Comments and Responses on SOCCR/SAP 2.2 Draft 1 (May 2006)
CHAPTER 8

COMMENT FROM PEER REVIEWERS						AUTHOR'S RESPONSE						
Comment Number	Reviewer ID	Chapter	Page	Line	Comment Text	Acknowledged, but no further reponse or revisions are required	Revisions have been incorporated as suggested in the comment	Agree, but see "Notes on Response"	Agree, but elaboration is precluded by length limitations	Disagree; see "Notes on Response"	Beyond scope of report/chapter	Notes on Response
08-001	14	8	General		Are the scope and intent of the synthesis and assessment product clearly described in the report? YES.	X						
08-002	14	8	General		Are all aspects of this charge fully addressed? NO. Report should provide quantitative estimates of carbon sequestration in products and wastes (i.e., on page 8-10). EPA (2005) is an appropriate source.			X				EPA has data for US but not for Canada or Mexico. US data have been put in table 8-2. No data could be found for Canada or Mexico.
08-003	14	8	General		Do the authors go beyond this charge or their expertise? NO.	X						
08-004	14	8	General		Are the conclusions and recommendations adequately supported by evidence, analysis, and argument? NOT IN ALL CASES.	X						
08-005	14	8	General		Report should provide much more documentation to support the author's estimates of potential emission reductions and costs shown in Table 8-3.			X				I have introduced a number of other articles and supporting literature in the "Explanatory Notes" section from which guidelines and, in some cases, costs were obtained that were used to derive the costs listed in table 8.3 There is no room to better define specific quatities as these are the authors educated estimates. I have also added some more commnets just prior to the table and have notionally categorized the supporting documents by what they address.
08-006	14	8	General		Author's estimate that pulp and paper emissions could be reduced 40% for less than $25 per ton CO2 is unrealistically low.			X				I presume this is a reference to the "Fuel substitution" cell in Table 8-3. I am suggesting that, just from fuel substitution, the industry might be able to reduce emissions by 40% for under $25/t, but there is also an energy efficiency improvement of 10% possible at that CO2 cost, plus there are some reductions through process change and fugitive emissions reductions that may be available for less than $25/t. As I explained in the text, these different avenues to reduction are not independent so it is very difficult to say what the total reduction might be for under $25/t. It could be 60% or more. The point of the table is to give some idea that, generally, it is cheaper to use fuel substitution than process change and / or some levels of efficiency and some idea of the relative indication of what that aspect alone (i.e., fuel substitution) might potentially provide.
08-007	14	8	General		Report should make clear that several of the studies cited as support for estimates of potential emission reductions were focused on "technical potential" without regard to economic and structural limitations on emission control options. Estimates of potential reductions based on "technical potential" may be too high.		X					
08-008	14	8	General		Are uncertainties or incompleteness in the evidence explicitly recognized? NO – see previous comment.		X					
08-009	14	8	General		Are the data and analyses handled competently? Are statistical methods applied appropriately? IN SOME INSTANCES, NO.			X				Statistical information on the data are often not available. What was available was presented.
08-010	14	8	General		The report does not consistently distinguish biomass carbon from fossil carbon. For example, biomass and fossil carbon are combined in the Figures 8.2, 8-A1, 8-A2, and 8-A3.			X				To get a comprehensive picture of the carbon cycle, all carbon is included in the diagrams, whether from biomass or fossil fuel. I have added some comments to enhance this. I only make reference to the differences between these two flows of CO2 when dealing with attribution issues (estimation of net emissions generation) or cost of carbon.

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08-011	14	8	General		It appears calculation errors were made in producing cost numbers in lines 7-13 on page 8-12. Cost per increment CO2 should be less than (not greater than) equivalent cost per increment C.		X					
08-012	14	8	General		Page 8-12 includes the statement that "as the cost of carbon increases, one can always obtain greater reductions, but the return on these expenditures becomes marginal or insignificant." The basis for this statement should be explained.		X					
08-013	14	8	General		The economics of industrial emission reductions is a complex subject that cannot be explored in depth in this report. Perhaps the author should eliminate the sector-level analysis (Table 8-3) and instead provide a broader overview of the relevant literature including general factors affecting the feasibility and cost of reductions. The concept of "capital investment cycles" should be mentioned as an important factor that should be considered when assessing emission reduction options.			X				I agree with the comment about the complexity of the values. I have included a comment on capital investment cycles in that there are various views on this matter as well. I've estimated many of the costs associated with emissions reductions from many sources, most of which are listed and described more fully in the following section "Some explanatory notes". I believe the table is a fairly clear picture of the realm of costs associated with reduction and is helpful to the reader re: general perspective on costs of emissions reductions.
08-014	14	8	General		Are the report's exposition and organization effective? Is the title appropriate? YES	X						
08-015	14	8	General		Is the report fair and appropriately balanced? YES	X						
08-016	14	8	General		Is the report's tone impartial and devoid of special pleading? YES	X						
08-017	14	8	General		Are any of the report's findings based on value judgments or the collective opinions of the authors? NO.	X						
08-018	14	8	General		Does the executive summary concisely and accurately describe the key findings and recommendations? YES	X						
08-019	14	8	General		Is it consistent with the other sections of the report? YES	X						
08-020	14	8	8-6		The text includes the statement that "These plants could be considered carbon neutral … etc." This statement should be rewritten to make it clear that the concept of carbon neutrality applies to biomass fuels and not necessarily to a facility that uses biomass fuel. For example, the statement might be rewritten as follows: "Biomass fuels are considered carbon neutral because return of the biomass carbon to the atmosphere completes a cycle that began with carbon uptake from the atmosphere by vegetation"		X					
08-021	14	8	8-6		The footnote should also be revised to indicate that carbon neutrality applies to biomass fuel and not necessarily to an industry that uses biomass fuel.		X					
08-022	14	8	8-9		The accuracy of third sentence could be improved by inserting the word "often" as follows: "For example, recycling materials often reduces demands in processing…."		X					
08-023	14	8	8-11		The accuracy of second complete sentence could be improved by inserting the word "sometimes" as follows: "Their combustion greatly alleviates the net contribution to GHG emissions and sometimes provides power or steam… etc."		X					

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08-024	14	8	8-11		The footnote may be incorrect. IPCC 3rd Assessment Report (WG1, Sec. 6.12.3) says "….the climate forcing caused by CO2 produced from the oxidation of CH4 is not included in…. GWP estimates."		X					