

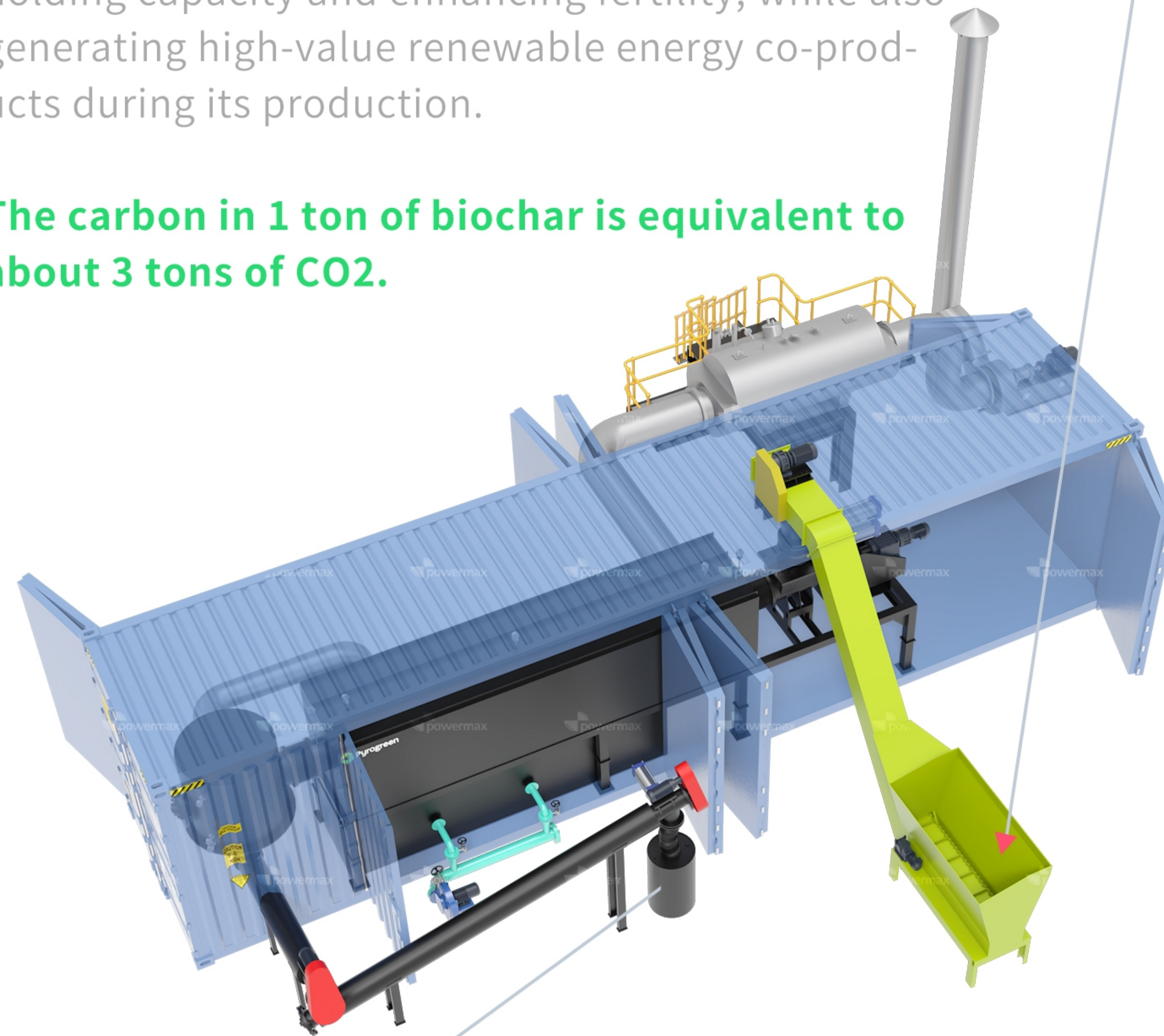


Different Raw Materials Can Get Different Biochar



Biochar is a carbon negative, charcoal based, soil amendment that can be designed to help reclaim and improve marginal soils by increasing soil water holding capacity and enhancing fertility, while also generating high-value renewable energy co-products during its production.

The carbon in 1 ton of biochar is equivalent to about 3 tons of CO₂.

