

INQUIRY INTO BENEFICIAL AND PRODUCTIVE POST- MINING LAND USE

Organisation: MeOH GigaBattery

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As a brief introduction, I have **attached** a short presentation deck detailing MeOH's general offering – in short, the process takes various types of feed-stock, including tyres and municipal waste, puts it through MeOH's gasification process to manufacture any number of green/blue fuels that can be deployed to grid scale power or transport fuel or fertiliser or export. It is proven technology deployed in a novel way at scale.

MeOH addresses several of the issues currently facing the NSW Government. Those issues include:

- i) NSW Government needs grid scale dispatchable energy that isn't weather dependent;
- ii) Sydney faces a major issue - it runs out of waste landfill in 8 years – recycling its waste to create energy is highly attractive from a political stand-point;
- iii) NSW is on a pathway to closing down coal fired power stations which leaves the grid vulnerable:
 - (1) Liddell already closed;
 - (2) Eraring slated to close in 2028 (unless extended) and that is causing some panic;
- iv) The closure of a number of industrial sites such as Mt Arthur mine, calls for a need to repurpose those sites, preferably in a manner that is palatable to the communities and voting public at large.
- v) The Government has hard baked targets it needs to meet around CO2 emissions.

A MeOH solution at Mt Arthur would tick off the following;

- i) **Landfill Solution:** Use of waste as a feedstock - using proven technology deployed in a novel way, will help extend Sydney's current landfill horizon or buy time to find other solutions;
- ii) **Asset Recycling:** Re-purpose existing &/or recently decommissioned sites;
- iii) **Social Licence:** No social license issues by using existing industrial sites for sustainable fuel and electricity production. Both construction and operation will contribute to job creation;
- iv) **Emissions Targets:** delivering energy to the grid using sustainable fuels provides measurable/reportable performance statistics towards meeting targets – MeOH solution will generate power at a similar or lower level of CO2 emissions than natural gas and significantly lower depending on the feedstock used;
- v) **Renewables Support:** MeOH facilitates accelerated deployment of renewable energies by making them bankable – MeOH provides firming to the grid;
- vi) **Grid Redundancy/Back-up:** MeOH provides a redundancy - grid scale dispatchable energy independent of the weather and at a level and over a time interval that batteries can't.

The MeOH plant would not only provide electricity to the grid, but also electricity to the other businesses on the site. Additionally, the CO₂ could be used in the greenhouse (something that supports the Biortica/Green Farmers submission) – effectively sequestering carbon as an input to horticulture.

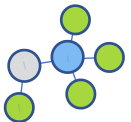
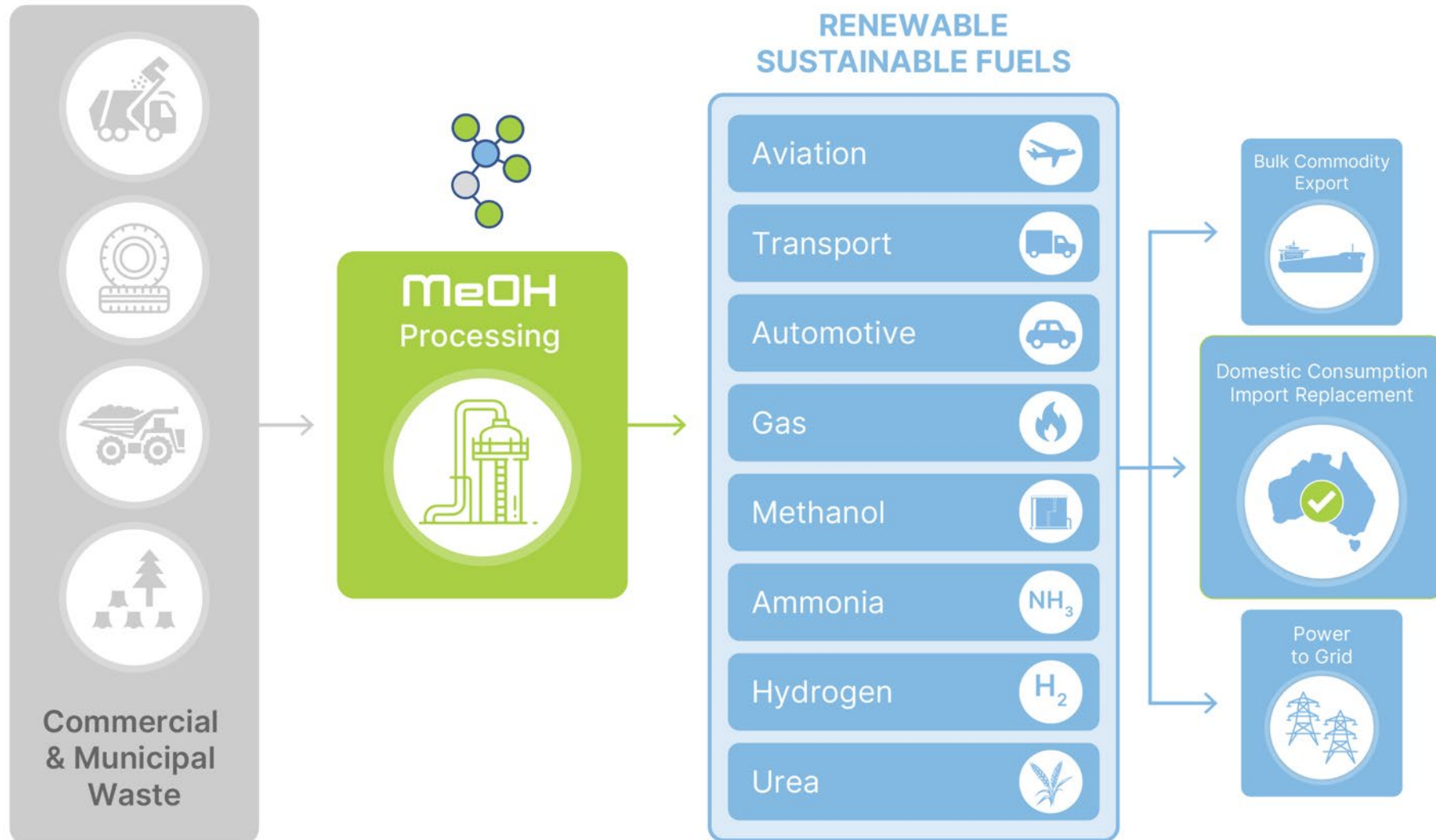
The Mr Arthur site would be perfect for a MeOH solution and would enable Mt Arthur's current assets to be recycled. To deliver its project, MeOH needs a parcel of land of approximately 6 hectares and which is close to:

