

Paul Belanger

Subject: FW: Offer to assist on much-needed report and graphics on CDR

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To: info@carbonbrief.org

Perhaps directed to Leo Hickman and Rosamund Pearce:

Identifying myself first - I recently noted the need to move the “oligocene” label in your article on “anthropocene” - and see it was changed today. I start here because I am most impressed with your daily output; I read your daily report more carefully than any other, save my own interests with several biochar sites (which are all less-well done). You obviously have a strong interest in the CDR/NET/GGR area - which is sorely lacking in most of your carbon-reporting competitors.

This is to offer to assist (no fee) on any information/graphics for CDR that you are developing or could develop where biochar would normally appear. I am unhappy with most everything appearing on the site “Geoengineering” - which neglects biochar universally. The reason is that biochar is occurring (even growing rapidly) for non-CDR reasons. And so highly pertinent articles don’t get picked up by search engines using too-short a list of key words.

Example CDR statistics that need to get to the “Geo” and carbon policy communities (my own biochar estimates in parentheses below [not claimed to be exhaustive]):

- a) annual publications and their growth or doubling rate (thousands; two years?); both technical and popular press
- b) companies involved (many hundreds for biochar; doubling time of few years)
- c) NGO organizations (dozens); countries with such (dozens); annual conferences and attendees (few; maybe a thousand?)
- d) daily or annual visits to pertinent web-sites (hundreds daily?); number of such sites (6-8?)
- e) annual tons of carbon sequestered vs time; include out-year growth - not only initial sequestration (approaching a million? - or projected dates for such)
- f) net cost of sequestering - need to include both cost and benefits (perhaps both \$ and carbon payback times)
- g) markets covered outside of CDR market (I am working now on the wildfire mitigations side; others working on water quality, livestock feed, etc)
- h) estimated numbers of individuals involved (thousands?) and growth rate for this
- i) potential labor available and any shortages (no known problem for biochar; problem is lack of detailed knowledge on costs/benefits)
- j) place on a development ladder (ready or not?; years to such a state; biochar almost there?)
- k) detractor groups (handful, BFW and ETC are most prominent) and their reasons for detracting (misplaced environmental supporting authorities (James Lovelock, Al Gore, Tim Flannery - less so - Jim Hansen, Bill McKibben)
- l) consulting groups offering some of above (at exorbitant prices: 2-3?)
- m) annual funding levels, both governmental and investment (tens of millions?)
- n) leading countries (China? UK is one of strongest, US has lots happening)
- o) relationships to other carbon brief topic areas: mitigation, adaptation, fossil fuel type areas

involved (biochar hits/fits all)

p) major global problem areas also impacted (biochar good especially on soils and food supply; also fertilizer and irrigation shortages; jobs; air quality)

q) new policy activity (Stockholm has a biochar program - breaking even?; California - new legislation; I have been active recently in Colorado re wildfire mitigation aspects of biochar)

Hope this gives you some ideas for a future carbonbrief project (with emphasis needed on comparative graphics). I, acting as a no-fee consultant, am ready to help on this not-easy problem. I try to follow the competitors - but claim little expertise there. BECCS is getting most of the press - and that seems to be a technology in deep trouble. All the other CDR approaches seem much further behind biochar. We need to tie biochar better into afforestation/reforestation/REDD+.

I am fully retired; I come to biochar after most of my career on renewables (policy emphasis). I was in first (1973) class of AAAS Congressional Fellows - worked only on RE topics. That led to being (first day) at what is now the US premier RE R&D group (NREL in Golden CO; then called SERI) where I was its first Principal Scientist (but left after a year of Reagan policies). I was chair of ASES (the American Solar Energy Society) for a short time. Mostly now active with biochar - being on the board of USBI, the technical advisory committee for IBI, and first (and continuing) coordinator of the Yahoo list "biochar". I recently joined the (unpaid) staff of tBJ - the Biochar Journal and will attend the APBC conference in Korea in 2 weeks for that publication.

My reason for this note is probably the same as for most of your group: a deep concern about not moving fast enough on excess atmospheric carbon.

Ron