



B I O C H A R

FOR PEOPLE & THE PLANET



Climate migration



Heat waves



Droughts



Pests & diseases in Agriculture



Loss & Damage

A PERIOD OF CONSEQUENCES



The different

futures that

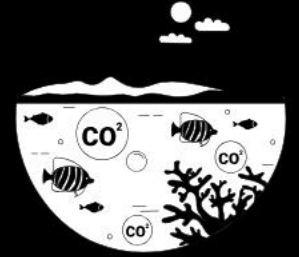
lie ahead.

+1.5 °C

+2 °C

+3 °C

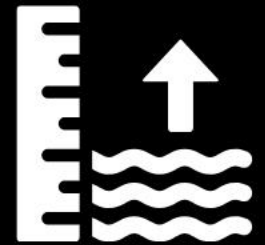
Ocean Acidification



Ecosystem Disruption



Sea Level Rise

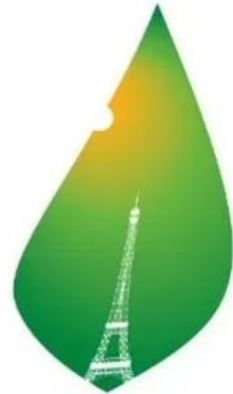


Forest fires



WHY CARBON SEQUESTRATION?

To limit global warming to below 1.5°C, key agreements like the Kyoto Protocol and the Paris Agreement were established. Despite efforts, global CO2 emissions rose in 2023, necessitating new carbon removal technologies like BECCS, biochar, rock weathering, and DACCS.



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



HOW CO2 SEQUESTRATION HELPS



OFFSET CO2 EMISSIONS



REDUCE ATMOSPHERIC
CARBON DIOXIDE

13
CLIMATE
ACTION

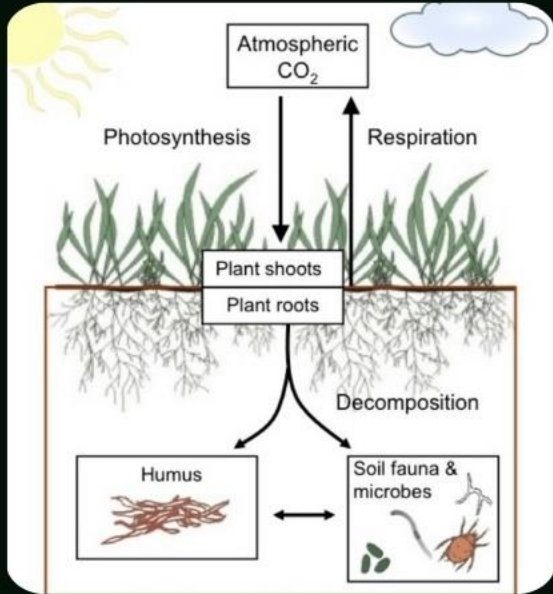


MEET LONG TERM
CLIMATE GOALS



LIMIT GLOBAL WARMING

METHODS OF CARBON SEQUESTRATION

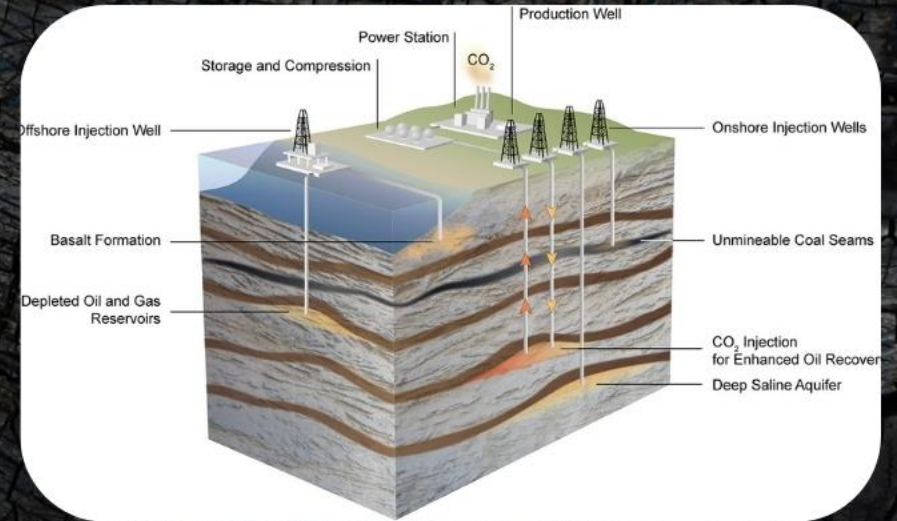


Technological Sequestration:



