



November 2015 News from the International Biochar Initiative

IBI Publishes Versions 2.1 of the *IBI Biochar Standards* and the *IBI Biochar Certification Program Manual*

On November 23, 2015, IBI published Versions 2.1 of the *IBI Biochar Standards* and of the *IBI Biochar Certification Program Manual* in order to ensure the continuous improvement of both documents. The *IBI Biochar Standards*—which provide a framework for determining what biochar is and what it is not, and for demonstrating the safety and efficacy of its use as a soil amendment—are the backbone of the *IBI Biochar Certification Program*, whose program requirements are laid out in the *Program Manual*. Biochar producers whose biochar materials meet the requirements of the *IBI Biochar Standards* as well as other requirements outlined in the *Program Manual* can apply for an *IBI Certified*[™] biochar seal to place on their biochar product.

Versions 2.1 of the *IBI Biochar Standards* and the *IBI Biochar Certification Program Manual*, as well as a note summarizing the changes to each document, are available on IBI's website. The [technical program revisions made to the IBI Biochar Standards](#) are limited to clarifications on required test methods for various parameters in two of the three biochar testing categories, in addition to other minor editorial modifications. The [technical program revisions made to the Program Manual](#) are focused on information that must be provided to demonstrate feedstock chain of custody, including a new provision for third-party sustainably certified feedstocks.

For more information on the *IBI Biochar Standards*, please visit <http://www.biochar-international.org/characterizationstandard> and for more information on the *IBI Biochar Certification Program* please visit <http://www.biochar-international.org/certification>. IBI welcomes input from all stakeholders; comments can be sent to info@biochar-international.org.

December IBI Webinar Series Event: Jim Diebold presents "IBI Certified Biochar Production by Community Power Corporation in California"

Many of you have been asking to hear from a biochar producer—and this month, we are excited to bring one to you! IBI welcomes Jim Diebold of Community Power Corporation, for our December *IBI Webinar Series* event. Mr. Diebold will discuss his autonomous, air-blown, continuously operating, downdraft gasifier system that produces an IBI Certified Biochar from waste walnut shells, meeting all of the requirements of the *IBI Certification Program Guidelines*, Version 2.0. Due to the destruction of tars in the gasifier to extremely low levels, no liquid scrubbing of the producer gas is required before the gas is filtered and used to fuel spark-ignited, internal-combustion engines for the production of grid-quality

electricity, with low CO, NOx, SOx, and VOC emissions that meet the strict requirements of the two local California Air Quality Management Districts. The feedstock used and the design and operation of this gasifier are responsible for the properties of his biochar.

[Registration is open now](#). The webinar will be held on Tuesday, December 15th at 18:00 GMT (which is 1:00p.m. Eastern Time or the time in New York City). Note: Please convert the 1:00p.m.ET start time to your [local time by using this time converter tool](#). You must be a dues-paying member to participate in these special events. If you are not an IBI member and would like to join, [please click here](#).

IBI members can view this and all prior *IBI Webinar Series* presentations by logging into the IBI member's only site at <https://ibi.memberclicks.net/login>. If you are not an IBI member and would like to join in order to view presentations, [please click here](#). For more information on *IBI's Webinar Series*, please see: http://www.biochar-international.org/webinar_series.

New and Renewing Business and Organization Members

A listing of all current IBI [Business](#) and [Organization](#) Members can be found on our website. For more information on membership opportunities and benefits, or to join, please see: <http://www.biochar-international.org/join>. Please note, Business and Organization descriptions are submitted by each individual entity, and are not developed or written by IBI.

New Business Member: Campos Verdes

CAMPOS VERDES is a Franco-Brazilian company belonging to the SLB Group. Based in southern Brazil, the company Campos Verdes is developing a high quality biochar product. The biochar feedstock is FSC certified wood, entirely harvested from afforestation projects. The SLB Group develops partnerships with the Federal University of Parana (Brazil) and Embrapa (Brazilian Agricultural Research Corporation, a state-owned research group affiliated with the Brazilian Ministry of Agriculture, Livestock and Food Supply).



