Annex 1 October 2018

Market for Carbon, Charcoal activated Coal Valorization of by-products from small scale gasification

1 General

This Annex is mentioned to give an impression what market, market player or market fields could be involved for the different potential C containing by-products, produced by the small-scale wood gasifier CHP units. These lists are not complete. The mentioned companies chosen are by chance and not with any preferences. This information's are public in the www and shall give an idea for the most promising market fields.

- a. Soli improvement
- b. Charcoal, BBQ-coal
- c. Activated coal
- d. Animal Food
- e. Medical Coal

Due to specification and standards the carbon market is a very closed, hidden and a special market. As higher the value of the products is, as more it is difficult to get information, specification and values of the different producer and costumer. It is a typical thrust and personto-person business. The information collected are examples. We also can observe as higher the price as more locked up information are! Similarity are to observe to the diamond market! Notice that diamond also is pure carbon physically seen.

Table shows existing market fields

Carbon utilization	Production by	Coming from	Raw material	General expretions	Brand names
Filter absorber	gasification pyrolyze	biomass	wood	Activated carbon	Donaucarbon Silcarbon
Agriculture Gardening Soil improvement	gasification pyrolyze lignite grinded	biomass «Biochar» fossil		(Pflanzenkohle) BIOCHAR*	Verora Egos
BBQ	gasification pyrolyze lignite grinded and pressed		wood fossil coal	BBQ coal charcoal	
Metal production	gasification pyrolyze lignite grinded	biomass fossil	Wood Coal lignite	Lignite Carbon	
Energy	gasification lignite	fossil biomass	biomass all type of carbon Lignite	Biomass Coal	
Animal food	pyrolyze	biomass			
Medical human	pyrolyze	biomass			© ETECA CMbH

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2 Soil Improvement

Examples of suppliers for charcoal products for the soil improvement:



https://www.pflanzenkohle24.de/



http://www.verora.ch/page/de/verora-pflanzenkohle

Terra Preta in folgenden Varianten



Riedlingsdorfer Schwarzerde

Entwickelt nach dem Vorbild der Terra Preta - der fruchtbarsten Erde der Welt! Bei richtiger Behandlung wird ewige Fruchtbarkeit garantiert!

ZUM PRODUKT →





Bodenaktivator

Der biologische Dünger für den Garten - bei Langzeitanwendung kreieren sie ihre eigene Schwarzerde (Terra Preta). Nur 3 Liter pro Quadratmeter sind notwendig - einfach nur oberflächlich einarbeiten.

ZUM PRODUKT ->





Pflanzenkohle

Stabiler Kohlenstoff zur Aufwertung von Kompost und Stallmist sowie zur Herstellung der eigenen Terra

ZUM PRODUKT ->



https://www.charline.at/de/terra-preta/

3 Charcoal, BBQ-Coal



4 Activated Coal / Activated Carbon



https://donau-carbon.com/

A nice overview documentation of activated carbon find in English:

https://donau-carbon.com/getattachment/76f78828-2139-496f-9b80-

6b6b9bdc6acc/aktivkohle.aspx

in German:

https://donau-carbon.com/getattachment/943783b7-783d-45ef-98de-392817d477da/aktivkohle.aspx

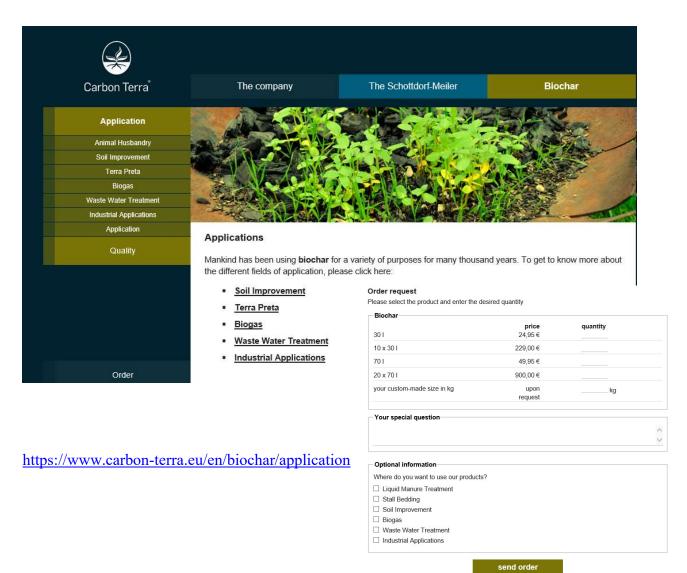


http://www.silcarbon.eu/englisch/products/application-table-/index.html

5 Animal Food Additives



https://www.charline.at/de/futterkohle/



6 Medical Coal





Activated charcoal is a potent natural treatment used to trap toxins and chemicals in the body, allowing them to be flushed out so the body doesn't reabsorb them. It's made from a variety of sources, but when used for natural healing, it's important to select activated charcoal made from coconut shells or other natural sources.

https://draxe.com/activated-charcoal-uses/

7 Biochar

Biochar is the reason for many misunderstandings. Behind this expression does not mean quality, nor standard, nor technology, nor a specified way of production. It simply mean char out of biomass in the consequent way seen biochar can also be millions of years old biomass also fossil coal.

It is the advertisement that stimulate the idea especially in the German speaking region it is something clean, nice healthy positive etc.

Never less there are many activities of researchers, organization and associations see the Links:

http://biochar-science.net/

http://charnet.ch/idee/

http://www.european-biochar.org/de/home

https://biochar-international.org/

http://www.ithaka-journal.net/newsletter?lang=en