

General Conclusions on Biogenic Carbon Accounting
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4-23-15

The following general conclusions are offered to summarize the Panel's comments to EPA on its 2014 Framework.

1. EPA should acknowledge and state that the overall goal of this framework is to minimize the impact of greenhouse gas emissions on the climate. [T1][RS2][FS(mab)3][RS4][pbw15][pbw16]
2. As the goal is to minimize greenhouse gas emission impacts, EPA should consider in any framework not only carbon dioxide but also other greenhouse gases including nitrous oxide and methane. [FS(mab)7].[T8][RS9]
- 3.3. Vital information is missing [KES10] from EPA's 2014 Framework to enable scientific input on how to design a framework for accounting for carbon emissions from biogenic sources. [pbw111][pbw112] Information is needed on the policy context for regulating biogenic feedstocks under the Clean Air Act and recent court decisions. In addition, information is needed on other supplementary approaches being considered/available for incentivizing sustainable land use practices (even those beyond EPA's legal authority), such as carbon offsets or certification of sustainable forestry and agricultural practices. [MB13][T14] To provide clarity and structure for this discussion, EPA should make clear its policy options, its legal boundaries and the extent of its authority over upstream and downstream emissions. [T15][RS16]
- 2.4. EPA's anticipated [KES17] baseline approach to calculating BAFs, while subject to implementation difficulties and all the uncertainties associated with modeling the future is preferred to the reference point approach. [JH18]
- 3.5. BAF [pbw119][pbw120] can be used to provide relative signals among feedstocks so that facilities have an incentive to choose feedstocks that minimize climate impacts or even provide climate benefits [RS21]. [JH22][MB23] However, the EPA should consider supplementary policies to prevent leakage effects that have an adverse impact on the climate and monitor the sustainable management of long-rotation feedstocks [T24] like roundwood and stocks of soil carbon [FS(mab)25]. [RS26]
- 4.6. A regional approach [KES27] rather than a facility-specific approach should be used to calculate BAFs that are representative for the region. [JH28] In general, larger spatial scales would be preferable because they will be able to more comprehensively include the indirect impacts at the landscape level. [MB29]
- 5.7. The appropriate time [KES30] scale for considering climate impacts from biogenic feedstocks is the time period over which biophysical effects occur in response to a policy induced shock in demand for bioenergy. [JH31]

6.8. Given the uncertainties [KES32] about the continuity of sustainable forest and land management practices that ensures re-growth of long rotation feedstocks and ~~preservation~~ conservation of sequestered carbon in the soil, ~~the BAF~~ [pbw133][pbw134] any framework should be continuously reevaluated. ~~evaluated~~ every 5–10 years [H35] and updated if conditions on the ground change [JH36]. [RS37][FS(mab)38]

1. The Framework document acknowledges in many places that many decisions involved in the framework will depend on the specific purpose and policy context in which it is used. Therefore, once a specific policy context is selected, the framework should be reviewed for use in that specific context. [pbw139][pbw140]

Main document changes and comments

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I disagree at this time. The purpose of the framework is to estimate net emissions associated with biomass used in a stationary source. The scientist need not know how this is being used in order to provide an answer to this question.

Page 1: Commented Rose, Steven 4/30/2015 8:53:00 AM

I suggest rephrasing to “EPA should acknowledge and state that the overall goal of this framework is to estimate the net carbon emissions associated with using biomass to produce energy in support of policies needing to track greenhouse gas emissions.” The goal of reducing emissions and avoiding climate change is a policy goal. The framework should simply be about emissions accounting.

I agree with this rewrite - Ken Skog

Page 1: Commented USFS-mal  4/29/2015 2:22:00 PM

I disagree with this statement. The purpose of the framework is to provide methods for estimating emissions associated with biomass used in a stationary source.

Page 1: Commented Rose, Steven 4/29/2015 1:04:00 PM

I suggest rephrasing to “EPA should acknowledge and state that the overall goal of this framework is to estimate the net carbon emissions associated with using biomass to produce energy in support of policies needing to track greenhouse gas emissions.” The goal of reducing emissions and avoiding climate change is a policy goal. The framework should simply be about emissions accounting.

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Peter Woodbury: Suggest re-phrasing to: EPA should acknowledge and state that the overall goal of this framework is to reduce greenhouse gas emissions and thus reduce their impacts on the climate

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Suggest re-phrasing to: EPA should acknowledge and state that the overall goal of this framework is to reduce greenhouse gas emissions and thus reduce their impacts on the climate

Page 1: Inserted Jason Hill 4/29/2015 9:05:00 AM

1.

