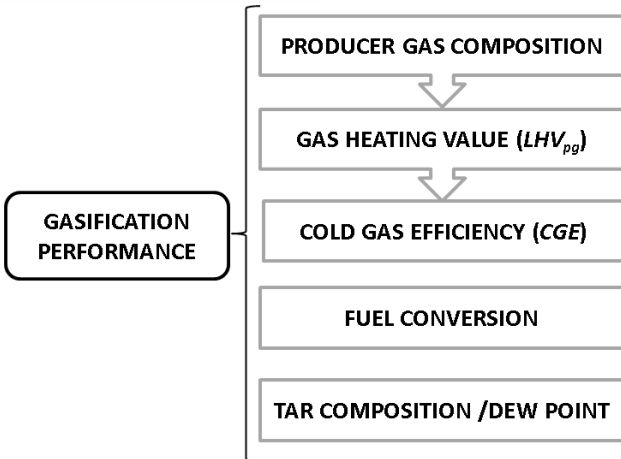
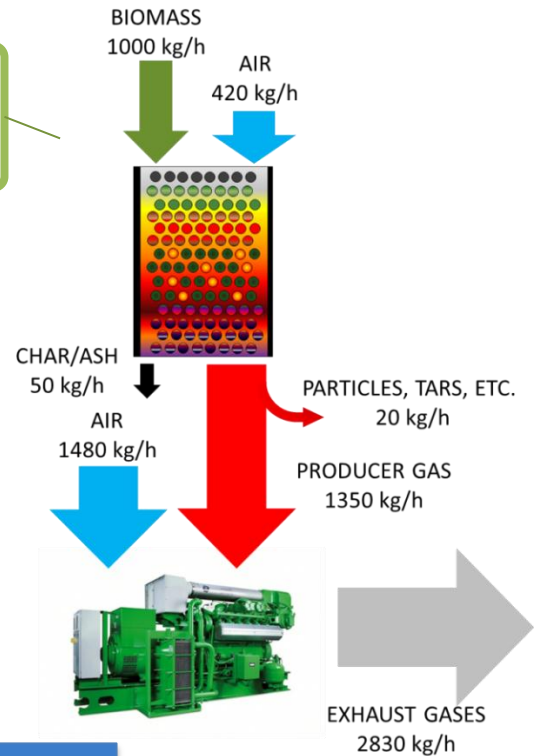


Operation and performance of gasification can be quantified through several parameters.

GASIFICATION IN NUMBERS

Generic mass balance of a small-scale gasification process.



Cold Gas Efficiency (CGE , in %): Chemical energy contained in the product gas with respect to the energy contained in the initial solid fuel. CGE should be calculated with respect to the LHV of the solid feedstock.

Fuel conversion (%): Mass fraction of the original solid feedstock that ends up in the producer gas.

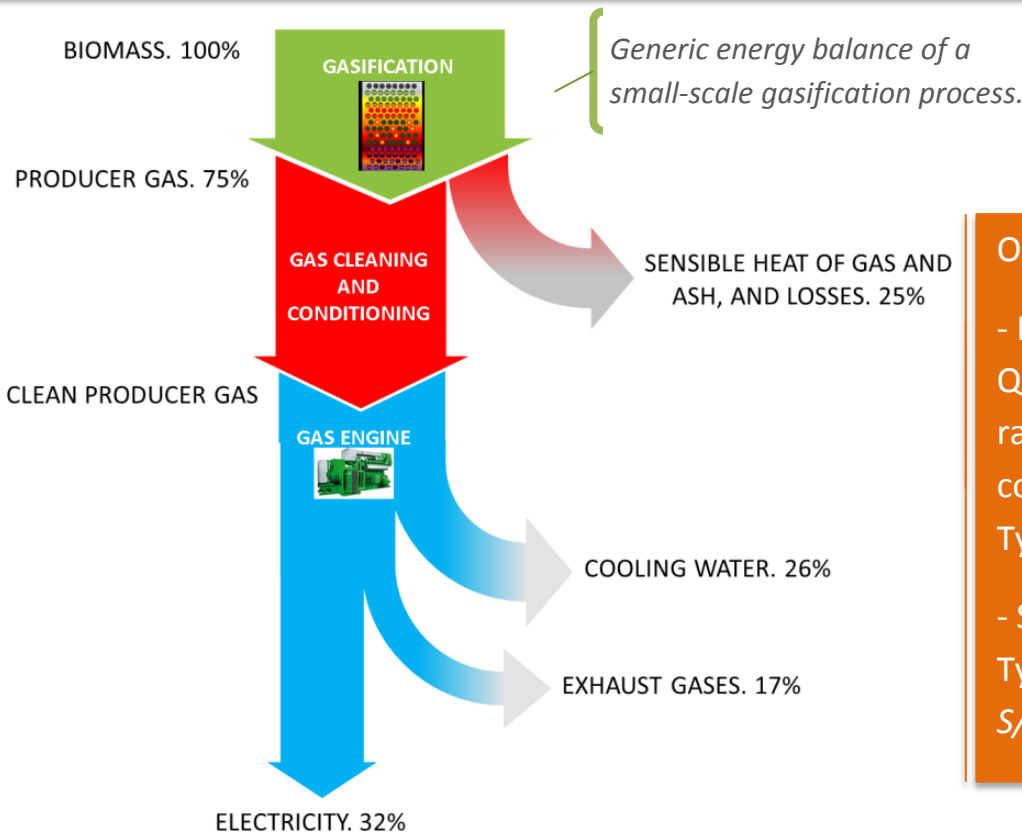
SOME FIGURES:

70-80%

Cold Gas Efficiency

80-100%

Fuel conversion



OPERATING PARAMETERS:

- Equivalence Ratio, ER . Quantifies the O_2 /fuel mass ratio with respect to that of complete combustion. Typically, $ER = 0.2 - 0.3$.
- Steam/biomass ratio, S/B . Typical values are $S/B = 0.6 - 1$ (kg/kg).