Comments and Responses on SOCCR/SAP 2.2 Draft 1 (May 2006)
CHAPTER 4

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
04-001	3	4	4-1	1-2	The title is somewhat vague and lacks pizzazz. As an alternative, how about “Options and Measures for Rebalancing the Carbon Cycle and Reducing Atmospheric CO2"?					X		The original title has been retained so as to match the style of the other chapters in Part I, which addresses specific questions posed in the Prospectus for SAP 2.2
04-002	3	4	4-2	20-23	These conclusions are very important; however, they are not supported by evidence and references. This is a recurring theme in the presentation of material throughout this chapter.			X				The long life and lower cost of implementing emission reductions in new facilities and equipment is amply documented in Chapters 6 through 9. A reference to those chapters is inserted.
04-003	3	4	4-3	7-23	The main focus seems to be on improved efficiency in end use rather on generation and transmission/transport. Shouldn’t options for increased efficiency in electric power generation (i.e., in addition to cogeneration) or transmission or in vehicles (e.g., hybrids, fuel cells) be mentioned?			X				End of second sentence changed. "directly or indirectly" replaced by "at any point between production of the fuel and delivery of the desired service" Footnote 3 also revised to incluce "and electricity transmission"
04-004	3	4	4-4	15-18	No mention is made of biodiesel which also can be used directly.			X				"biodiesel is produced from vegetable oils and animal fats" added to the end of ther third sentence
04-005	3	4	4-5	26-32	Should the current research on development of methane hydrates from marine sediments and permafrost soils as a potentially significant energy source also be mentioned, even though this is a longer term option?					X		This section deals with reducing methane emissions. Methane hydrates are a potential source of methane better addressed in chapter 6 (and possibly 12 and 15).
04-006	3	4	4-6	5	The difference between afforestation and reforestation should be explained for the general reader.		X					A footnote explaining "afforestation" has been added
04-007	3	4	4-6	22-23	This is hyperbole. Many but certainly not thousands have been identified.		X					
04-008	3	4	4-6	29	The comma after “telecommuting” should be moved and placed after “demand.”		X					
04-009	3	4	4-7	20-33	A reference to Chapter 8 as the source of the data presented and of more detailed discussion on the topic should be given both in the text and the figure caption. The figure caption also needs to indicate these cost estimates are for options to reduce emissions and/or enhance sequestration of carbon. The options presented in Table 4-1 seem to be too general to be appreciated without additional information on the characteristics of each. Unless there is some effort to indicate the potential significance of each option by presenting the carbon reduction potential on a common basis, preferably in Mt C per year, the comparisons will not be particularly meaningful. Also, what does “marginal cost” mean with respect to the last three options in the table?			X				Chapter 8 is NOT the source of the cost estimates. The sources are listed in the table. Most of those sources are also cited in chapters 6 through 11. The figure caption has been changed. The potential emission reductions are presented in MtC/yr where available, and as % reductions in cases where the that is the only information available from the original source.
04-010	3	4	4-20	Table 4-1	See comment # 04-009			X				See response to comment 4-009
04-011	3	4	4-7	31-33	This statement deserves additional explanation and perhaps an example to illustrate what you mean.			X				A footnote has been added. "For example, increasing the scale of tree planting to sequester carbon requires requires more land. Typically the value of the extra land used rises, so the additional sequestration becomes increasingly costly."
04-012	3	4	4-8	11-12	Please identify the chapters in which these complications are discussed.		X					
04-013	3	4	4-8	13-18	I recommend that you again reference Chapter 8 as the source of this information.					X		Chapter 8 is NOT the source of the cost estimates. The sources are listed in the table, so a text reference to the table is appropriate

