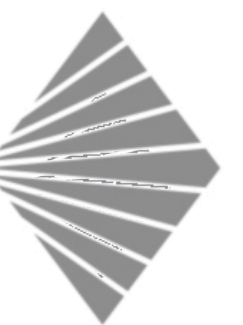
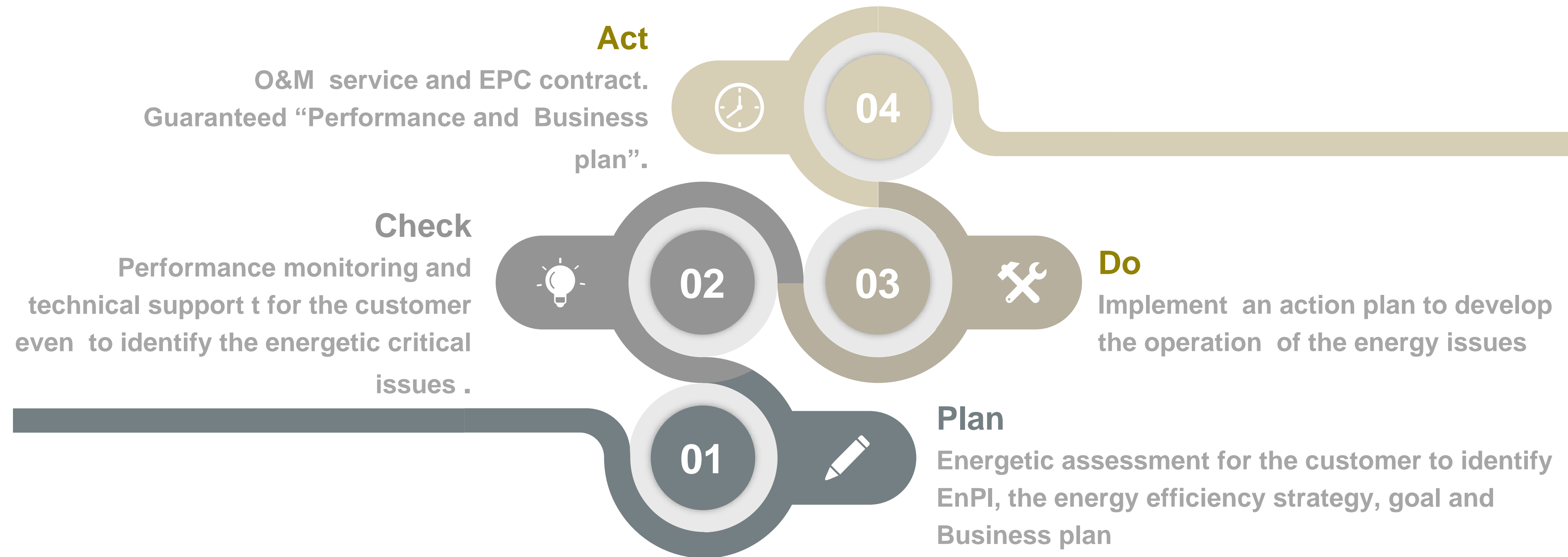




