PYROGREEN®
SUSTAINABLE BIOMASS VALORIZATION
TORREFACTION - PYROLYSIS
Patented technologies
PYROGREEN®
General Concept

Termobio® dryer
biomass feedstock
up to 50% moisture

Biogreen® pyrolyzer
Biogreen® char cooler
thermal oxidizer
gas to heat conversion

hot syngas (3-16 MJ/Nm³)
- energy for drying

250-350°C Torrefaction application
- Product yield equal to 65-80% of feedstock
- Increasing low heating value of material up to 21-24 MJ/kg product
- Homogenous and easy to pelletize solid fuel production
- Increased energy density (up to 7.4 MW/m³)

Biochar application
- First biochar certified and registered in France
- Compatible with IBI and European Biochar Certificate
- Biochar yield equal to 25-35% of feedstock
- Syngas production with LHV up to 16 MJ/Nm³
- Syngas quality also suitable for electricity production or CH₄, H₂ production after additional process
- Precisely controlled conditions of process allow to generate high-quality and standardized product

500-600°C Biochar application
- 100% natural water retention product for soil application
- High C/O ratio preferable for combustion
- High calorific value up to 30 MJ/kg

PRODUCTS OF THE PROCESS
Torrefied biomass / biocoal
- Hydrophobic, easy to store solid fuel
- Product resistant to external agents (fungi, bacteria, parasite)
- Low C/O ratio preferable for combustion
- High calorific value up to 24 MJ/kg

Biochar
- 100% natural water retention product for soil application
- High C/O ratio (80-90%)
- High calorific value up to 30 MJ/kg

Torrefied biomass
Biochar

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