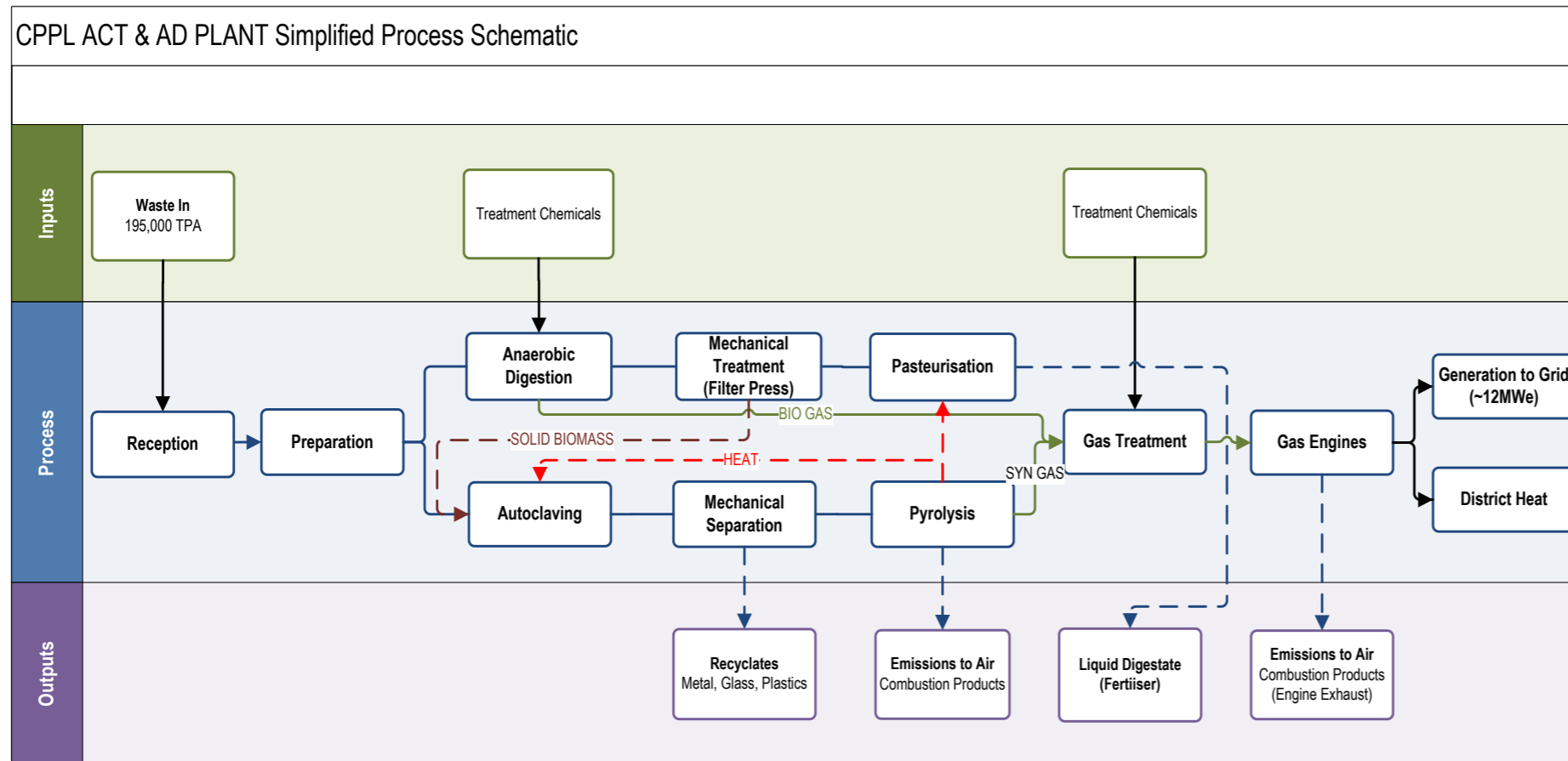


Design Proposals 4.0



4.2 Use (Function)

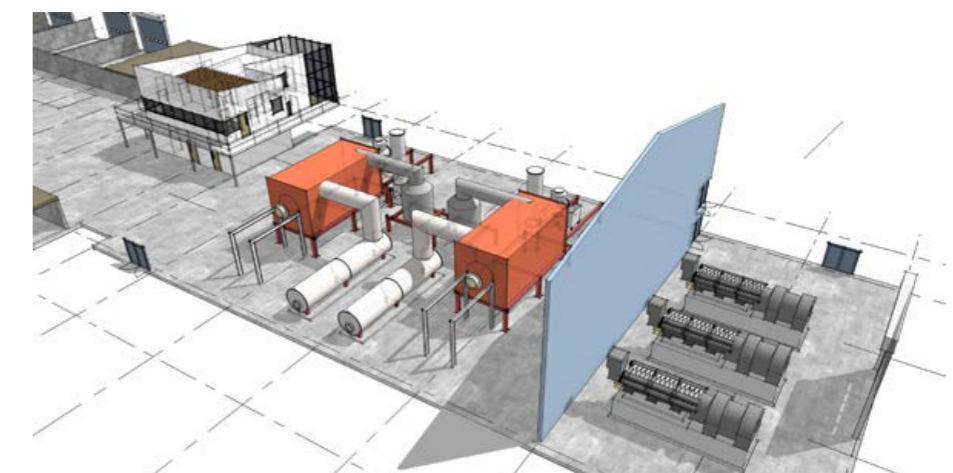
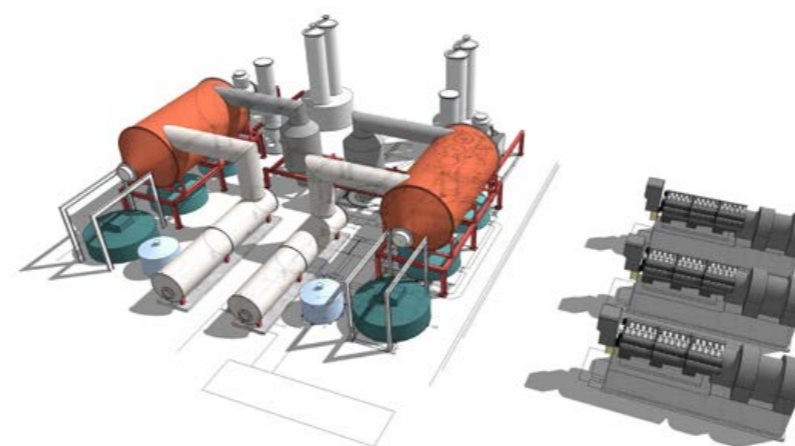
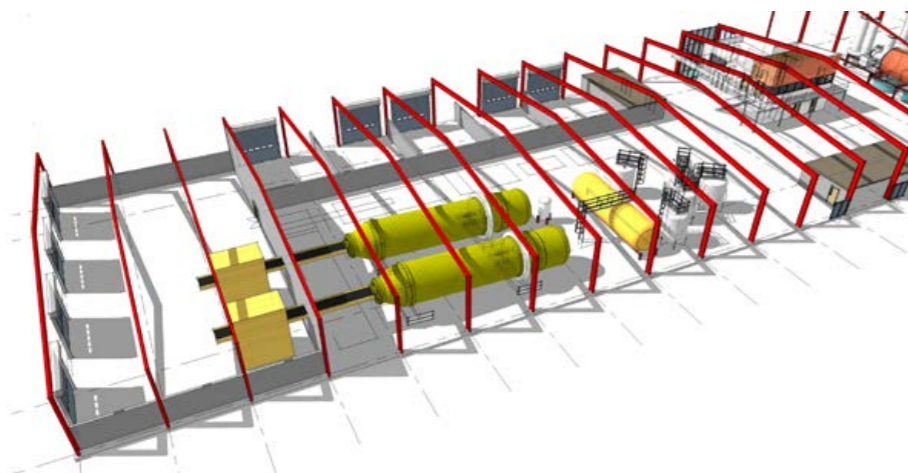
The Energy Recovery Centre comprises a single building to house a 12-15MWe Advanced Conversion Technology (ACT) and 2-3MWe Anaerobic Digestion (AD) facility and a 1MWe Solar Array.

ACT & AD Facility

The proposed ACT and AD Facility will be able to recover 195,000 tonnes of waste per annum.

The process will utilise two autoclaves for the processing of mixed source waste ('MSW') and the production of a biomass fuel product called 'Biofibe'. Each autoclave comprises a rotating cylindrical structure (c. 18 meters long and c. 4 meters in diameter), with an internal cylinder fitted with a helical screw arrangement to facilitate mixing, loading and unloading of MSW. Each unit has an operating capacity of which will be typically 20 tonnes and is designed to break up the MSW through rotation (at a uniform temperature) and application of pressurised, high temperature steam. The sterilised waste discharged from the autoclave will be transferred onto a moving floor and passed through sorting/segregation plants by means of a conveyor.

The autoclaving process reduces the original volume of the waste materials by approximately 80%, with recyclates being automatically



Energy Recovery Centre & Photovoltaic Solar Array, Eastleigh