- i) Transmission lines/substation;
- ii) Labour force;
- iii) Water supply;
- iv) Port;
- v) Waste delivery access points; and
- vi) In an already established industrial area (social license issues).



... sustainable renewable fuels

MeOH ...the process

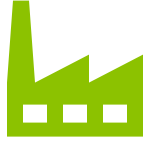


MeOH ...commercial benefits

- ✓ Cost competitive
- ✓ Conventional storage and distribution logistics
- ✓ Modular & Scalable
- ✓ Multiple revenue streams
- ✓ Australian produced
- ✓ Security of supply
- ✓ Security of cost



MeOH ... overview



Proven Technology

13 commercial installations operating at 6 locations in North America and China



Established Infrastructure Domestic Demand

100% Domestic Demand for Fuels,
Existing infrastructure in place and operational



Low Operating Costs

Commercially cost competitive



High Efficiency Carbon Management

Low / No / Negative CO₂ footprints



Feedstock Flexibility

Focus on upcycled waste products; feedstock flexibility
No reliance on gas as feedstock.



MeOH ... fast facts

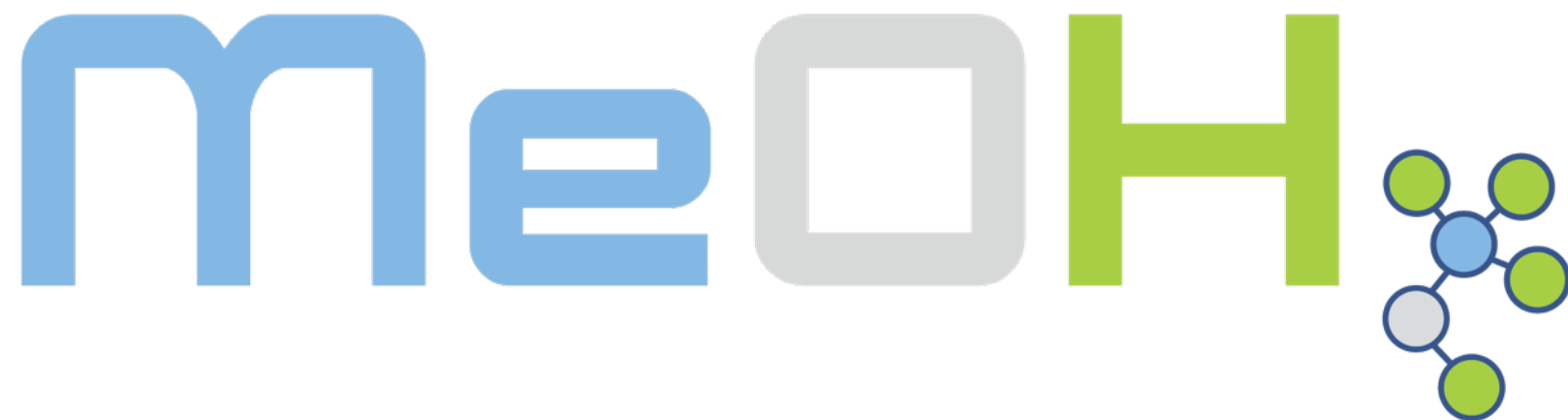
- ✓ Modular design
- ✓ 2PJ pa fuel gas production per module, (6,000 GJ/day of fuel gas)
- ✓ 500 ton per day feedstock
- ✓ Capex ~ \$75m
- ✓ MeOH process can be throttled to 30% capacity as required
- ✓ 2 ha site footprint
- ✓ 12 months to Turn-key
- ✓ Ideal brown-site upscale



MeOH ... protecting our planet

MeOH diverts societies' wastes away from landfill and the environment, upcycling and converting them into a valuable, clean biodegradable fuels.





Thank You

MEOH