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Subject: Comments on the document from [Carbon Gold](#) titled:

General Methodology for Quantifying the Greenhouse Gas Emission Reductions from the Production and Incorporation into Soil of Biochar in Agricultural and Forest Management Systems

Numbers refer to sections in the document:

Section # 2: Applicability

- There should be a statement (a bullet point) explicitly excluding natural habitat and natural forest to avoid "taking"/converting, or using natural habitat for char production. This is especially because natural forests under/without protection can be categorized as managed forest. Else, the project should be applicable to ALM and plantation forests only (and avoid using the term IFM).
- The applicability should also exclude situations where the feedstock (e.g. agricultural residue, tree trimmings, dead trees, logs, branches, saw dust etc.) are being used for non-carbon emitting purposes, as an alternative/renewable fuel source, and/or as the primary low-cost fuel source for domestic use (in developing countries).

There are often multiple uses for the crop/forestry residues. For example

Crop residues used as and/or for:

- Fodder (developing countries),
- Both alternative and traditional building technologies,
- Briquette making (in developing countries) for household fuel;

Crop residue, tree trimmings are used for:

- Gasification as heat/fuel source

Tree trimmings, dead or diseased wood/trees used for:

- Composting*
- Often the only affordable fuel source (in developing countries)

Saw dust and wood chips used for:

- Pallet/briquette making
- Particle board manufacturing

Saw dust, wood chips, crop residue used for:

➤ Paper making

* Can also capture methane if producing biogas through anaerobic digestion

Section # 3: Technology/Measure

- Sub-sections for technology/measure (and other sub-sections e.g. 8.3, Table 1 etc.) provide a good guideline/scope for the design and specification for the pyrolysis unit to be used.

Section # 4: Boundary

- Repeat comments for Section # 1 - the project should exclude from boundary natural habitats and/or uses for crop/plantation forest residue that are non-carbon emitting, as alternative/ renewable fuel source, and/or as the primary low-cost fuel source for domestic use (in developing countries).
- 4.2: What is the justification for 10 years? Is it arbitrary?

Section # 5: Summary of Process for Quantifying Net Emissions Reductions

- 5.1 is fine but can be simplified

Sections # 6, 7, 8, 9, 10, 11, 12, 13, and 15:

- Mostly fine as it is and clear
- 12.3 (b) Reference / rationale for default value of 0.4?
- 12.2 states: "This methodology does not quantify the total annual change in DOM carbon pool, or SOM carbon pool.... "
This is a major weakness: adding char with quantifiable carbon content, comparing it with baseline, and monitoring it over time - does not make sense if over time it cannot be proved that the DOM and/or SOM and/or non-fossil carbon in the soil is increasing over time with addition of char from pyrolysis.

Section # 14: Leakage

- "There is no land use change involved....displaced". Leakage or impact should be explicitly prevented in natural habitat and existing uses that are non-carbon emitting, as alternative/ renewable fuel source, and/or as the primary low-cost fuel source for domestic use (in developing countries).

Section # 16: Monitoring

- 16.1 What is the justification for sampling four times a year irrespective of the seasonality? Instead sampling should be spread out (less or more than four times) based on region or zones.
- 16.8 "The project participants shall demonstrate... Would have been burned or left to decay aerobically in the absence of project activity" [Caveats in applicability (#2), boundary (#4), and leakage (#14) sections excluding natural habitats and some uses that are non-carbon emitting, as renewable fuels, and or as the primary low-cost fuel source for domestic use (in developing countries) is needed so that this statement (16.8) can stand as it is].