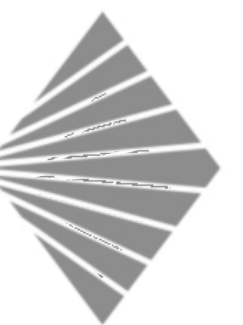
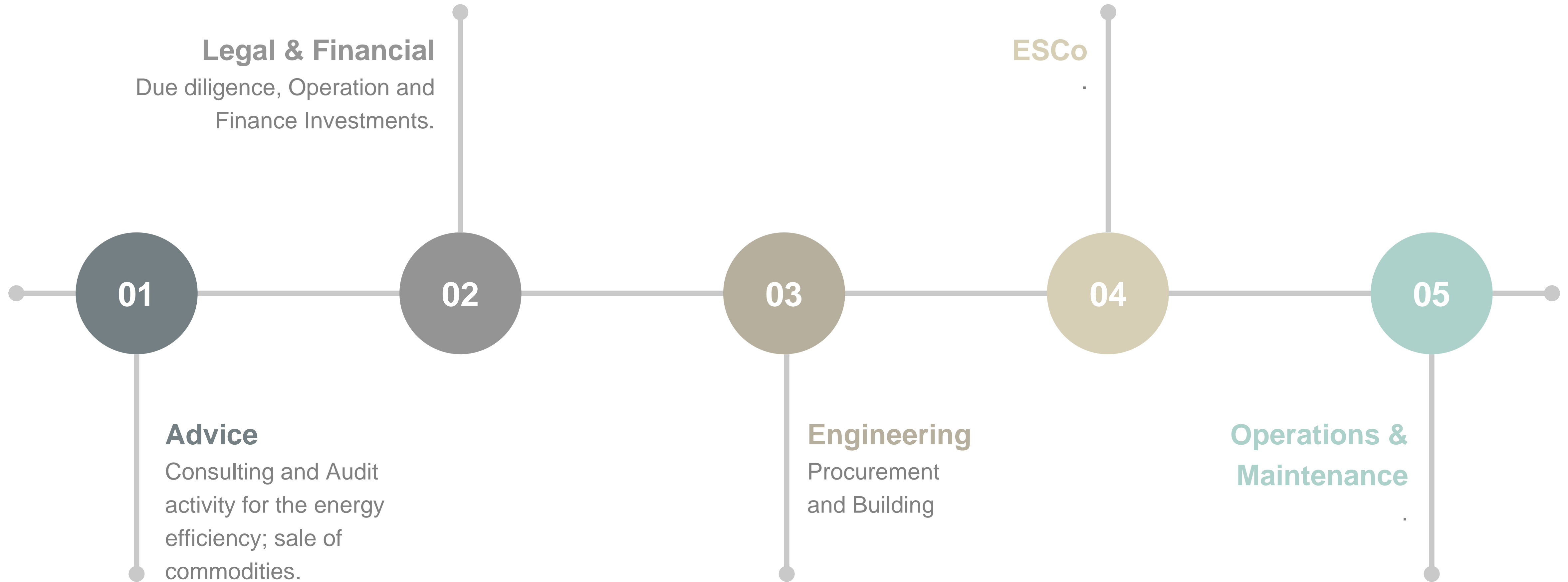
C-FUSION
Just green energy.

*“Everyone talks about environment.
We preserve it.”*

COMPANY MODEL PDCA



COMPANY CORE BUSINESS



VALUES

01

Our company will follow a code of conduct through which we intend to promote positive behaviours in our whole organization and also towards third parties according to fundamental principles:

02

Honesty

03

Avoidance of conflict of interest

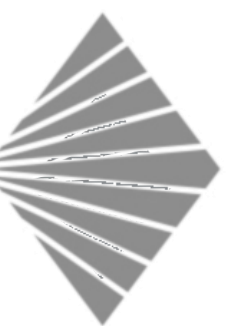
04

Accountability

05

Transparency

Environmental responsibility



MICRO-COGENERATOR C-F1



ENERGY EFFICIENCY SOLUTION



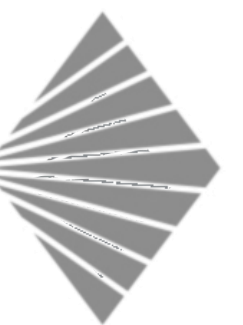
C-F1

Our CHP unit is able to deliver 200 kW thermal and up to 30 kW electrical, with extremely low pollution emissions. Thanks to its environmental sustainability, our product could even provide the generation of “carbon credits”, this in case of use of certified biomass.

