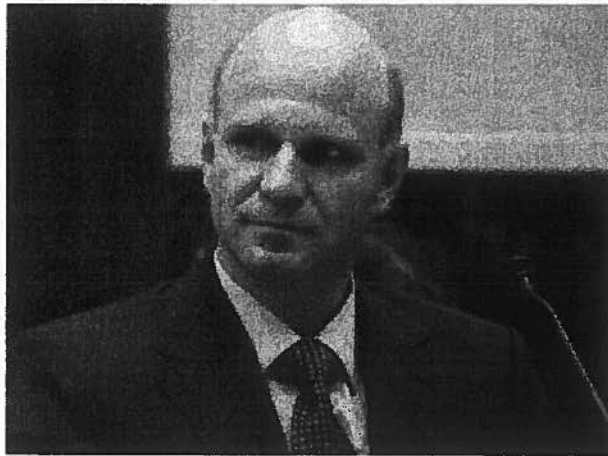


## Biochar Hero, Johannes Lehmann, Testifies before the 111th Congress



On June 18, Cornell Associate Professor of Soil Fertility Management/Soil Biogeochemistry and author of *Biochar for Environmental Management: Science and Technology* (referred to by some as the Bible of Biochar) Dr. Johannes Lehmann testified before the House Select Committee on Energy Independence and Global Warming. The hearing, *Global Warming's Growing Concerns: Impacts on Agriculture and Forestry*, featured Dr. Lehmann as an expert on Biochar and its potential usages in staving off the effects of climate change through government legislation and sanctions. He explained to members of the committee the basics of biochar but, what's more, he also identified the most significant hurdles standing in the way of biochar reaching its highest potential. Biochar has become an enormously popular. The benefits of its usage are becoming more widely known everyday. Still, certain hurdles exist that congress can help to address. The following is an excerpt from his testimony submitted to the committee:

“Current hurdles to implementation are: availability of pyrolysis units at sufficient maturity to allow all necessary research and development, and, as a direct consequence, a lack of demonstrated carbon trading activities; of sufficient development of best biochar practices at scale of implementation, including farm scale; and of demonstration of soil health benefits for the full spectrum of agroecosystems. The distributed nature of biochar systems and the potential for variability between systems create significant opportunities for sustainability, but also hurdles to widespread adoption, regulation, and financial viability.

“Establishment of policies at national and international levels is required to remove hurdles to implementation and support full evaluation of biochar systems. Mechanisms for carbon trading that recognize soil carbon sequestration, including biochar sequestration, need to be put into place. Methodologies must include full life cycle accounting of emissions balances to deliver net climate benefits. The entire value chain of mitigation approaches must be recognized, to reward those activities that have multiple environmental and societal benefits. Biochar must not be an alternative to

making dramatic reductions in greenhouse gas emissions immediately, but it may be an important tool in our arsenal for combating dangerous climate change.”

Just three days prior to Lehmann’s testimony, committee member Henry Waxman (CA-30) and global warming committee chair Ed Markey (MA-7) successfully passed their clean energy bill H.R. 2454 in the House (more on H.R. 2454 later). Although Lehmann was unable to provide testimony before the bill had been written and marked up, his words will hopefully be influential in the creation of further energy stipulations and policies released by the EPA in the coming months, as the bill does require that the Energy Secretary and the EPA take specific action to further our efforts in combating climate change. Dr. Lehmann was clear in emphasizing that carbon sequestration through pyrolysis and biochar must be worked into the developing structure of our cap and trade system (which was just mandated in H.R. 2454 – now on its way to the senate).