



The future of biochar

End conference of the Interreg IVB project Biochar: climate saving soils

Date: December 10, 2013
Time: 09:45 – 17:30 (Day programme)
18.15 – 21.00 (Evening programme)
Location: Hampshire Hotel Groningen Centre, Groningen,
the Netherlands

Over the last 4 years twelve partners from seven North Sea countries have performed extensive research into many questions related to biochar production and biochar applications.

Now they will share their knowledge about the production and application of biochar.

What is the current state of affairs in biochar research? What questions are still in need of an answer? What does the future of biochar look like? Are there any risks? And what about the economics?

Increasing soil organic matter improves soil quality and sequesters carbon. Organic material breaks down easily sequestering carbon from being sequestered permanently. If we transform biomass into biochar through the process of pyrolysis, carbon can be stored for hundreds of years. With this approach we can improve our soils, we can store carbon for hundreds of years and we can produce energy. If we are able to find an economically feasible way to do this we can add an extra win to this win-win-win concept.

Is this a realistic scenario? How can we do this?

This conference will focus on:

- The production and use of biochar – developing the value chain;
- Key functions and behaviour of biochar in the soil;
- Biochar and plant production – practical perspectives.

Register now at www.biochar-interreg4b.eu
Free admission after registration

Day			
9:15 – 9:45	Registration		
9:45 – 10:05	Frans Debets	Province of Groningen	Netherlands
	Welcome and introduction Overview of the project and the relevance of biochar.		
Theme 1: The production and use of biochar – developing the value chain			
10:05 – 10:30	1 Ondrej Masek	University of Edinburgh	United Kingdom
	The production of biochar, different aspects of pyrolysis Biochar production, from lab to deployment; overview of challenges and opportunities in scaling-up biochar production.		
10:30 – 10:50	2 Frederik Ronsse	Ghent University	Belgium
	Commercial biochar production and its certification Overview of today's examples of commercial scale biochar production, on how to define biochar quality and the purpose of certification schemes.		
10:50 – 11:20	Coffee break – Poster and Product Presentations		
11:20 – 11:45	3 Achim Loewen	HAWK	Germany
	Life Cycle Analysis of biochar Ecobalances of biochar production and utilization and assessment of biochar process chains including biomass production, pyrolysis technologies, energy generation and biochar application.		
11:45 – 12:10	4 Wytze van der Gaast	JIN	Netherlands
	Biochar for carbon sequestration, developments in the carbon market How could carbon pricing add value to biochar projects: short and longer term perspectives.		
12:10 – 12:30	5 Hans-Peter Schmidt	Ithaka Institute	Switzerland
	Cascading use of biochar Before its application to soil, biochar can help to close the agronomic nutrient cycles especially in animal farming when used as a feed additive or for manure treatment.		
12:30 – 12:50	Questions + discussion		
12:50 – 13:30	Lunch – Poster and Product Presentations		
Theme 2: Key functions and behaviour of biochar in the soil			
13:30 – 13:55	6 Kor Zwart	Alterra	Netherlands
	Key functions of biochar in the soil Is biochar comparable to soil organic matter regarding its function in biological, chemical and physical roles in soil processes?		
13:55 – 14:20	7 John Stenström	SLU	Sweden
	Effect of biochar on pesticide and P sorption and leaching Pesticides and phosphorus can be transported from agricultural soils to water bodies. Such losses can be reduced by exploiting the high adsorptive capacity of biochar.		
14:20 – 14:45	8 Victoria Nelissen	ILVO	Belgium
	Nitrogen dynamics in the soil Effect of biochar on soil nitrogen cycling and nitrogen availability in the short and longer term; insights from ¹⁵ N tracing, incubation, pot and field experiments.		
14:45 – 15:05	9 Saran Sohi	University of Edinburgh	United Kingdom
	Screening biochar for effects on nutrient balance around roots Roots affect soil conditions and soil conditions affect root behaviour. How does biochar impact this interface? How can we screen biochars for a positive effect on crop nutrient acquisition?		
15:05 – 15:35	Coffee break – Poster and Product Presentations		
15:35 – 16:00	10 Henrik Hauggaard-Nielsen	DTU	Denmark
	Subsoil biochar application to vitalize coarse sandy soils From a column study it was concluded that biochar subsoil application increased barley yields tremendously due to the ability of biochar to increase the root zone capacity.		
16:00 – 16:25	11 Dorette Müller-Stöver	DTU	Denmark
	Suitability of gasification biochar as a renewable phosphorus fertilizer Gasification biochar showed a substantial phosphorus fertilizing effect in pot experiments; however, plant availability strongly depended on the feedstock used for conversion.		
Theme 3: Biochar and plant production – practical perspectives			
16:25 – 16:50	12 Greet Ruyschaert	ILVO	Belgium
	Field trials with biochar in the North Sea Region Effect of biochar on crop productivity and soil quality under field conditions in Europe; results of the Interreg biochar ring trial.		
16:50 – 17:10	13 Romke Postma	NMI	Netherlands
	Perspectives of biochar as a soil conditioner Biochar may be used as a soil conditioner in agriculture by farmers. The perspectives of this application will be presented by comparing it with conventional soil conditioners.		
17:15 – 17:30	Discussion and concluding remarks		
17:30 – 18:15	Drinks and snacks – Poster and Product Presentations		
Evening			
18:15 – 19:30	Discussion and three pitches about future actions What have we learned today? What questions need to be answered? How do we carry on from here?		
19:30	Dinner, toasts and speeches		
21:00	End of the conference		

Call for Research and Product Presentations
If you're interested in presenting a research poster or product please contact the congress organisation.

Parking facilities
Parking Damsterdiep

Hotel suggestions in de city center of Groningen (at walking distance from the train station):

- Hampshire Hotel Groningen (conference venue)
- Hampshire City Hotel Groningen
- Martini Hotel
- NH Hotel de Ville