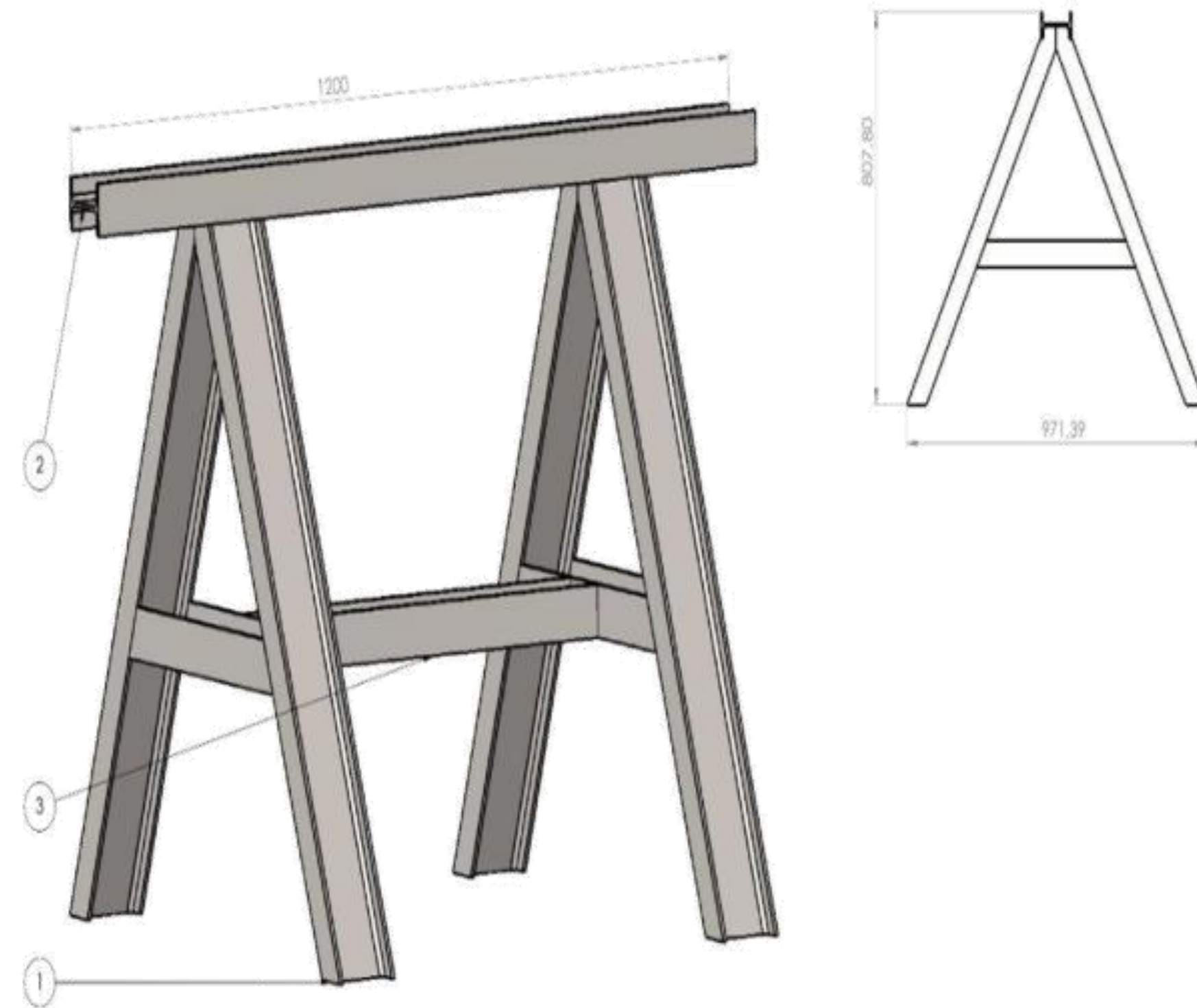
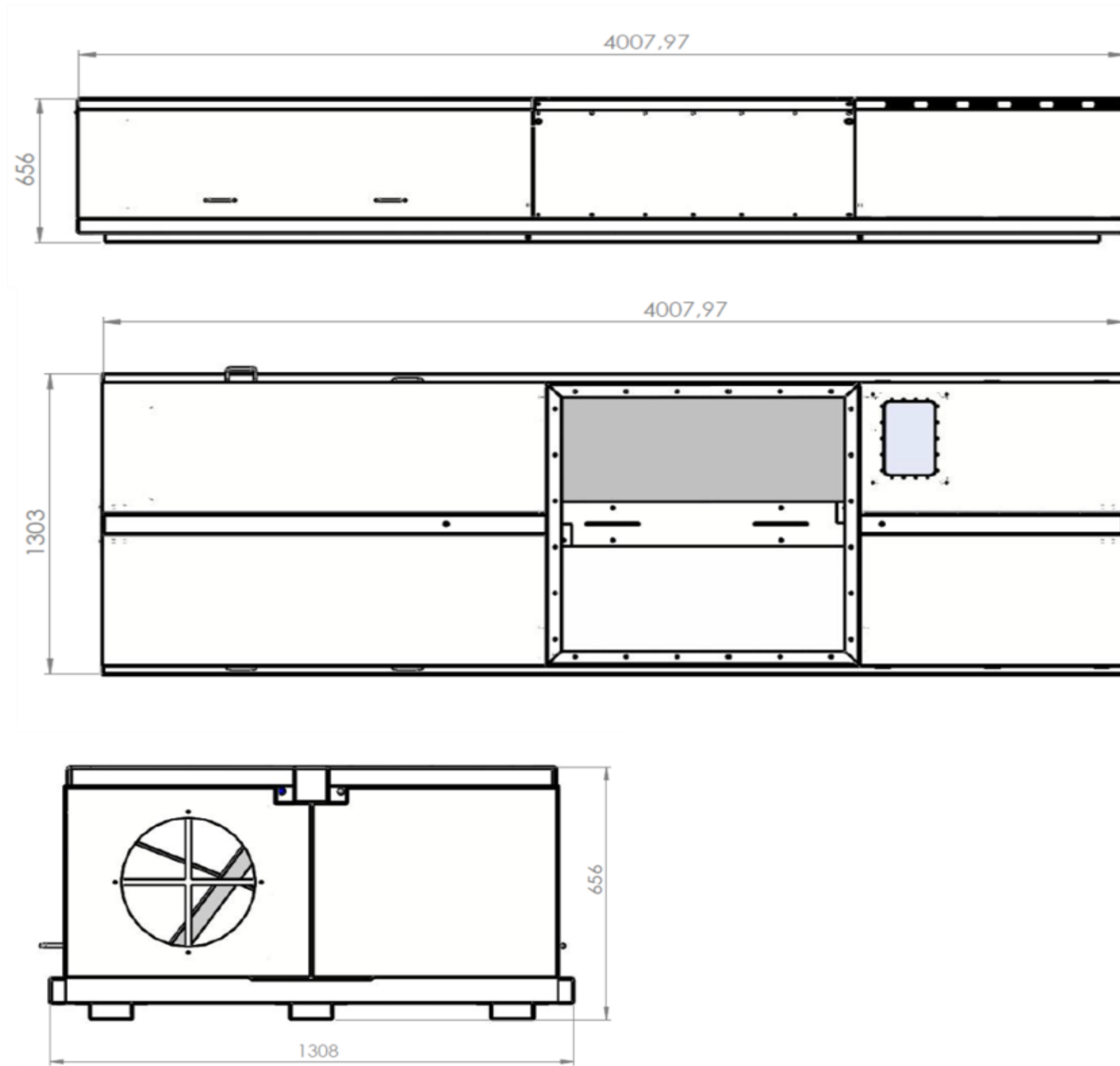
The very high reaction temperature obtained in our reactor allows a very flexible approach to materials to be consumed, which simply need to be a carbon-based biomass; this operational flexibility is furthermore supported by the modulation of its power (from 10 to 100%) and by the bi-fuel feature (methane gas).