MEDIUM PERMANENCE
MEDIUM COST/TON CO₂

Utilizes advanced technologies like direct air capture and bioenergy with carbon capture and storage (BECCS) to remove and store CO₂

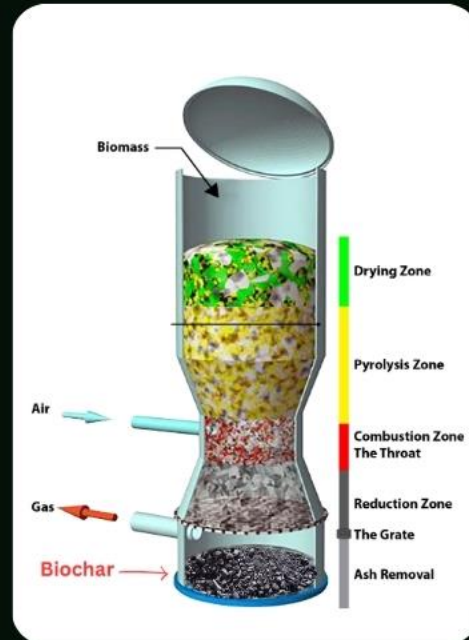


Biological Sequestration:



LOW PERMANENCE
LOW COST/TON CO₂

Involves capturing carbon through natural processes such as plant growth and soil management.



Geological Sequestration:



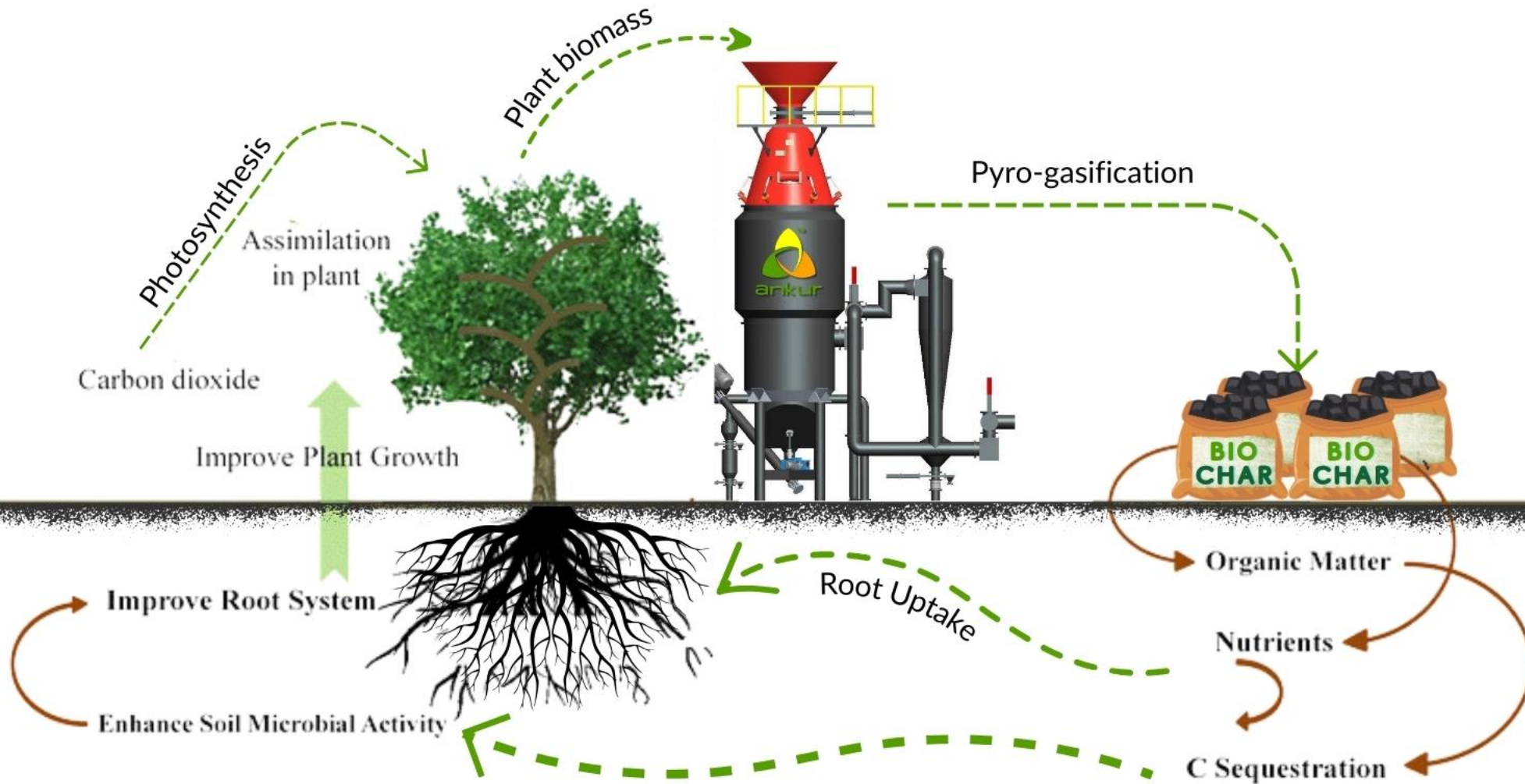
HIGH PERMANENCE
HIGH COST/TON CO₂

Focuses on storing CO₂ in underground rock formations, preventing its release into the atmosphere.

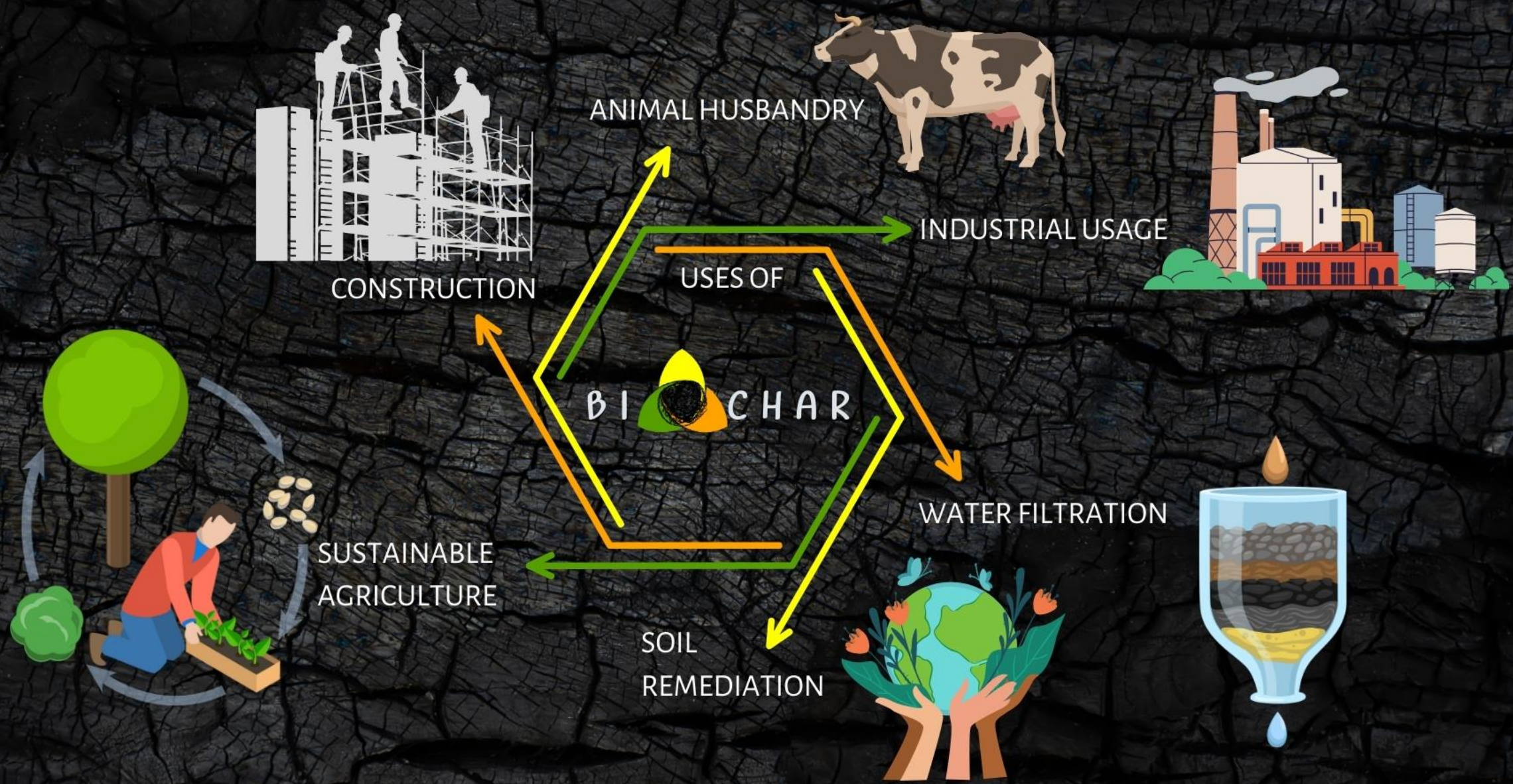
WHAT IS BIOCHAR?

