

Adjusting Carbon Management Policies To Encourage Renewable, Net-Negative Projects Such As Biochar Sequestration

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Prominent scientists believe the world concentration of carbon dioxide already exceeds a "safe" level. Thus, there will likely be a need to not only reduce the pace of net emissions but also to develop technologies for effectively removing carbon from the atmosphere. One promising technology is the use of biochar to sequester carbon in soil. This article considers legal changes needed to fully accommodate credits for biochar and otherwise encourage net-negative projects.

Part II of this article examines the science behind biochar, the manufacturing process, and its potential as a method of carbon sequestration. Biochar is created through pyrolysis- a process of heating biomass in a low-oxygen environment. The end result is a substance containing, for practical purposes, a permanent form of carbon. When used as a soil amendment, this biochar increases soil fertility, water retention, and crop productivity. Moreover, it yields secondary greenhouse gas-related benefits by suppressing greenhouse gas (GHG) emissions from soil, and increasing the soil's capacity for carbon storage. There are some attendant risks, but, as Part II describes, such risks appear manageable and may be worth taking in light of the proven benefits of biochar.