As the goal is to minimize greenhouse gas emission impacts, EPA should consider in any framework not only carbon dioxide but also other greenhouse gases including nitrous oxide and methane

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The goal is to estimate emissions.

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I find this statement should be reworded as a cautionary note, not as a demand. EPA is well aware of the need for life cycle analyses in order to adequately compare alternative practices. However, currently fossil fuel emissions do not consider the mining, processing, and transport of the product. While LCA should be conducted in order to remove any perverse incentives, it may not have to be embedded in this framework.

Page 1: Commented Rose, Steven 4/29/2015 1:12:00 PM

See previous comment. Also, if including non-co2 GHGs for biomass, should do so for other fuels as well.

Page 1: Inserted Stallworth, Holly 4/29/2015 10:33:00 AM

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Page 1: Commented Ken Skog 4/30/2015 8:56:00 AM

My view is that science can provide methodes to estimate impacts regardless of the policy that causes the impacts. I do not see it as essential to know the policy context to suggest methods. This situation is similar to the methods recommended by the IPCC for countries to report GHG sinks and emissions. There is no assumption in those methods about the policies that will be chaning those sinks and emissions each year.

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Peter Woodbury: Suggest deleting the first sentence.

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Peter Woodbury: Suggest deleting the first sentence.

Page 1: Commented Morton Barlaz 4/23/2015 8:54:00 PM

Not sure this text is needed

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I do not believe such information is needed in order to address our charge questions.

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I don't think the science panel should be inserting itself into the complexities of legal authorities and rule making.

Page 1: Commented Rose, Steven 4/29/2015 1:16:00 PM

More is needed than legal clarity for a proper assessment. We need a specific context and proposed BAFs. This will allow for concrete scientific feedback and facilitate our thinking about alternative policy contexts.

Note also that land conservation programs are likely supplemental programs that should be listed and discussed.

Page 1: Commented Ken Skog 4/30/2015 8:56:00 AM

I agree....

Page 1: Commented Jason Hill 4/29/2015 9:09:00 AM

I am of the opinion that Points 3–5 should be dropped. These statements assume legitimacy of the BAF approach to carbon accounting, which I'm not sure we've established.

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Peter Woodbury: BAF should be plural: BAFs

Page 1: Commented Windows User 4/29/2015 12:51:00 PM

Peter Woodbury: BAF should be plural: BAFs

Page 1: Commented Rose, Steven 4/29/2015 1:18:00 PM

See previous comment. Framework goal should be accounting only.

Page 1: Commented Jason Hill 4/29/2015 9:02:00 AM

This is problematic as scale of use can change the climate effects of feedstocks.

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This does not work for waste if energy offsets are not counted

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From my perspective, the primary reason for developing BAF values at the regional scale was to inherently consider leakage. If leakage is going to be considered using additional methods, then I would favor reducing the scale of BAF estimation to the stand level (per acre).

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We should not be suggesting policies. We should be commenting on the framework as a tool to estimate emissions.

Page 1: Commented Rose, Steven 4/29/2015 1:19:00 PM

I don't think we should suggest a policy goal here or policy solution. We should focus on emissions accounting.

Page 1: Inserted Stallworth, Holly 4/30/2015 11:14:00 AM

rather

Page 1: Commented Ken Skog 4/30/2015 8:57:00 AM

I agree...

Page 1: Commented Jason Hill 4/29/2015 8:59:00 AM

I don't necessarily agree with this. This may be the incentive for individual facilities to innovate, and it may not provide sufficient incentive for poor-performing facilities to improve. This is a problem with BAF in that it's inherently a compromise between accounting for landscape level effects and specificity of how biomass is used at facilities.

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A facility specific approach is likely needed for at least some aspects of MSW		
Page 1: Commented	Ken Skog	4/30/2015 8:58:00 AM
I agree		
Page 1: Commented	Jason Hill	4/29/2015 9:06:00 AM
Yes. I'd move this up to right after the new Point #2 I've specified.		
Page 1: Commented	Ken Skog	4/30/2015 8:59:00 AM
I agree but there is a corollary that In making projections of effects of current biomass use for energy it is necessary and appropriate we assume continued sustatinalbe management of forest and agricultural resources.		
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preservation		
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the BAF		
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This seems arbitrary, and this assumption should be tested before we recommend it.		
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Ambiguous. Suggest removal.		

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Would be good to talk through how this might work in terms of real BAFs that individual compliance entities might see today and 5, 10, 20, and 40 years from now. Updating is practical, but should revised BAFs apply to past investment decisions?

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Drop this point.

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Peter Woodbury: I think we all agreed on this important point, so I added it.

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Text Box changes

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Footnote changes

Endnote changes