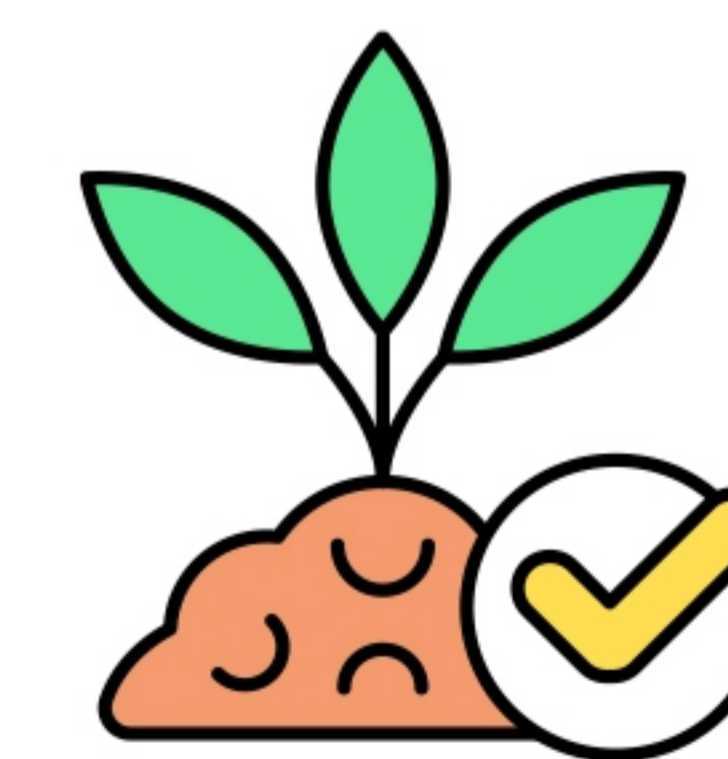


BIOCHAR & BIOCOAL SOLUTION



Pyrogreen - Biomass Carbonization/Torrefaction Solution

“Biochar, Green Energy, a Carbon-reduced Future.”



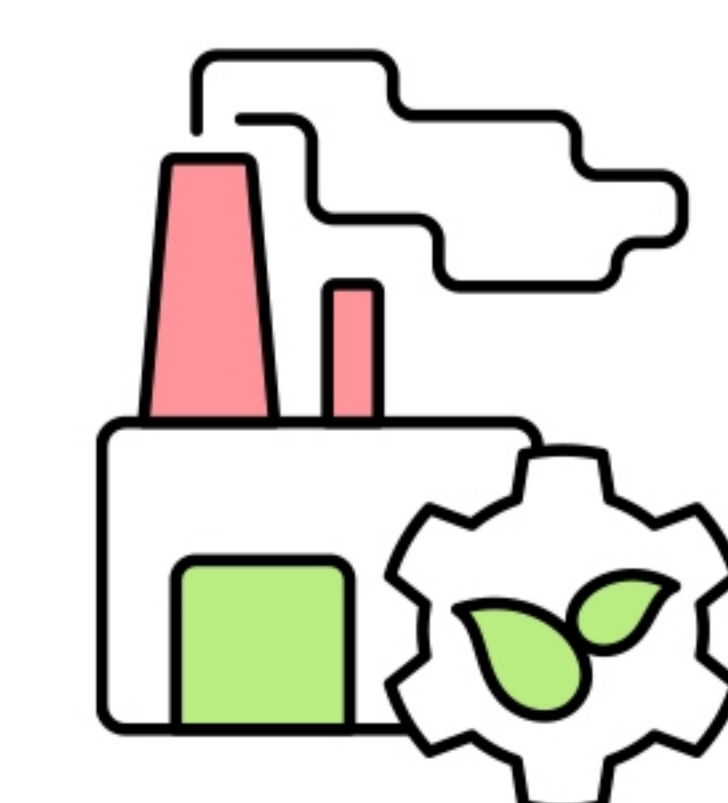
SOIL ADDITIVE

As a soil additive, biochar can improve soil structure, increase soil fertility, improve soil water and fertilizer retention capacity, and promote plant growth.



