demand for lower carbon fuels	
Dedicated Processing	Dedicated production of fuels and recycled products from renewable and waste plastic feedstocks	

SAF infrastructure solution for future

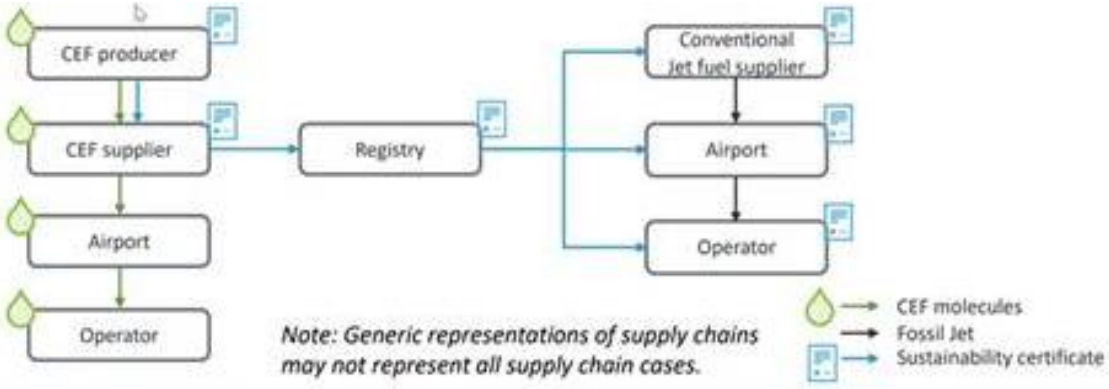
SAF project jointly funded by ARENA at our Pinkenba terminal

The key objectives of the project are to:

1. **Upgrade distribution infrastructure and provide future options:** Recondition a fuel storage tank, upgrading pipes and pumps to allow blending and distribution of SAF to the airport.

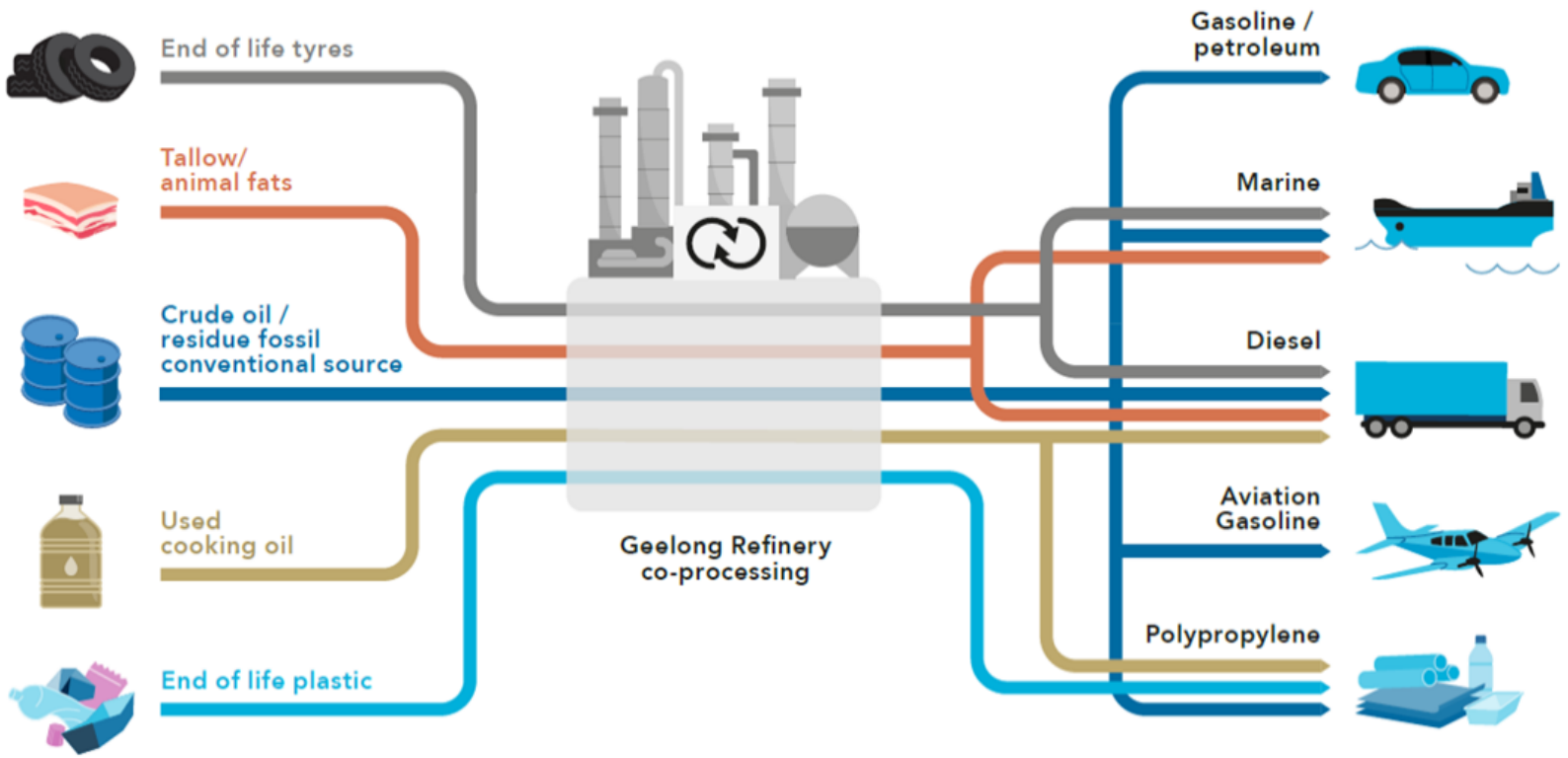
2. **Foster growth in customer partnerships:** Adoption of a book-and-claim system to enable the decoupling of sustainability benefits from the physical SAF product allowing customers to realise the carbon benefits.

