

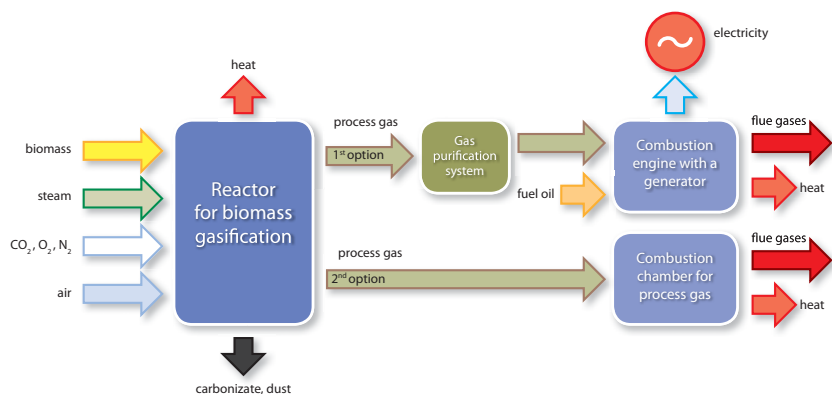
# Testing plant for biomass gasification GazEla

Plant is designated to conduct experiments on biomass gasification in a fixed fluidised bed reactor. This experimental system is also designated to make research on process gas purification and its effective use in a dual fuel internal combustion engine.

Plant is equipped with:

- system of the fuel dosage,
- gas generator with fixed bed,
- dry system of gas cleaning,
- combustion chamber,
- dual fuel internal combustion engine.

Installation are supplied with technical gases, steam and cooling water from the fan cooling towers.



## Technical characteristics

Input fuel flowrate	11-15 kg/h
Gasifying agent	atmospheric air
Temperature of gasifying agent	20 - 200°C
Flowrate of the gasifying agent	25 - 30 kg/h
Working pressure	atmospheric pressure
Gasification temperature	800 - 1000°C
Control system	automatic

## RESEARCH AREA

Research on biomass gasification process in a fixed fluidised bed reactor..

Research on process gas purification in a dry system of gas cleaning.

Research on efficiency of process gas use in a dual fuel internal combustion engine.

## POTENTIAL APPLICATION IN THE MARKET

Technologies of producing process gases from the local resources of biomass and after production waste..

Technologies of purifying process gases.

Technologies of electricity and heat production in the distributed cogeneration systems.

## ADDRESSED TO (POTENTIAL CO-OPERATORS)

Enterprises and institutions operating in energy sector.

Sawmills, furniture producers and any enterprises processing wood biomass that produce sawdust and woodchips during wood processing and that have big demand for process heat.

Distilleries, breweries and garden farms, food processing enterprises and others, in which there is enough disposable waste biomass.



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