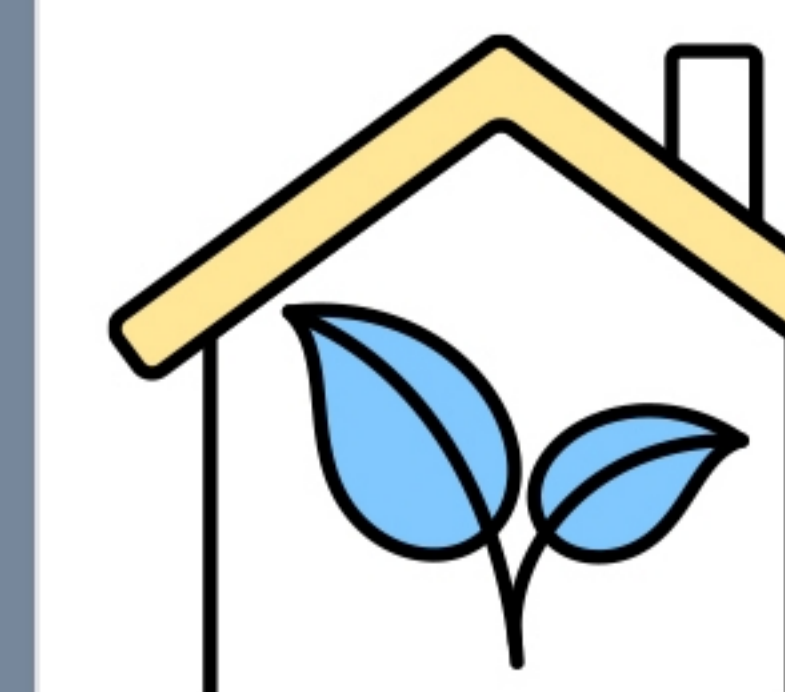
FEED ADDITIVE

As a feed additive, biochar can improve the digestion and absorption capacity of animals, improve intestinal health, reduce ammonia emissions, and promote animal growth.



FILLING MATERIAL IN PRODUCTION

In the field of metallurgy and casting, the biochar can be used to cover on the surface of the liquid steel and iron to reduce the radiation, convection and thermal loss.



BUILDING MATERIAL ADDITIVE

As a building material additive, biochar can be used to prepare environmentally friendly concrete, bricks and other building materials.

Pyrogreen Energy

Wuxi Powermax Renewable Energy Technology Co.,Ltd.
Wuxi Teneng Power Machinery Co., Ltd.



www.powermaxgasifiers.com



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The hazards of continuous increase of CO₂

Excessive accumulation of carbon dioxide (CO₂) in the atmosphere is a major cause of global warming and climate change. The burning of fossil fuels, deforestation and industrial production have led to significant increases in carbon dioxide levels, causing a range of adverse effects such as rising temperatures, extreme weather events and ecosystem damage.

Global carbon dioxide (CO₂) emissions from energy combustion and industrial processes¹ grew 0.9% or 321 Mt in 2022 to a new all-time high of 36.8 Gt.

To combat these effects, carbon from the atmosphere must be actively removed.



Pyrogreen's biomass energy conversion technology can serve as a solution to the current problem.

Pyrogreen Energy is a leading company in the manufacturing of eco-friendly carbonization & torrefaction systems and providing biochar & biocoal solutions for the recycling of biomass residuals. Our mission is to create and deploy biorenewable technologies that enhance soil fertility and combat climate change through CO₂ sequestration.

We support our clients in making use of biomass waste, boosting efficiency, and generating extra revenue while simultaneously reducing carbon emissions.



