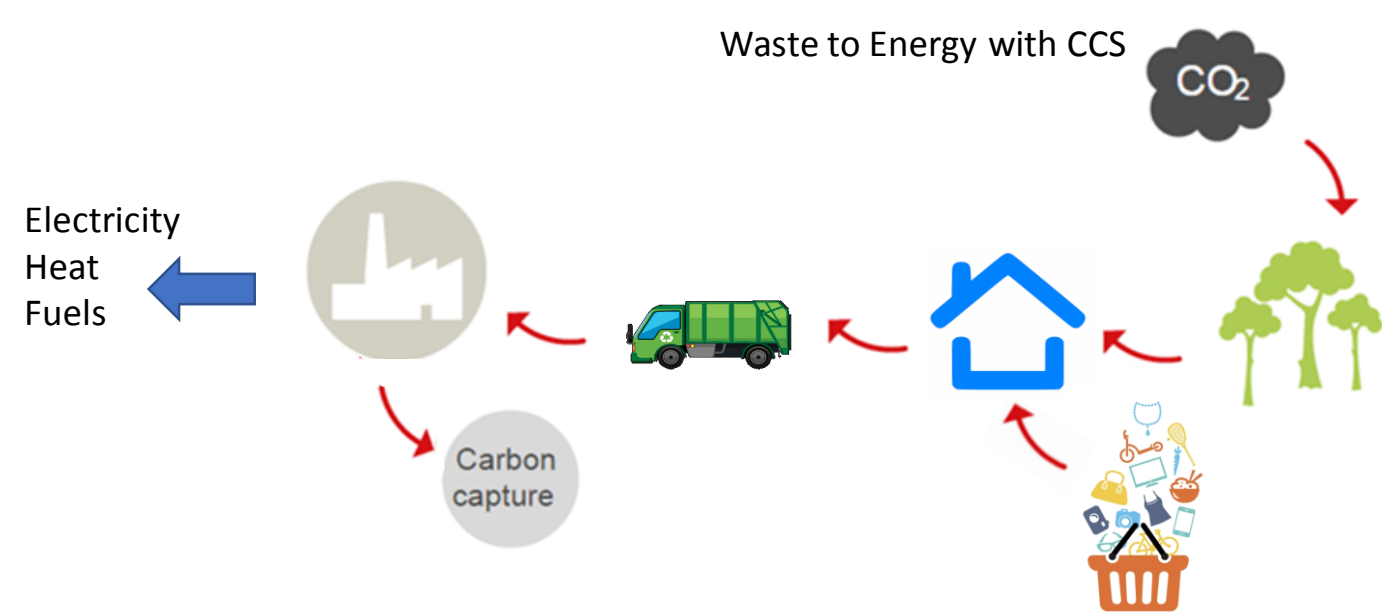


# Negative Emissions in the Waste to Energy Sector: Technologies for CCUS



## Oxyfuel - 3 ways

- Circulating fluidized bed combustion
- Bridge knowledge gap on waste combustion for grate-fired boilers
- Membranes for oxy-combustion of grate-fired boilers

## Solvents: 3 solvents, 3 facilities, 3 scales

- Waste wood - 1tCO<sub>2</sub>/day scale - 30%wt MEA
- Waste wood - 1tCO<sub>2</sub>/day scale - CCSL proprietary solvent
- Municipal Solid Waste – 10tCO<sub>2</sub>/day scale – CCSL proprietary solvent
- Synthetic flue gas – Bench scale - 3rd generation solvent

## Quantify the atmospheric CO<sub>2</sub> reduction potential

- Assess the European market for WtE+CCUS
- New methodology to quantify negative emissions



The University Of Sheffield.