The product offers technologically advanced security systems that allow remote monitoring of each machine and its functional monitoring and emission continuously.



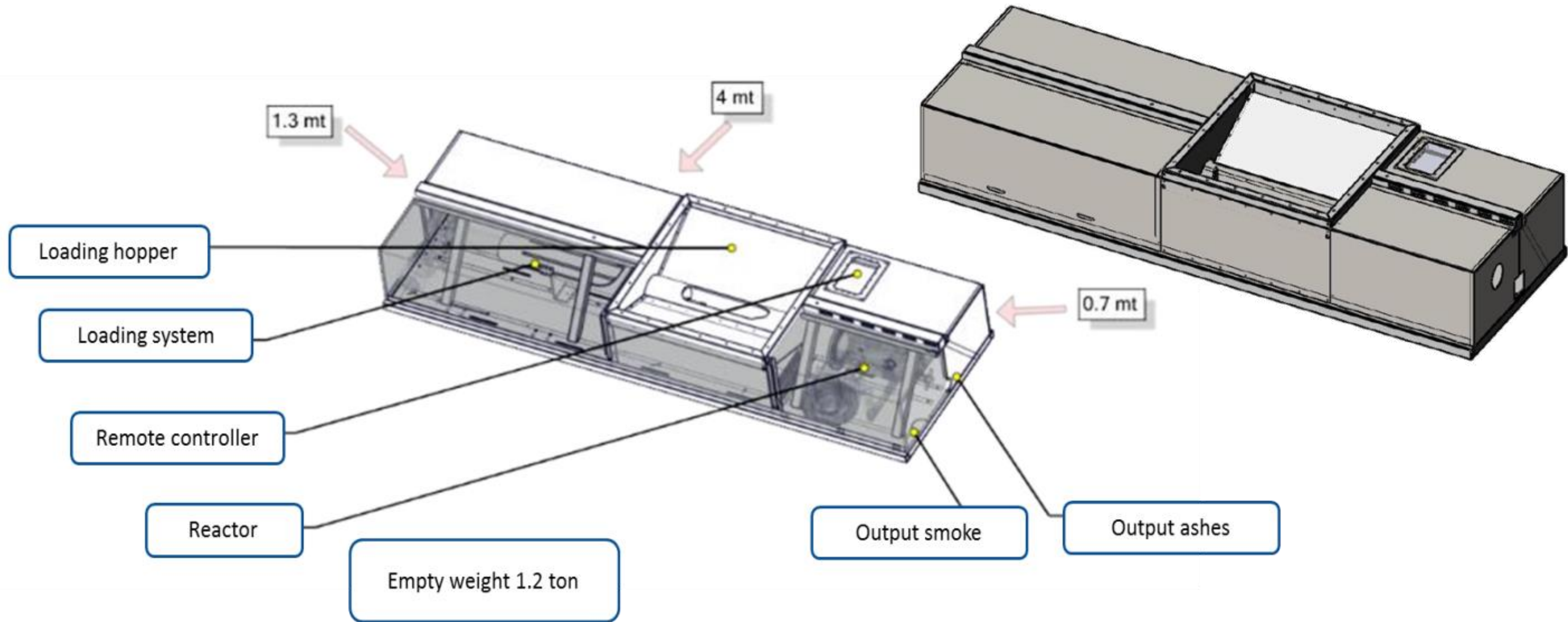
C-F1 PRODUCT



All products are delivered with 2 metal supports included in the price list amount) which will help to correctly position the unit at approx. 80 cm from the ground at the correct grade.



