

*A 60 year company history with an increasing focus on environmental sustainability*

energy recovery  
**SUSTAINABLE**  
raw materials  
low emissions  
flue treatment

# WOOD CHIP GASIFIER



via Emilia Ponente, 750 • 48014 Castel Bolognese (RA) Italy  
tel. +39 0546 655911 • fax +39 0546 656202 • info@curti.com  
[www.curti.com](http://www.curti.com)



TAILORED SOLUTIONS

Gasification is a chemical and physical process that transforms solid fuel (ligno-cellulosic biomass) into a gas fuel known as syn-gas.

Syngas is employed to fuel internal combustion engines to produce electricity and heat.

Among the technologies currently available to extract energy from biomass, the advantage of gasification is its high efficiency.

One kg of quality biomass yields about 0.75 kWh electricity and 1.5 thermal kWh.

Alternative technologies such as ORC turbines or Stirling engines would require twice as much biomass to yield the same energy.



The Energy division of Curti has been active in the energy saving, renewable energy generation and circular economy fields since 2006. Curti developed a small biomass gasifier (20 kW electrical power) fed by biomass such as wood chips.



The plant functions transforming wood chip into syn-gas that feeds an internal combustion engine and alternator to produce electricity.

As a by-product approx. 42 kW of thermal power can be employed for ambient or swimming pool heating etc.

Less than 3 metres high and with a footprint comparable to a small container it can easily be integrated in existing installations/plants.

The high degree of automation aims to reduce maintenance time, improve uptime and, most importantly, simplify everyday use.

Our collaboration with the University of Bologna ensures that the tar level in the gas is among the lowest in the class.

The reactor has a robust construction, offers increased safety and long lifespan while decreasing OPEX.

**42kW**  
THERMAL POWER

**20kW**  
ELECTRICAL POWER