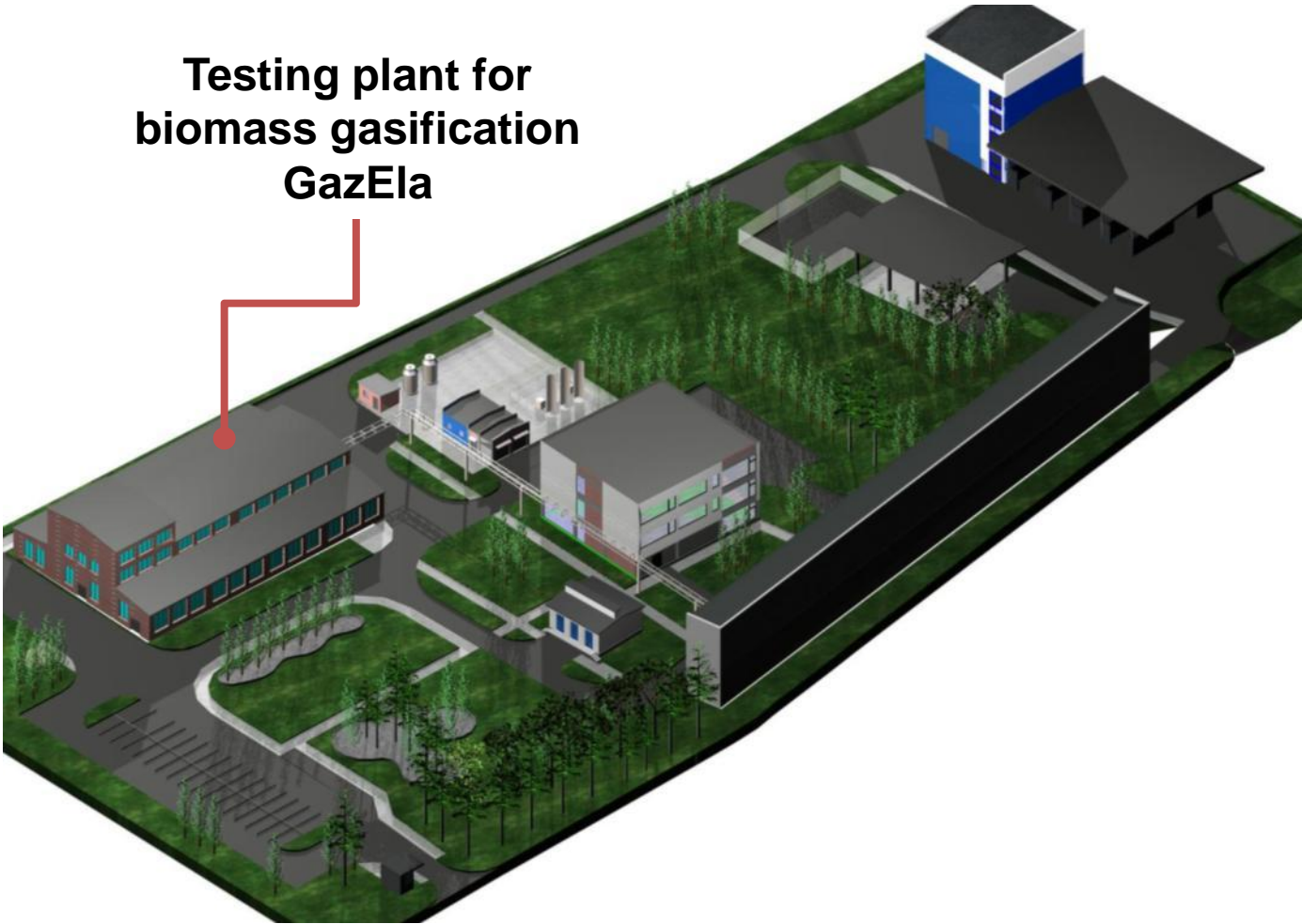


CLEAN COAL TECHNOLOGY CENTRE

Testing plant for
biomass gasification
GazEla



INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY



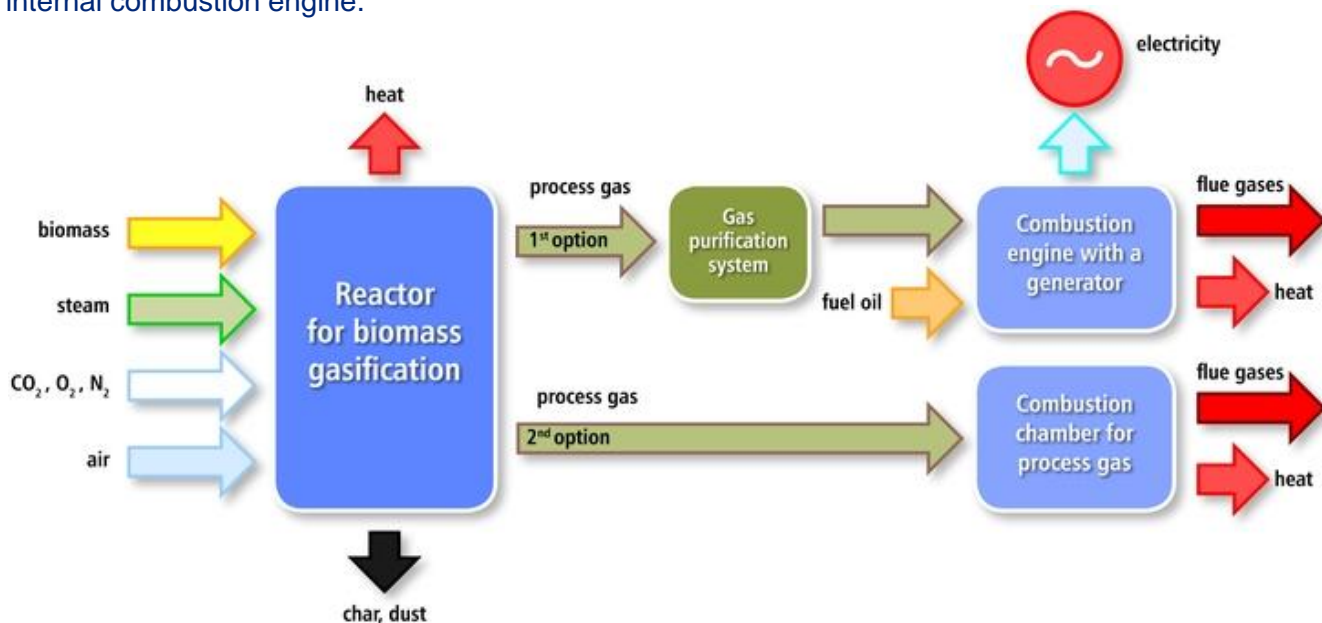
EUROPEAN UNION
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DEVELOPMENT FUND



Testing plant for biomass gasification GazEla

The 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.

The plant is equipped with system of fuel dosage, gas generator with fixed bed, dry system of gas cleaning, combustion chamber and dual fuel internal combustion engine.



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 |

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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.

SUBJECT OF COMMERCIALIZATION

- 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.



POTENTIAL RECIPIENTS OF THE RESEARCH RESULTS

- 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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