C-F1 PRODUCT



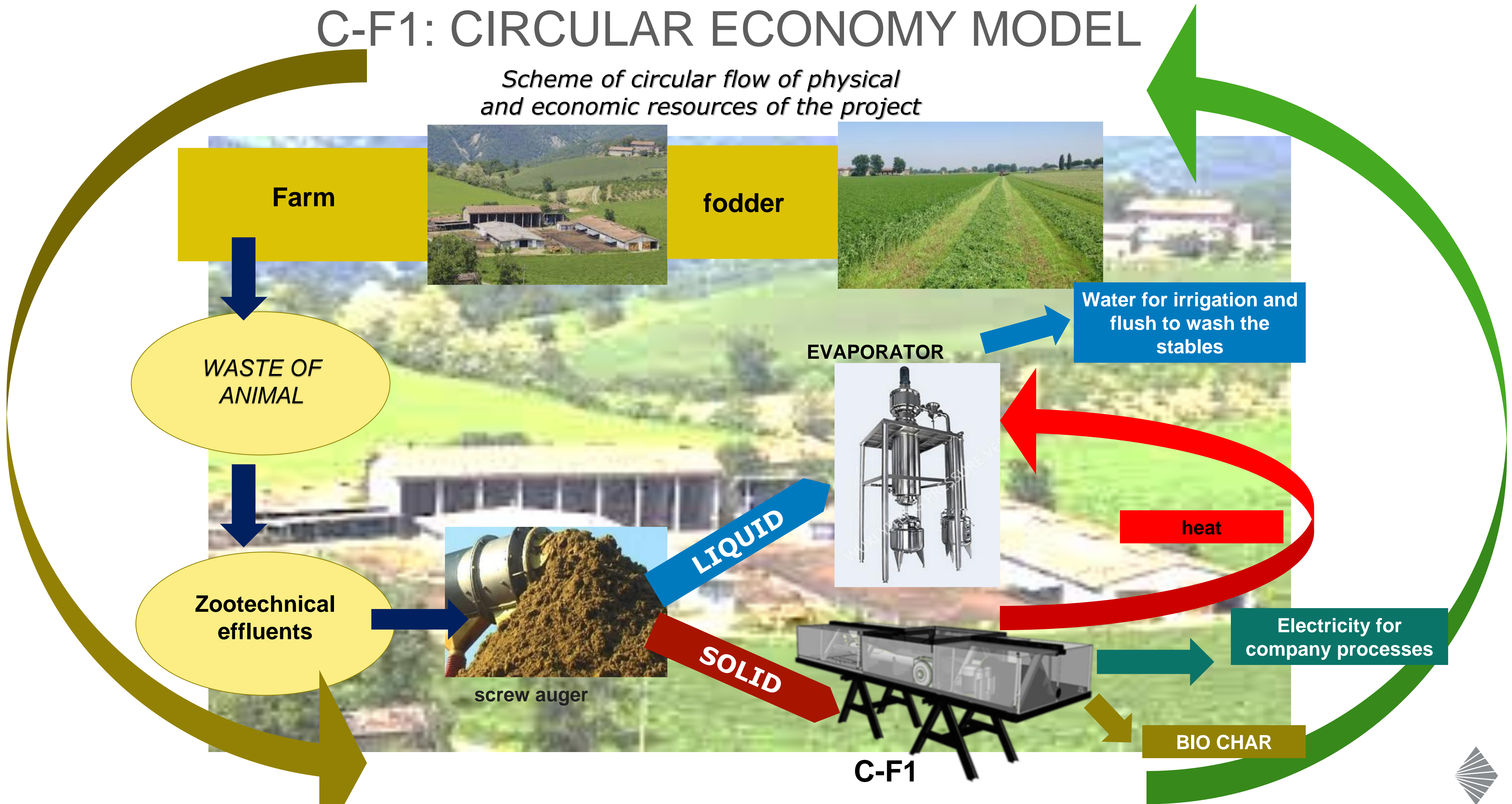
C-F1 PRODUCT

	Biomass class	Description
M1	Wood	Wood chip, pruning, waste from wood processing, etc.
M2	Waste from food processing industry	Any waste from the food processing industry such as, for example, hay, vegetable rests, olives, tomatoes,
M3	Waste from animal farms	Waste from animal farm activity (manure, stable rest, etc.)
M4	Synthetic waste	Any carbon-based industrial waste which has been processed with chemicals (paper industry, textiles, plastic, production, etc..)
M5	Production mud	Any industrial mud with high humidity (not from agriculture)



C-F1: CIRCULAR ECONOMY MODEL

Scheme of circular flow of physical and economic resources of the project



C-F1 PRODUCT

01



Our product must be seen as a component of an industrial plant, particularly improving its energetic efficiency, and as such it must be accurately evaluated from the financial point of view.

02

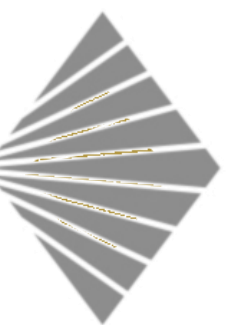


For this purpose, thanks to a questionnaire aimed to understand various operational aspects of the potential customer and conducted by our pre-sales service, we can attach to our quotes a business plan, which can be a valid support in this sense

03



In addition to this, our “full-service” after sales proposal is fundamental in the long term profitability of such investment



C-F1 STRATEGY

C-FUSION strongly believes in developing clean energy technologies.

OBJECTIVE

.....

The objective of CFUSION SA is to approach the market with a technologically mature and flexible, high-quality product able to approach a large spectrum of users and allow them to return on their investment thanks to easy operations and also to an outstanding after-sales service with an extensive “full-service” clause.

MISSION

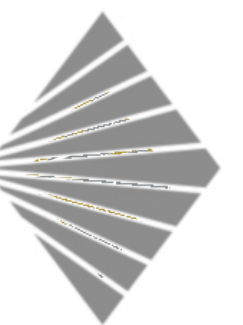
.....