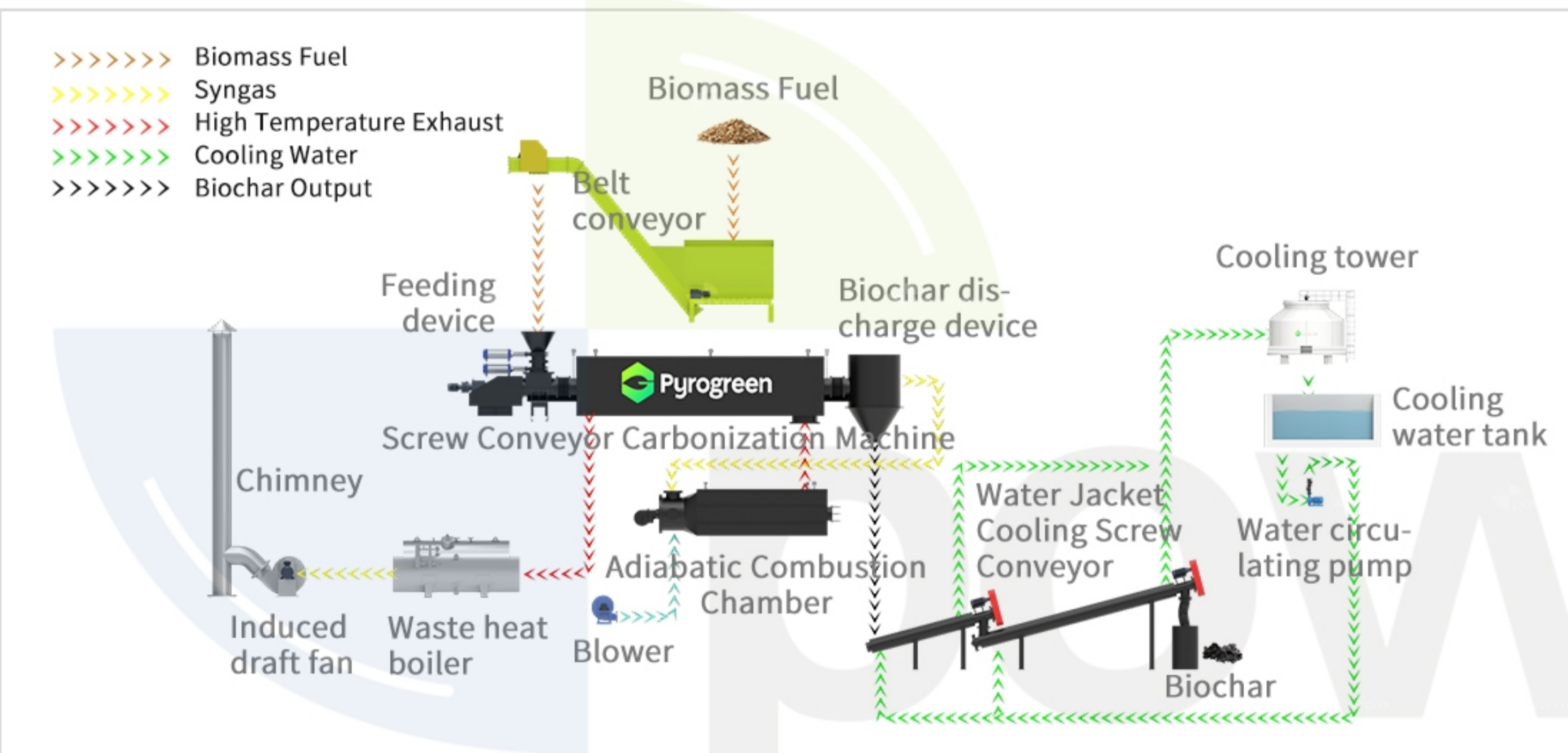
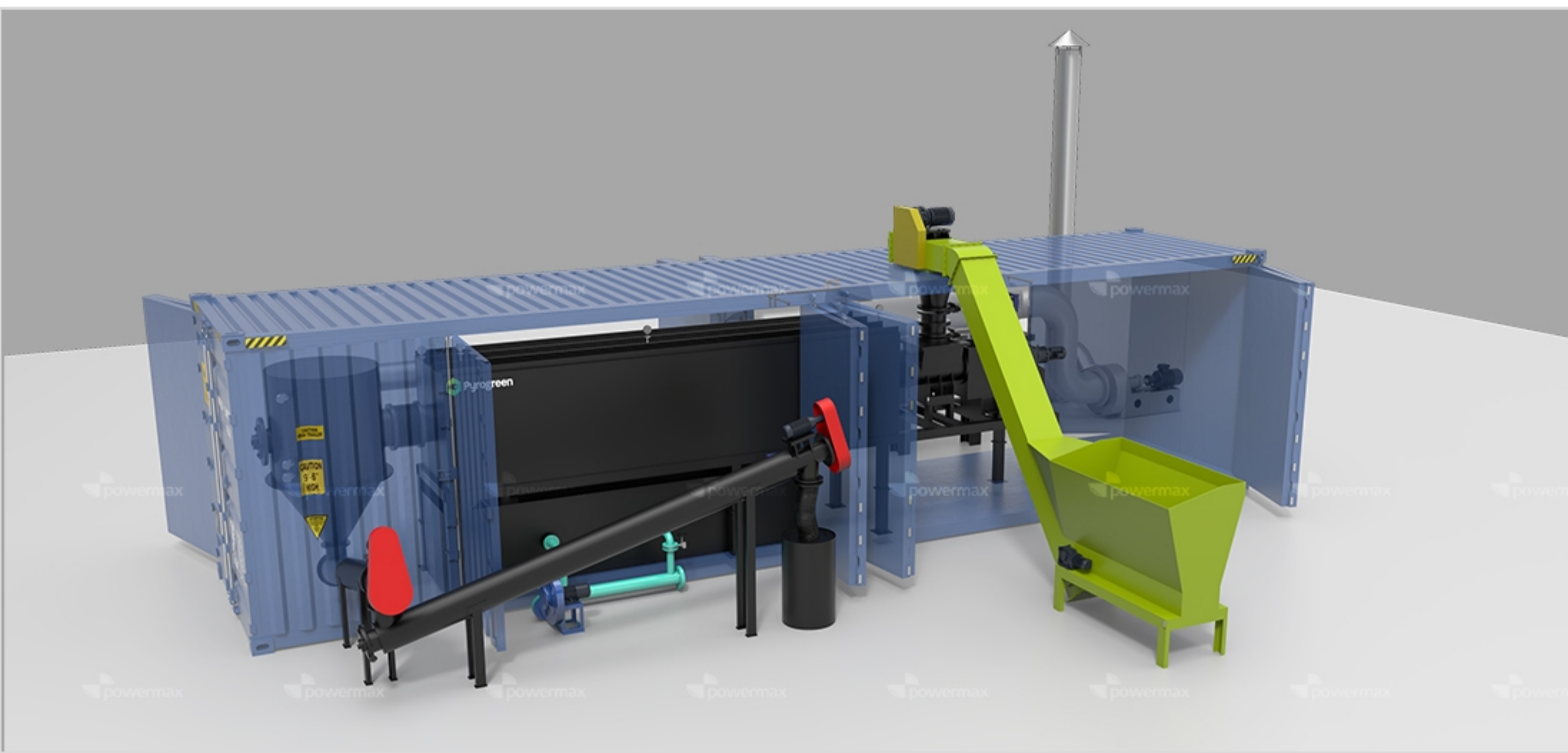
Pyrogreen's solution

