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Company Snapshot

- Carbon Gold is a biochar company
- Founded in 2009
- UK-based, Bristol
- One of the world's first companies to commercialise biochar
- Sale of soil products and production systems



What we do

Soil Products



What we do

Biochar production systems



Target Market & Competition

Soil Products: Commercial and amateur gardeners and growers in UK and international markets

Biochar production systems: Supply chain, rural development, community groups



Carbon Gold – The Business of Biochar



2013 State of the Biochar Industry

A Survey of Commercial Activity in the Biochar Field

A report by the International Biochar Initiative (IBI)



Spectrum of Materials



Wood is the primary source of feedstock

Primary Market is Soil Use

CARBON GOLD
GRO CHAR

GROW A PEAR

FASTER GERMINATION
INCREASED ROOT DEVELOPMENT
LESS WATERING
ALL SOIL TYPES
BETTER RESILIENCE
REDUCED LOSSES
IMPROVED YIELDS

BUY IT, TRY IT, SEE THE DIFFERENCE
ENRICHED BIOCHAR SOIL IMPROVER, COMPOST & FERTILISER
WWW.CARBONGOLD.COM

100% SUSTAINABLE



Climate Change Impact

Customers not motivated by climate change benefits of biochar
It's all about performance



WORLD BANK

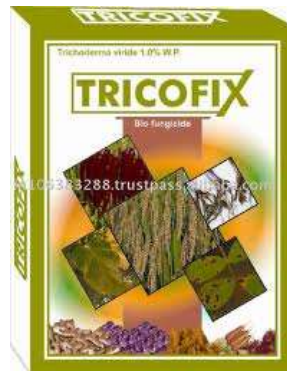


Markets and Pricing

CG sells biochar blends into high-end niche markets where the biochar component of our products is valued between £10 and £0.75 per kilo



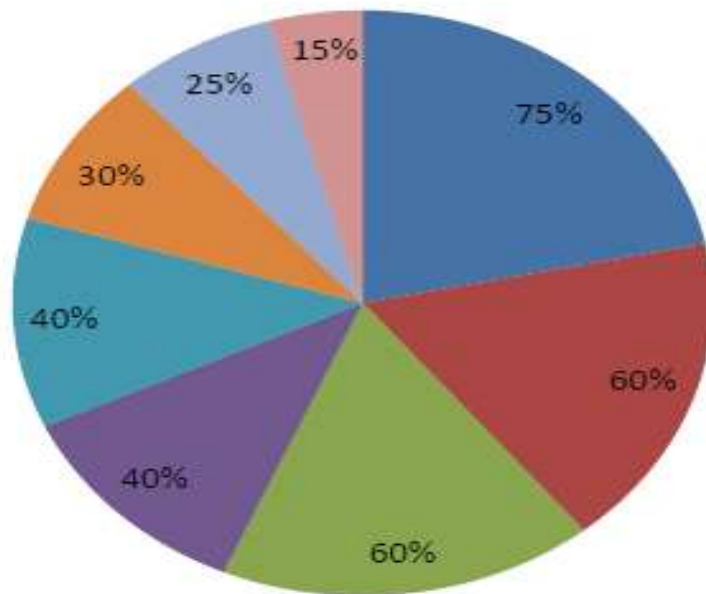
Market Positioning



Biochar Production

Insufficient demand to create viable market for commercial biochar production
827 metric tonnes sold ever!

Larger scale biochar production equipment machines must monetize bi-products from pyrolysis process – thermal energy / fuel gas / bio-oils



- Drying food, fuel, feedstock or crops
- Space heating
- Combined heat and power (CHP)
- Electricity generation - thermo-electric generator
- Bio-oil collection and refining
- Syngas collection, cleanup and storage
- Electricity generation - internal combustion engine
- Cooking

Biochar Production

Market for small scale production units is more viable – units sold into non-commercial environment

Research / Rural Development / Supply Chain / Corporate CSR

- Belize
- Ecuador
- Turkmenistan
- Brazil
- Botswana
- Nigeria
- Burkina Faso
- Fiji
- Indonesia
- Costa Rica
- Trinidad

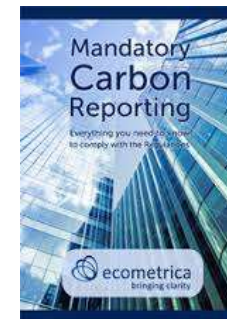
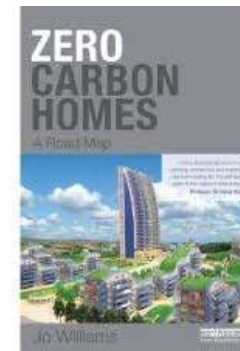


Policies and Regulation

Standards: - IBI / EBC / BBF BQM



Market Based Programmes: -



Barriers

- Market Awareness

Biochar trial among professionals yields positive results

A Soil Association commercial biochar trial with professional horticulturists has yielded positive results.

The Carbon Gold products are in 90 garden centres but are now being promoted to professional growers.

Some 19 growers trialled the Soil Association-approved, peat-free products. They were found to help



Carbon Gold: biochar products

boost root growth, reduce the need to water and improve germination rates.

Carbon Gold executive chairman Craig Sams will be launching the results at the Soil Association's Soil Symposium on 15 November.

Delfland Nurseries co-owner John Overvoorde trialled GroChar Seed Compost on young lettuce and brassi-

cas. "I use Klasmann modular compost and biochar did just as well. I also use Klasmann peat-free and there's not much in it."

He said he would contract grow a "reasonably-sized" order in biochar if asked and expects his first customer by early 2013.

Great Dixter head gardener Fergus Garrett said:

"Excellent peat substitute, better than green waste. Would not hesitate to use as part of a John Innes mix."

Rijk Zwaan field trials manager Martin Kyte said: "I started trialling Carbon Gold's GroChar Composts against a peat-based compost but the results were so good I stopped the trials and progressed solely with GroChar."

- Regulatory



- Carbon Component



Conclusions

- Early stage
- Business case for biochar still emerging
- More participants needed in the market
- Regulatory drivers need to change
 - Remove renewable energy subsidies
 - Introduce carbon tax
 - Incorporate biochar into existing mkt based programmes
- Drive market awareness



Thank you