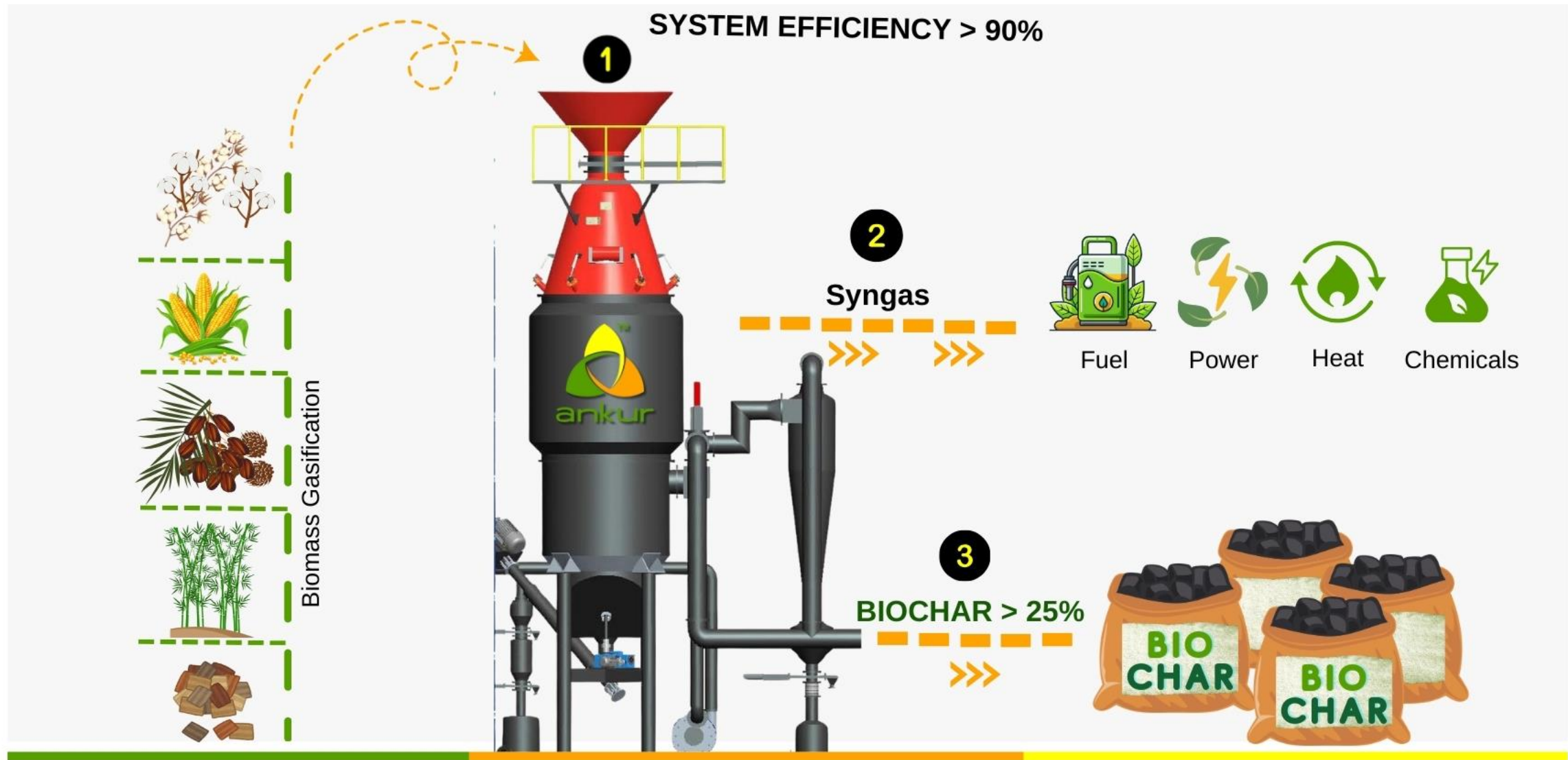
Biochar is a fine-grained, highly porous material produced from biomass such as agricultural by products, forestry residues, and solid waste (e.g., sewage sludge). It is created through high-heat, low-oxygen processes like pyrolysis or gasification. Biochar is recognized as one of the most cost effective solutions for permanently mitigating climate change today.





