

WASTE TO REPLACE COAL .

For existing coal fired boilers, to produce steam for process or electricity generation, we can supply a GASOSYN™ system that can transform biomass or Municipal Solid Waste (MSW), as collected in the streets, with or without prior selective collection of paper, plastic and metal, in a SYNGAS that can be cleaned of pollutants, before firing that SYNGAS (Hydrogen [H₂] and Carbon Oxide [CO]) in a boiler to replace the coal.

We are then using an existing boiler facility and we do not disturb the production of the electricity while we are installing our material around the coal boilers.

We cannot increase the efficiency of the existing system excepted that we have clean burning with no soot which keeps a good efficiency in the boiler, no need to often clean the boilers.

Only a few weeks shut down is necessary for existing boilers, even only a few days in some type of installation or boiler type of configuration.

For a specific case, a local onsite feasibility study, which implies some costs, is needed to finalize the price and a time frame for construction and mainly to see how many days the system will have to be stopped to install the SYNGAS burners.

Normally a steam turbine system to produce electricity can use from 8 to 32 pounds of steam to produce one kilowatt of electricity, so only data for a specific case will allow us to give a price or establish which capacity could be used for a GASOSYN™, from 1 T/H to 20T/H or more . . .

As a budget price, ± 30% precision, to install a GASOSYN™ SYSTEM to replace the coal in an existing boiler facility, we can use a figure of 3 million dollars US for each ton per hour of biomass or MSW fed to the GASOSYN™ .

It means that a GASOSYNtm system transforming five (5) tons per hour of Biomass in SYNGAS for 8 400 hours a year, for yearly total of 42 000 tons, will cost 5 t/h per 3 million US dollars a total of 15 million dollars US.

A 5 ton/h GASOSYNtm will generate a SYNGAS, cleaned from pollutants, having a heating capacity of 85 000 000 BTU/Hour, from MSW composition of 60% organic, 25% humidity, 15% ash & inorganic. It could be much more with only biomass.

From same given feedstock, our new and unique GASOSYNtm technology delivers much more energy than any other competing system, including gasification systems.

On top of all this we can produce 5 tons per hour (5 000 litres per hour) of distillate water, from seawater, river or wells, which is a very good source of income or extra steam for process or electricity generation.

Normally a GASOSYNtm system should become a profit center, not an added cost to replace the coal.

This is a very significant advantage over any other process that could be proposed to replace the coal in existing boilers.

Do not hesitate to get in touch with us if you need more details.

John Dzararov