The company began operations in January 2015, and its commercial plant will be active in 2016, with a production target of 5000 tons/year of biochar. For more information, please contact: freddy.gaudier@slbsa.com or see <http://www.brazilforest.fr/en/home.html>.

**The IPCC (Intergovernmental Panel on Climate Change) defines afforestation as reforested land.*

CAMPOS VERDES é uma empresa franco-brasileira, pertencente ao Grupo SLB. Baseada no sul do Brasil, a empresa Campos Verdes desenvolve um programa para a produção de biochar de alta qualidade. O biochar da CAMPOS VERDES utiliza somente madeira no processo de pirolise, 100% proveniente de afforestation*, e certificação FSC. O Grupo SLB desenvolve parcerias com a Universidade Federal do Paraná (Brasil) e Embrapa (Empresa Brasileira de Pesquisa Agropecuária, instituição pública de pesquisa vinculada ao Ministério da Agricultura, Pecuária e Abastecimento do Brasil).

A Campos Verdes iniciou suas atividades em janeiro 2015, e desenvolve um projeto de planta comercial que estará ativo em 2016, com meta de capacidade de produção de 5000 toneladas /ano de biochar. Para mais informações, entrar em contato: freddy.gaudier@slbsa.com

** Segundo o IPCC, aflorestamento é o plantio de florestas em regiões historicamente sem árvores.*

CAMPOS VERDES es una empresa brasileña, que pertenece al Grupo SLB. Con sede en el sur de Brasil, la empresa Campos Verdes desarrolla un programa de producción de Biochar de alta calidad. El Biochar de CAMPOS VERDES solo utiliza, para el proceso de pirólisis, madera procedente 100% de forestación* con certificación FSC. El Grupo SLB colabora con la Universidad Federal de Paraná (Brasil) y EMBRAPA (Empresa Brasileña de Investigación Agropecuaria, institución de investigación pública dependiente del Ministerio de Agricultura, Ganadería y Abastecimiento de Brasil).

Campos Verdes empezó sus actividades en enero de 2015, y desarrolla un proyecto de una planta comercial que estará activa en 2016, con un objetivo de capacidad de producción de 5 000 toneladas/año de Biochar. Para más información, contactar con: freddy.gaudier@slbsa.com

**Según el IPCC (Panel Intergubernamental sobre el Cambio Climático), es la plantación de bosques en zonas históricamente sin árboles.*

Renewing Business Member: Earth Systems

Earth Systems is an international environmental consulting firm based in Australia. We develop effective solutions in diverse areas such as environmental management, carbon and bioenergy, and water quality. Our bioenergy team has developed a mobile biochar technology for stick to log sized stranded woody biomass, where transport costs make recovery uneconomical. The CharMaker MPP (Mobile Pyrolysis Plant) is a simple to operate, safe and easily transportable batch pyrolysis furnace that goes to the biomass – not the other way around. The technology is based on a shipping container design making transport simple. The CharMaker is designed for standalone operation and includes on board power and ignition generation and controls, it safely operates itself and can be controlled remotely from any smart phone or computer. The furnace creates excess energy that can be used for high grade heat. Electricity generation with the CharMaker has been developed at the pilot scale and can be implemented as needed. We have also developed a full bio-liquids recovery system for wood vinegar and bio-oils creating multiple outputs from the technology. Multiple units are in operation in Australia, and internationally. Our Asian installation was a fixed installation and the waste heat from the thermal oxidiser was used to drive a wood drying kiln. The furnace meets stringent environmental emissions standards and the thermal oxidiser ensures minimal smoke emissions. Larger units are under development and a continuous unit for smaller fractioned materials is also coming soon. For more information, see: <http://www.esenergy.com.au/services/charmaker>.



Renewing Organization Member: Institute for Governance and Sustainable Development

IGSD's mission is to promote just and sustainable societies and to protect the environment by advancing the understanding, development, and implementation of effective, accountable, and democratic systems of governance for sustainable development.