3. **Build industry capacity through pilot program:** Provide the initial SAF purchase and blockchain tokens to stimulate customers to pilot the system and generate learnings for industry highlighting the use of both SAF and the book-and-claim system.



Co-processing at Geelong Refinery

Benefits of co-processing for low carbon liquid fuels



Why co-processing

- Quick start up
- Supports feedstock establishment
- Capital efficient
- Energy security

How cooking chips can make new snack packaging

Circular solution for used cooking oil

Bio-circular Polymer

- Used cooking oil (UCO) from Snackbrands will be used to create a bio-circular polymer.
- Additional UCO may also be used to create a co-processed low carbon diesel to potentially power the Snackbrands trucks.
- For every ISO tank container of UCO processed, we save 4.5 tonnes of scope 1 emissions at the refinery.
- For every ISO of UCO processed, we can produce enough polypropylene to make **~ 3 million chip packets.**

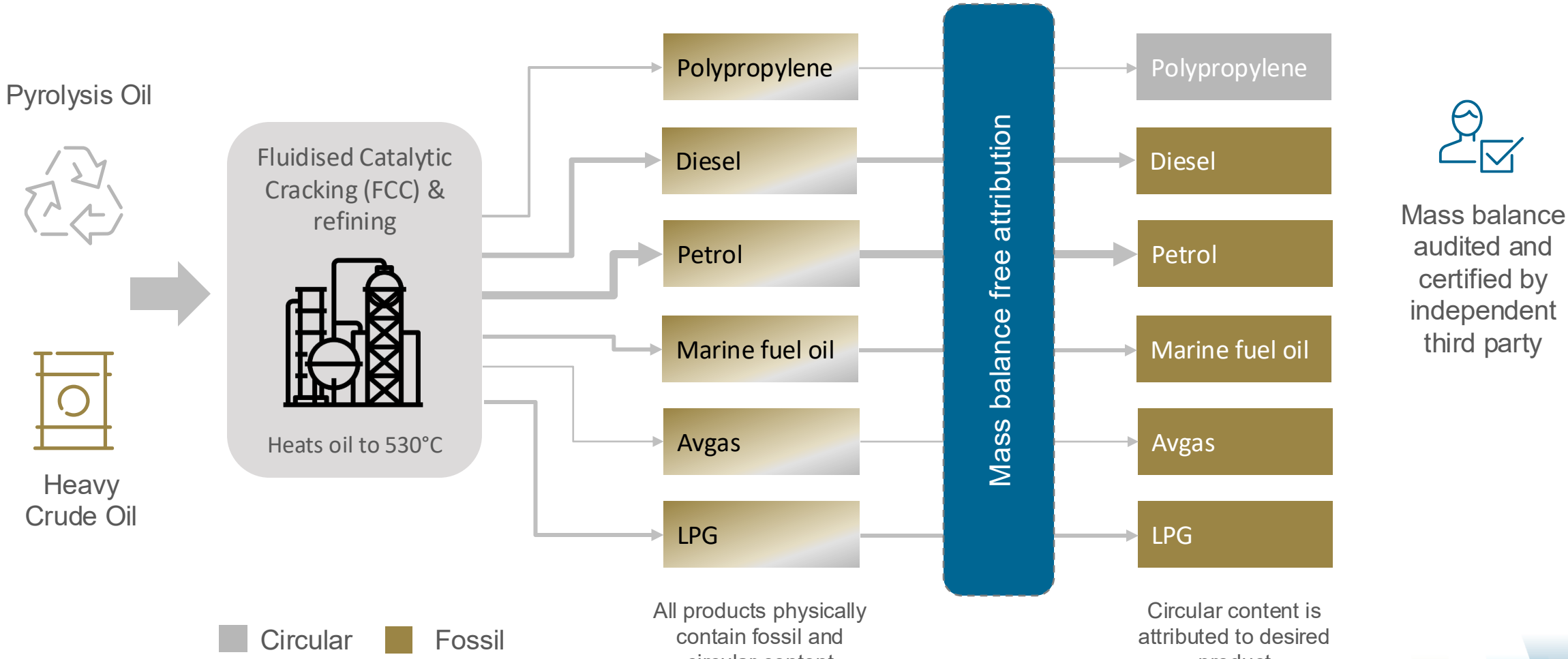
Viva Energy and Cleanaway

Circular solution for hard-to-recycle plastics

- Soft plastic collection [step 2] at scale via three different channels:
  - Bag in bin
  - Return to store / Drop-off
