

⇒ The development of a 100% synthesis gas output platform from distributed organic residues (non recyclable RDF, Food & Kitchen waste, green waste treatment facilities, sewage or agricultural and industrial biomass residues) allows a highly flexible disposition of the downstream use of the recycled energy from atmospheric Carbon stock. In case there was a need for electricity, the synthesis gas could either be directly combusted for mechanical CHP electricity generation or leveraged to 100% Hydrogen Output for utility scale fuel cell electricity generation for the back-up of fading, delinquent or other deficiencies of other volatile renewable sources. On the other hand, when the other variable renewable sources can support the grid sufficiently, the continuous synthesis gas output can transformed into fossil substitute hydro carbon energy carriers of regional demand, potentially leveraged temporarily by e.g. additional Hydrogen from electrolysis off excess from such other renewable sources.