IGSD's strategies focus on reducing non-CO2 climate pollutants -- as a complement to cuts in CO2 -- by reducing other short-live climate pollutants



(HFCs, black carbon, tropospheric ozone, and methane) in various venues primarily outside the UNFCCC, including the Montreal Protocol (ranked the most effective of all past climate mitigation strategies in a study published in *The Economist*), <http://www.economist.com/news/leaders/21618781-quickest-way-cut-greenhouse-gases-expand-montreal-protocol-paris-montreal> the Climate & Clean Air Coalition to Reduce Short-Lived Climate Pollutants, as well as through national and regional laws and regulations. IGSD's strategies also include measures to capture, reuse, and store CO₂ after it is emitted, including biosequestration and mineralization strategies that turn carbon dioxide into stable forms for long-term storage without competing with food supply.

Follow [IGSD on Twitter](#) for updates https://twitter.com/IGSD_DC or see the website at <http://www.igsd.org/>

Did you know that the IBI Online Biochar Training Course is Ongoing?

If you are interested in gaining more in-depth knowledge on biochar and biochar systems, consider registering for IBI's recently launched online course, [Biochar Training for Environmental Sustainability and Economic Development](#). This ten week, ongoing course provides participants an intensive training series on all aspects of biochar, presented by leading biochar experts. Participants have the opportunity to learn about best-science updates on biochar to promote the uptake of biochar production and use, and actions necessary to overcome the barriers to commercialization of the biochar industry. The course contains 19 separate lessons—each with a subject overview, a recorded audio/video presentation lasting 30 – 45 minutes (some lessons contain more than one video), and quizzes to test comprehension and retention. There is also an optional introductory presentation on the basics of biochar and the IBI so that all participants start the course with a common understanding of both. Course materials are presented in a user-friendly online format and participants can access the course at their convenience over ten weeks and will receive a certificate of completion at the conclusion of the course.

Course materials are based on presentations from the June 2014 in-person biochar training course titled, "*Biochar for Environmental Sustainability and Economic Development*," hosted by the University of Santiago de Compostela, Spain, and developed and presented by IBI and collaborators. For more information on member and non-member pricing and registration, please see www.biochar-international.org/online_course.

Opportunities in Biochar

- Take advantage of a free subscription to Biomass Magazine. More information is available at <http://www.biochar-international.org/node/5537>
- Download the open access biochar book: *Biochar Culture*, by Dr Sai Bhaskar Reddy Nakka. The text highlights the use of biochar in communities and its potential for increased sustainable agriculture in smaller scale farmsteads and homes, focusing on work in India. The book can be accessed at <http://www.biocharculture.com>
- Job postings in biochar (as well as research/educational opportunities) can be accessed at <http://www.biochar-international.org/network/jobs>

- Looking for potential grant funding? Check out the Terra Viva Grants Directory which develops and manages information about grants for agriculture, energy, environment, and natural resources in the world's developing countries at <http://www.terravivagrants.org/Home>

Upcoming Calendar Events

- November 29: Biochar Workshop. Location: Huelo, HI, USA. For more Information: <http://www.biochar-international.org/node/7539>
- March 30 – April 1, 2016: Northeast Biomass Heating Expo 2016. Location: Burlington, VT, USA. For more information: <http://www.biochar-international.org/node/7389>
- April 11 – 14, 2016: 9th Annual International Biomass Conference & Expo. Location: Charlotte, NC, USA. For more information: <http://www.biochar-international.org/node/7430>
- Save the Date: August 2016. Biochar 2016: The Synergy of Science and Industry: Biochar's Connection to Ecology, Soil, Food, and Energy. Location: Corvallis, OR, USA. For more information: <http://usbi2016.org/>

See the [IBI Calendar page](#) for more events. To add an event to the calendar, send the information to info@biochar-international.org.

Recently Published Biochar Research

IBI tracks all published research on biochar and includes it in our [online bibliography](#). The following articles were added in the last month. Please visit the website bibliography for more information on any of these articles. Due to copyright infringement laws, we cannot provide full copies of articles unless we have permission from the publisher. If you have published work that is not included, [please email us](#).

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