As a leader in advanced thermal processing systems, Pyrogreen provides custom rotary kilns carbonization system and custom screw conveyor carbonization system for the production of biochar from a variety of sources. Sometimes referred to as torrefaction, the pyrolysis of biomass into a high quality biochar product is a technical endeavor, requiring advanced knowledge of thermal processing principles. Pyrogreen process experts can work with you to design this system around your unique source of material.

■ Advantage:

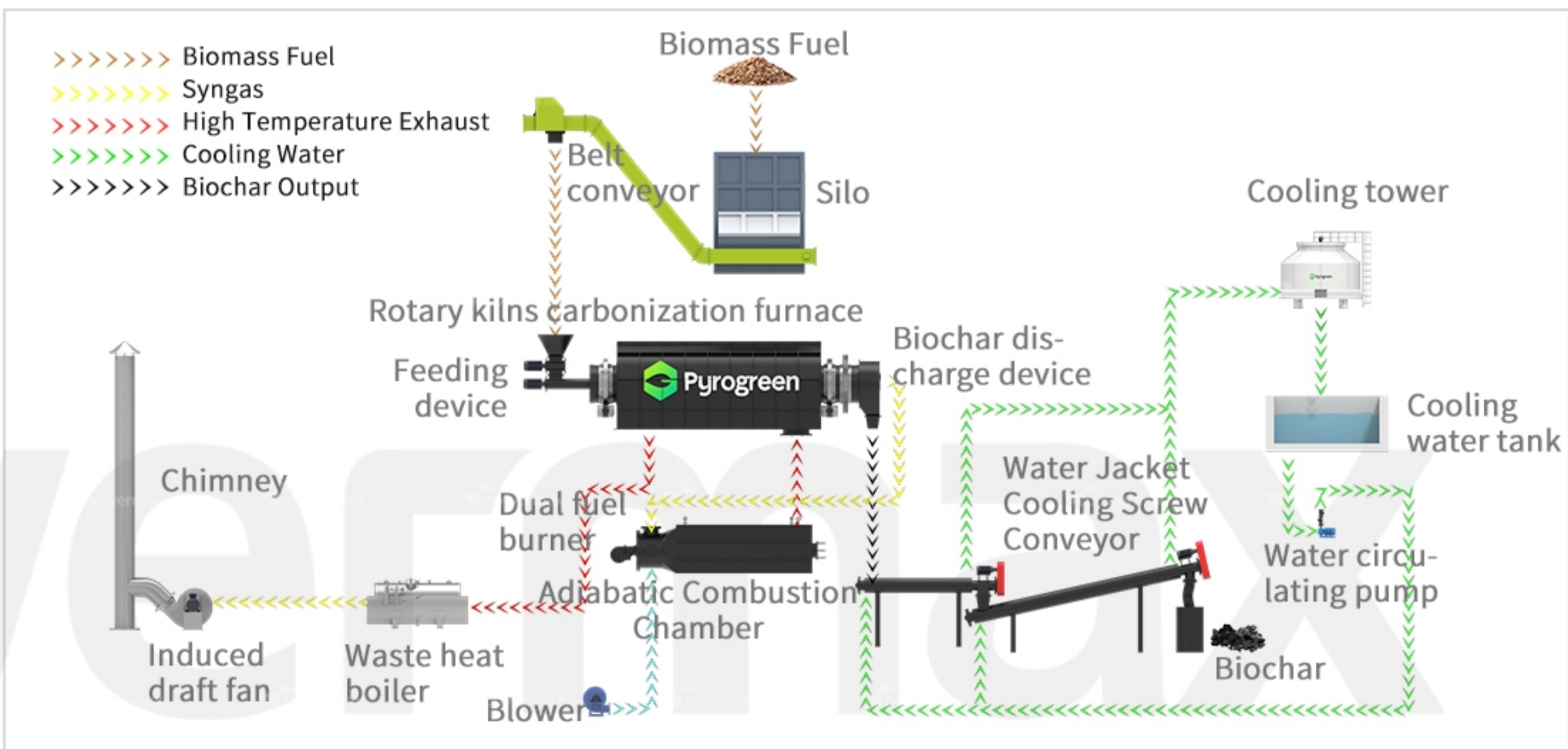
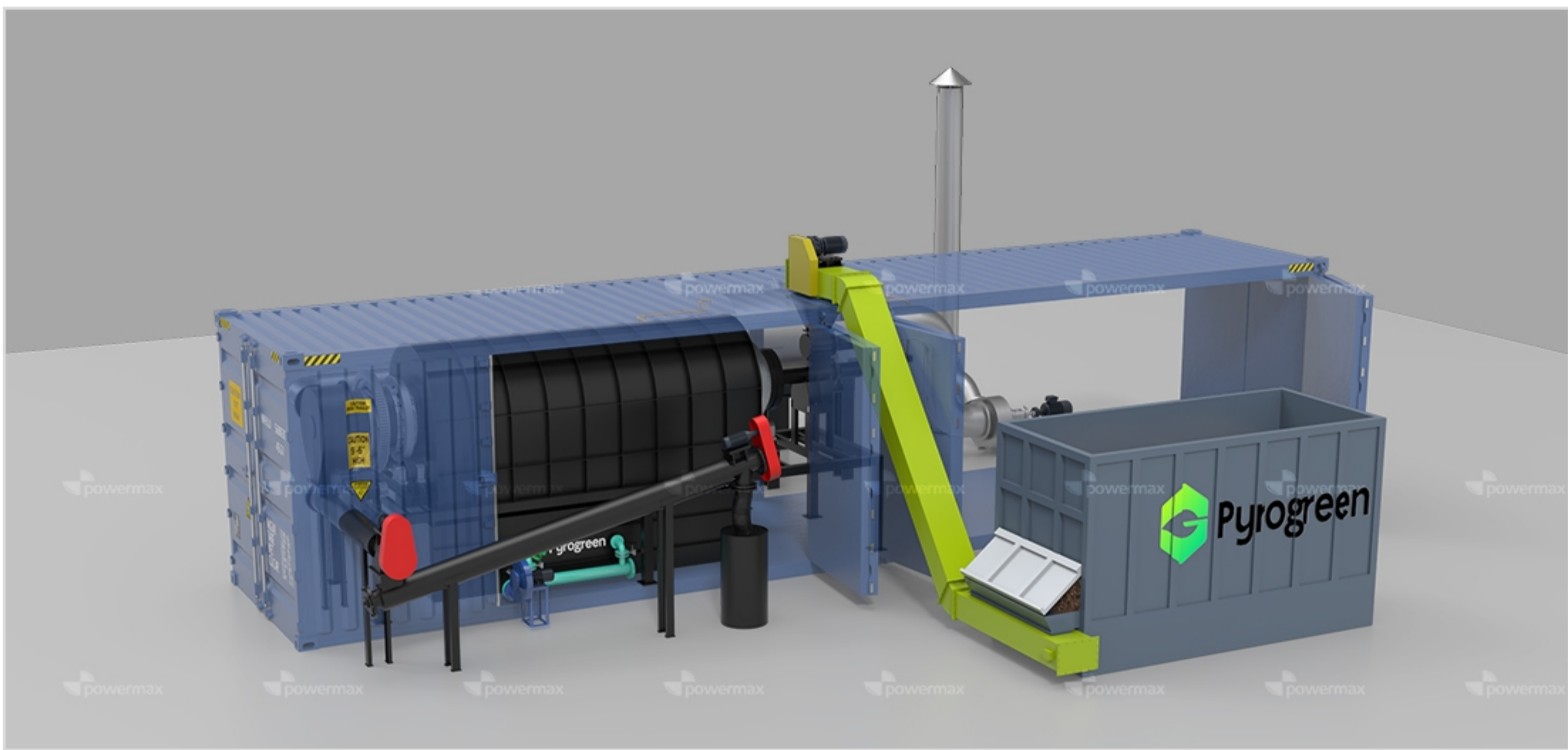
- ① Modular Concept, easy transportation and installing.
- ② No tar and liquid waste production.
- ③ Fully Automation.
- ④ Extremely Low NO_x, CO, Particle Emission.
High thermal efficiency and high biochar
- ⑤ quality and quantity production.