The business idea which is driving CFUSION SA is based on developing, manufacturing and selling small size CHP units supported by second generation pyro-gasification technology and a first-class pre-sales and after-sales service, able to ensure the right plant configuration and installation and therefore its maintenance and performance in the time.

VISION

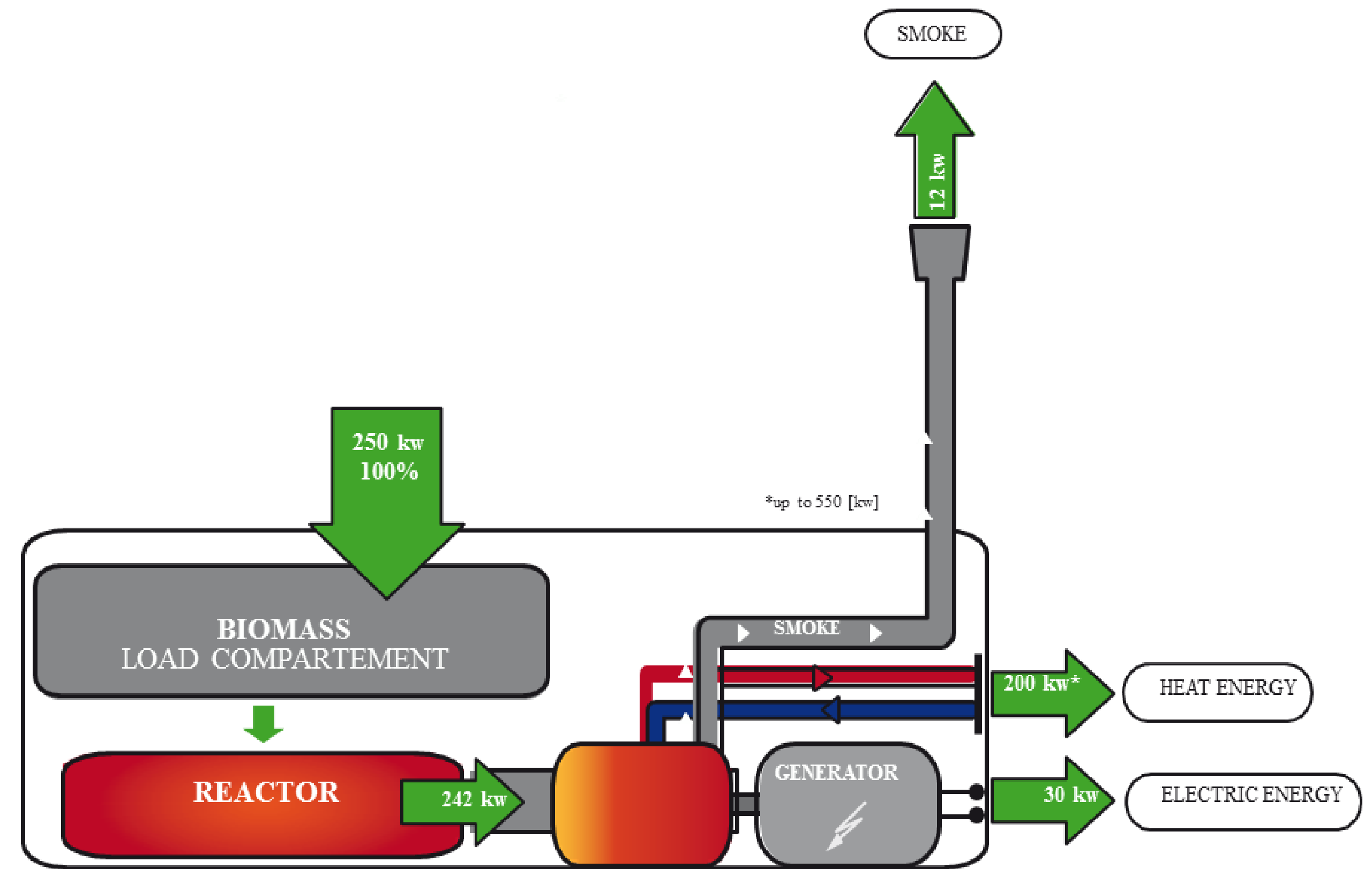
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CFUSION SA will search for highly innovative solutions able to exceed the limits set by present technologies in the energy industry so to set a competitive gap to our favour which we will turn into an advantage for end user and Environment, with strong preference to applications in private housing..