HOW BIOCHAR SEQUESTERS CARBON?





PYRO GASIFICATION: AN ANKUR INNOVATION

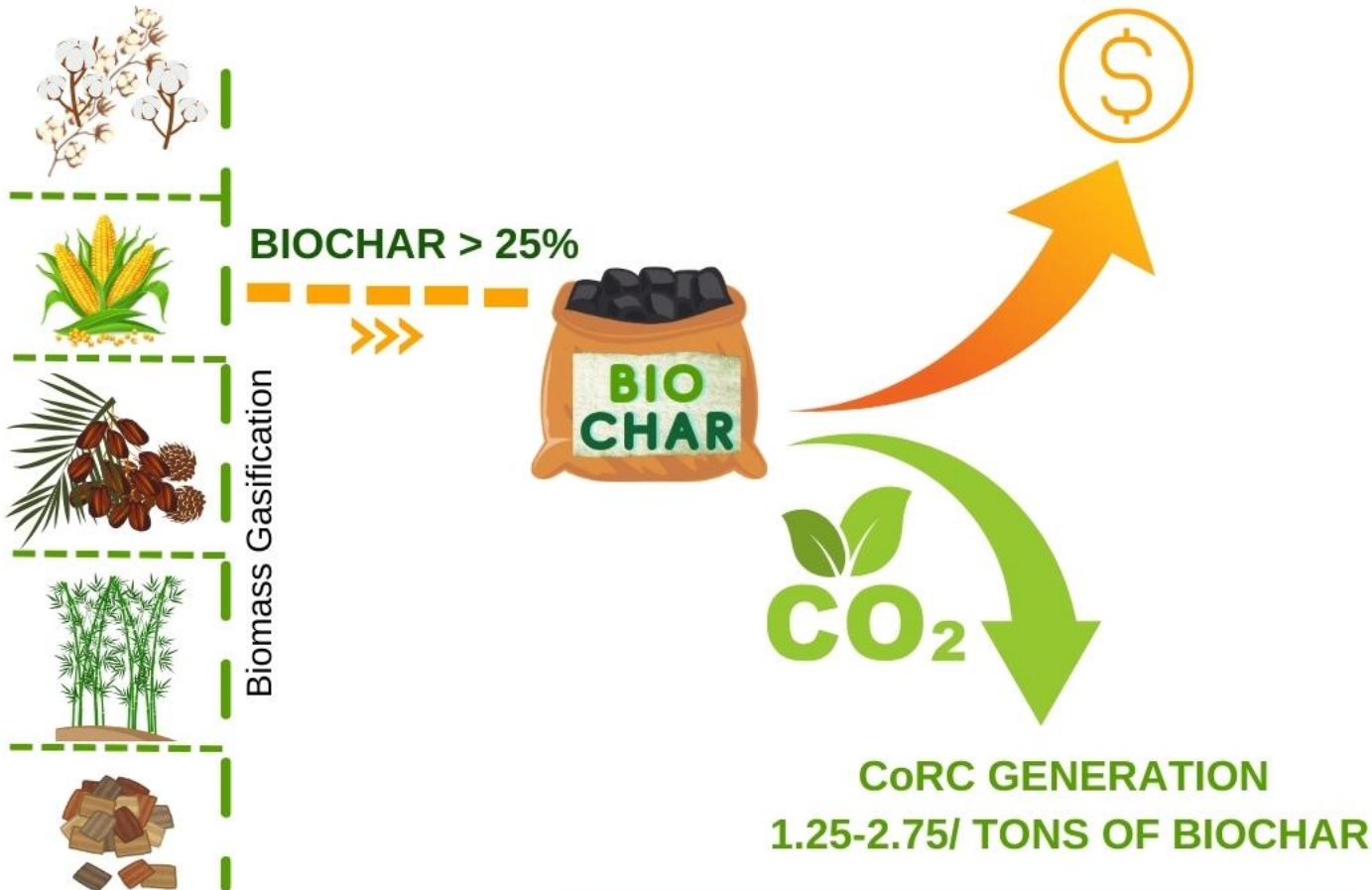
[LINK TO GOOGLE DOC WITH PROPERTIES OF ANKUR BIOCHAR](#)