  - Commercial & Industrial
- Plastic Pyrolysis Oil (PPO) can displace [step 6] in excess of 100kt per annum of fossil sourced feedstock
- Identified 50kt as achievable scale for commercially viable project
- Support from government, customers and community required to achieve a circular economy for hard-to-recycle plastics
  - Community – need the ability to recycle [step 1]
  - Customers – want sustainable solutions [step 8]
  - Government – regulatory settings critical including packaging reform, EPR scheme and acceptance of mass balance free attribution

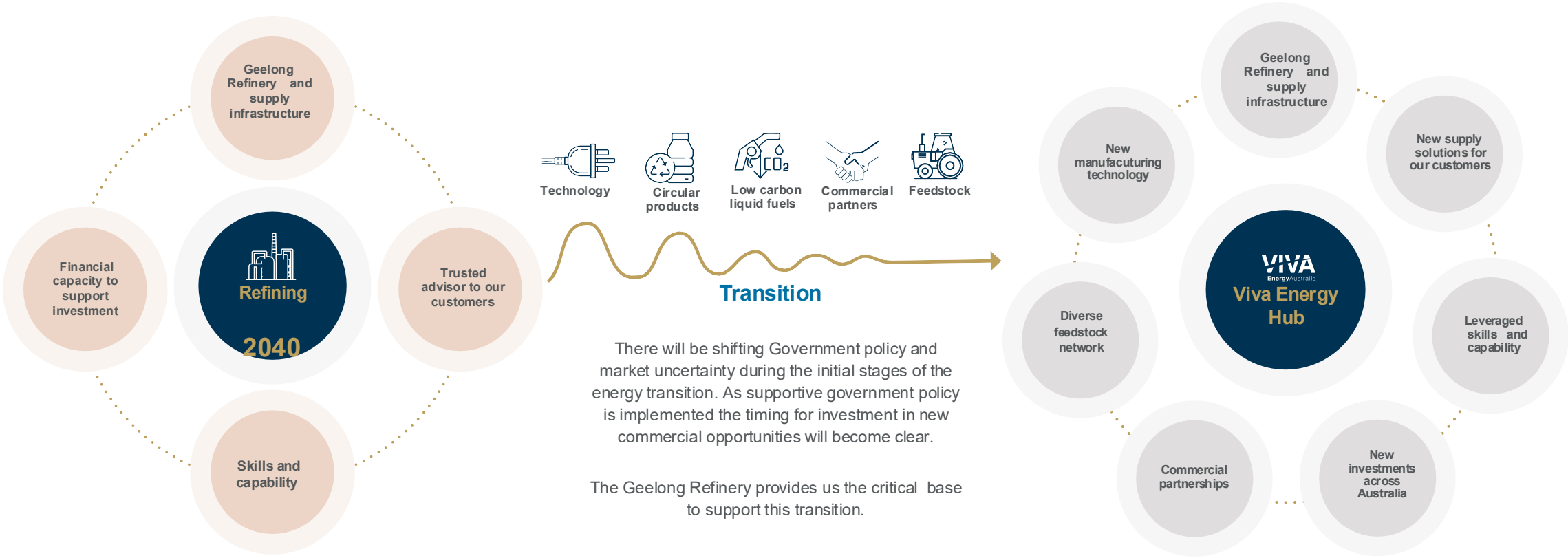
Mass balance free attribution of plastic pyrolysis oil to circular polypropylene

Critical to unlocking existing infrastructure



Emerging into the low carbon economy

We will need to navigate through high levels of uncertainty to emerge into the new low carbon economy



There will be shifting Government policy and market uncertainty during the initial stages of the energy transition. As supportive government policy is implemented the timing for investment in new commercial opportunities will become clear.

The Geelong Refinery provides us the critical base to support this transition.


VIVA
EnergyAustralia