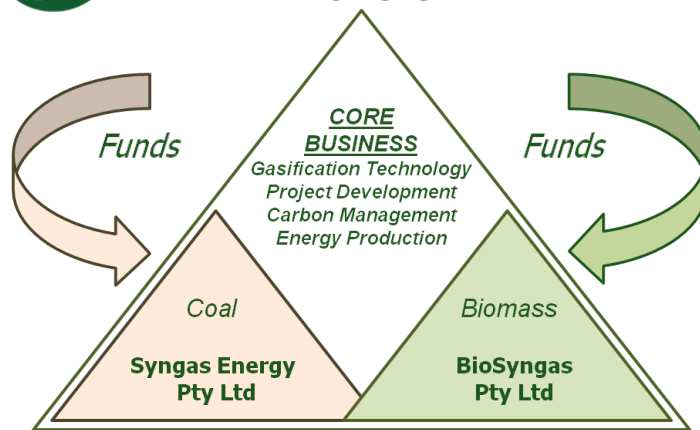


- South Australian Lignites e.g. Clinton (Salty)
- Victorian Lignites
- Queensland Coals
- International Coals



- Bomen 5 MW Project
- Crop Residues (YP/MN area)
- Other Projects

Above Ground Coal to Liquid (CTL)

Since early 2008 Syngas has, been developing the Clinton CTL Project in South Australia. The project has progressed from Scoping Study through Pre-Feasibility Study (PFS) and on into Bankable Feasibility Study (BFS) stage of development.

The Clinton CTL Plant is expected to comprise of six primary, proven technology modules i.e. coal drying, coal gasification (using Siemens technology), gas clean up (using UOP (part of Honeywell technology)), liquid synthesis (Rentech Inc), liquid clean up (UOP), supported by four secondary sections of the plant i.e. power production (GE), sulphur production, oxygen production and water treatment.

BFS work, specifically the Basis of Design stage, has been Syngas' focus over the past 2 years, in conjunction with sourcing of project funds. A fully integrated CTL plant flowsheet model has been developed based on preliminary module engineering completed. Allowing mass, energy, carbon and water balance assessments across the plant. Management of the high levels of salt within the coal requires further engineering.

Syngas is currently focussing on securing existing producing coal mine offtake agreements in Queensland and Victoria. Where small (around 3,500 barrel per day) plants could be developed providing a basis for the future development of Clinton.



First Commercial Scale RWE Coal Drying Plant near Cologne in Germany

Biomass to Energy

Syngas is at the forefront of new Biomass (Renewables) to Power project development in Australia.

Syngas is developing the Bomen 5 MWe Clean Power Project in Wagga Wagga, New South Wales. This project is at Bankable Feasibility Study (BFS) stage of development.

Biomass combustion combined with Organic Rankine Cycle processes to produce power from steam, is one of the flowsheets under development for Bomen.

A three phased development plan could see cashflow generation within 12 months, subject to funding, and phased expansion to 5 MWe in power generation at the site. Most of the power produced is under negotiation for sale to Teyes Australia Beef Processing Plant, which lies within 800m of the proposed Bomen facility.

Syngas is innovatively addressing the critical issue of securing sustainable quantities of low cost biomass feedstock suitable for power generation in a number of locations in Australia.

Crop residues (see below), energy crops (e.g. Arundo Donax, (Giant Reeds)), industrial woodwaste and woodwaste diverted from landfill, are all feedstocks under review.



Large Scale Mechanised Collection of Residual Straw

Fliegl compression trailer being filled by Forage Harvester