CARBON CAPTURE & COST



COST OF BIOCHAR
\$160/Ton
(if cost of biomass \$40/ton)



- Based on C in biochar, CO₂ captured can range from 1.25 to 2.75 tons of CO₂ per ton of biochar.
- Each tonne of biochar can thus generate between 1.25 to 2.75 CoRCs.
- Assuming a biomass cost of around USD 40 per tonne, cost of biochar generation is about USD 160 per tonne.
- Syngas is available free of cost for various applications like Process Heat, Power Gen., making fuels and chemicals etc.

ABOUT US



Founded in 1986 by Dr. B. C. Jain, a gold medalist from BITS, Pilani, Double M.S., Ph. D, & M.B.A. from M.I.T. (Cambridge), an internationally acclaimed technocrat.



Indigenously Developed and Patented Technologies that meet all emission and safety norms.



1000+ systems installed in 35+ countries worldwide.



Working with various Governments globally, NGOs, agencies of the UN, EU, World Bank, Internationally reputed Universities, the Gates Foundation, various industrial and investor groups and private industry.



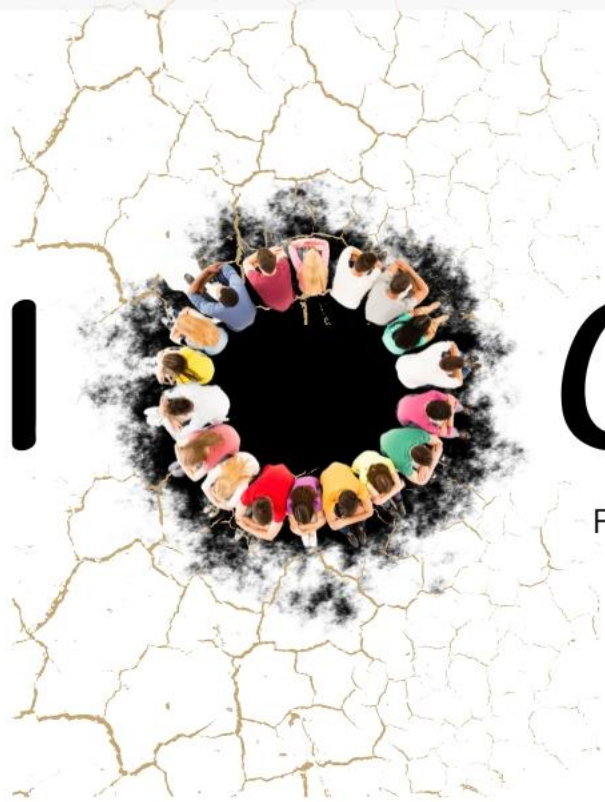
Recipient of numerous National and International Awards.



ISO 9001, ISO 14001 and ISO 45001 certified. All equipment is CE certified.



B I C H A R



FOR PEOPLE & THE PLANET



THANK
YOU!

Ankur Scientific Energy Technologies Pvt. Ltd.

www.ankurscientific.com

info@ankurscientific.com

Phone No. +91-265-279-3098

Ankur, Near Navrachana School, Sama

Vadodara, Gujarat 390024, INDIA