

## SESSION THREE ORAL PRESENTATION A

### **Do integrated energy and agricultural charcoal production techniques offer opportunities for carbon trading?**

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#### **Abstract**

The Kyoto protocol is an international agreement that defines targets for reducing emissions of anthropogenic sources of greenhouse gases. It allows for both reductions in emissions and removal of C from the atmosphere in soils or biomass. The US government has declined to sign the Kyoto protocol, and has indicated that it favors market based, rather than regulatory, approaches to reducing anthropogenic sources of GWP.

Until now considerations of the role of agriculture in reducing greenhouse gas emissions have focused mainly on the potential to sequester carbon in soil or through reforestation. Drawing upon a case study of New York State (NY) we re-examine the opportunity for agriculture to contribute to the reduction in C emissions. The analysis is broken down as follows:

1. An assessment of the emissions associated with agriculture in the context of other sources of emissions in NY.
2. A preliminary assessment of the improved management of resources within NY and the integrated use of biomass based energy sources to offset greenhouse gas emissions from no agricultural sources
3. We then examine the potential that integrated energy and agricultural charcoal production techniques may offer to reduce greenhouse gas emissions.

The analysis will take a holistic approach, considering both C sequestration in and emissions from soil. Having established the scope for emissions reduction we will consider the implications for carbon emissions trading may offer.