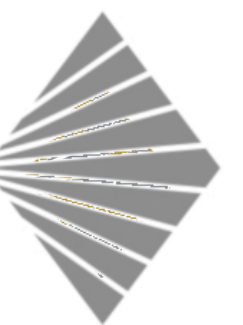


C-F1 TECHNOLOGY

Pyrolysis is a thermochemical conversion of organic matter, also called dry distillation process, which is based on the transformation of biomass by the action of heat at temperatures between 400 and 1000 °C in absence of any oxidizing agent (oxygen normally) or, at least, using a very small amount of oxygen (partial gasification). The material is brought to a temperature between 200 and 1000 °C (complete gasification of biomass), sometimes by entering appropriate amount of oxygen that allows the triggering of a partial combustion that leads to an increase of temperature. From this process we obtain gaseous products, liquid and solid as a percentage dependent on the reaction parameters.



Amount biomass consumed (W 30% PCI 3,4 kWh/kg): about 70 Kg/h.



C-F1: TECHNICAL AND EMISSION DETAILS

TOTAL POWER [kW]		250	DATA		MEAN VALUE	METHOD
Heat output[kW]		200	Effective range (mc/h)		400	
Electric output [kW]		30	standard flow rate		349	
η thermal [Pn 100%]		80%	standard flow rate dry		328	
Natural gas [mc/h]		/	Average speed		6,29	
Biomass W50 [kg/h]		70	temperature		46	UNI EN ISO 16911:2013
Empty Weight C-F1		1200	Natural gas dry % O2 CO2 N2		18,5 – 1,7 – 79,8	UNI EN ISO 16911:2013
Size C-F1		4,0x1,35x0,6	Humidity relative		3,5	
Electrical consumption[kWh]		1,5	real gas density		1,086	
medium temperature fume outlet [°C]		130	dry average molecular weight		29,01	
Biomass size		MEDIUM SIZE CHOPPED	wet mean molecular weight		28,63	



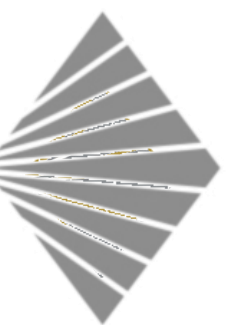
C-F1:TECHNOLOGY PYRO-GASIFICATION

01

The interest in finding technologies able to exploit carbon-based materials, such as biomass, urban or industrial waste, all of them largely available worldwide, finds in pyro-gasification the correct theoretical answer; so far this market need has not yet developed into an efficient and environmentally clean solution.

02

In a similar way to what has happened in wind energy and PV business, pyro-gasification plants need a strong and focused technological development which will make it able to exploit the so-called “bio-waste”, which so far needs to be disposed in landfills, somehow postponing its potential pollution effect. This evolution would then allow to take advantage of a largely available source of energy, in any territory, providing an exceptional solution to its disposal and, in general, to the renewable energy market.



C-F1: TECHNOLOGY SECOND GENERATION PYRO-GASIFICATION

01

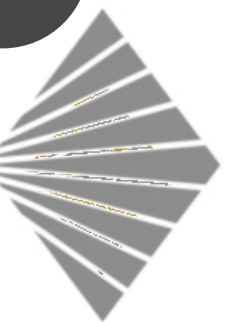
.....
The technological limits of present plant solutions, in terms of environmental sustainability, efficiency and performance, have clearly limited the present diffusion of pyro-gasification, so far.

02

.....
Thanks to C-FUSION, the breach of such limits represents the second generation of pyro-gasification, which has relatively quickly been brought to an industrialized level thanks also to technological solutions already used in other product categories and therefore of proven performance.

03

.....
The operation of such products will be managed by an advanced electronic management system which allows a stable and high-performance pyro-gasification process, independently from the biomass available, with certified environmental emissions and extremely low impact, so to be finally defined “green”.





C-FUSION
Just green energy.

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C-FUSION.IT

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*** C-FUSION reserves the right to vary the product range by offering the customer the technologically and economically best solutions on the international market.**