■ Screw Conveyor Carbonization/Torrefaction System



Biomass Screw Conveyor Carbonizer		
Model	BSCC 1000	BSCC5000
Feed Rate	1m³/h(300kg)	5m³/h(1500kg)
Footprint(L*H)	16m*10.5m	21m*11m
Working Mode	Continuous	
Feed Requirements	Size≤20mm(5-8mm is optimal), MC≤15%	
Construction	Indirect Heating Screw Conveyor Type	
Control Mode	PLC Control System	
Material	SS310S+SS304	
Pressure	Micro Negative Pressure	
Heating Fuel	Diesel, natural gas, heavy oil,etc	
Heating Mode	Indirect Heating	
Noise(dB)	≤80	
Cooling Mode	Circulating Water Cooling	

■ Rotary Kilns Carbonization/Torrefaction System



Biomass Rotary Kilns Carbonizer					
Model	BRKC600	BRKC1000	BRKC1500	BRKC3000	BRKC5000
Feed Rate	0.6m³/h(200kg)	1m³/h(300kg)	1.5m³/h(500kg)	3m³/h(1000kg)	5m³/h(1500kg)
Footprint(L*H)	14m*10.5m	15m*10.5m	16m*10.5m	17.5m*10.5m	19m*10.5m
Working Mode	Continuous				
Feed Requirements	Size≤50mm, MC≤15%				
Construction	Indirect Heating Rotary Kilns Type				
Control Mode	PLC Control System				
Material	SS310S+Carbon Steel				
Pressure	Micro Negative Pressure				
Heating Fuel	Diesel, natural gas, heavy oil,etc				
Heating Mode	Indirect Heating				
Noise(dB)	≤80				
Cooling Mode	Circulating Water Cooling				
Rotation Mode	External Gear Rotation				