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04-014	3	4	4-8	21	Ancillary costs (e.g., from environmental degradation or risks to human health from some sequestration options) should also be mentioned.		X					"and costs" inserted after "ancillary benefits"
04-015	3	4	4-8	19-26	What appears to be needed is an integrated analysis that covers all types of emissions and all costs, including those produced by negative environmental consequences. Focusing only on benefits from CO_2 reduction could overlook critical unforeseen consequences (e.g., from effects of some proposed sequestration options and development of alternative energy sources with lower carbon intensity). One example of the latter: Extraction techniques could destabilize deposits of methane hydrates in marine sediments and increase the potential for catastrophic releases in conjunction with expected future warming. A total systems approach is needed.		X					"and ancillary impacts" added to the end of the first sentence
04-016	3	4	4-8	30-34	The use of the verb “will” in each sentence in this paragraph has not been justified by the material presented thus far. Although I might agree with the current wording, the justification will not be apparent to all readers. Thus, I recommend making this the second paragraph of the Overview subsection and leading off with the paragraph at the top of page 4-9.			X				The first two paragraphs of this section have been merged.
04-017	3	4	4-9	17	What does “environmentally effective” mean?			X				Text revised so this phrase no longer appears.
04-018	3	4	4-9 and 4-10	23-28 and 1-4	The authors need to provide evidence with references to support their conclusions.					X		These paragraphs are descriptions of emissions trading and emissions taxes. No conclusions are drawn.
04-019	3	4	4-10	5	Awkward wording. How about “The framework for choosing a policy instrument needs to include consideration of institutional…”		X					
04-020	3	4	4-10	18-21	Would the sentence read better if “lower costs for” were inserted before “societal benefits” and “offset” was substituted for “exceed” in line 20?			X				"lower costs" is not appropriate; "the" before "societal benefits" is deleted; "exceed" is replaced by "offset"
04-021	3	4	4-11	1-2	The words “macroeconomic” and “distortionary” need to be defined.			X				"macroeconomic cost" replaced by "cost to the economy" A footnote defining distortionary tax is added
04-022	3	4	4-12	29	Either “help” or “are needed” should be deleted.			X				"help" is deleted
04-023	3	4	4-13	6 et seq	This section as a whole is marked by presentation of conclusions that are not supported by the information presented in the chapter or in several cases not discussed at all prior to this section. Although I have provided specific comments below, I think that this entire subsection could be deleted, given that much of the material was included in the KEY FINDINGS section at the start of the chapter. Of course, the key findings would still need to be supported with evidence and references.			X				Lines 18 to 29 are moved into Overview section under Policy Options. The material in this portion of the text is supported by the reference - Raupach, et al.

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04-024	3	4	4-13	11-12	I would argue that sequestration of 20% of current emissions is not small when measured against other control options discussed in this chapter. In addition, the reversibility of uptake by agricultural soils and forests was discussed previously (on page 4-12) in the context of “a forest fire or tilling the soil,” implying a single event or location. This does not convince me that a coordinated continent-wide program “can be reversed easily.”					X		The statement in the text is that the potential is "significant but small relative to emissions" The reviewer argues that the potential is not small relative to other options. This is acknowledged by the statement that the potential is "significant". Reversal is addressed by adding "at any given location by natural phenomena or human activities"
04-025	3	4	4-13	22-29	These subjects were not covered in this chapter.			X				The material has been moved into the body of the chapter
04-026	3	4	4-14	18-23	This material was not covered in this chapter.			X				It is a conclusion and the arguments supporting the conclusion are presented in this paragraph.
04-027	3	4	4-2	5-10	This material was not covered in this chapter.			X				This text repeats the text covered by the preceding comment.
04-028	7	4	4-3	6-23	This section should highlight the overwhelming potential of improvements in energy efficiency to reduce greenhouse gas emissions. The United States uses nearly twice as much energy per person as Japan, the United Kingdom, and other countries that enjoy a high material standard of living (IEA 2005). The United States could significantly improve the efficiency of its energy use and reduce greenhouse gas emissions by up to half using existing technology without major sacrifices to the material standard of living. REF: International Energy Agency (IEA). 2005. Key World Energy Statistics 2005. IEA, Paris, France.						X	This is more appropriate for the chapters in Part II
04-029	7	4	4-4	19-23	This section should highlight the overwhelming potential of renewable energy sources to reduce greenhouse gas emissions. In 2003, the world rate of energy use totaled 14 TW or 14 trillion watts. Nevertheless, available solar and wind power resources could potentially provide energy to the world at a rate of 70 TW (UNDP 2000). REF: United Nations Development Programme (UNDP). 2000. World Energy Assessment. UNDP, New York, NY.						X	This is more appropriate for chapter 6.
04-030	7	4	4-11	7	The section should note that twenty states and the District of Columbia have enacted policies that set a target for the fraction of electricity that utilities generate from renewable sources from 5% to 30% (REN21 2005). REF: REN21 Renewable Energy Policy Network. 2005. Renewables 2005 Global Status Report. Washington, DC: Worldwatch Institute.						X	This is more appropriate for chapter 6.
04-031	7	4	4-11	23-25	The chapter would benefit from citing the potential positive impact of an increase in U.S. Corporate Average Fuel Efficiency (CAFE) motor vehicle standards. Raising CAFE from the current level of 22.2 miles per gallon for light trucks and 27.5 miles per gallon for passenger cars to 39 miles per gallon, a level still lower than current standards in the European Union and Japan, could reduce oil consumption and carbon emissions by 37% (National Commission on Energy Policy 2004). REF: National Commission on Energy Policy. 2004. Ending the Energy Stalemate: A bipartisan Strategy to Meet America’s Energy Challenges. National Commission on Energy Policy, Washington, DC.						X	This is more appropriate for chapter 7.

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04-032	8	4	General		In general Chapter 4 performs a credible job of reviewing technological and policy options for addressing carbon dioxide emissions. Given that the Chapter is charged with presenting an exceeding complex and large range of information in very few pages, the author is to be commended on having, by and large, successfully carried out this task.	X						
04-033	8	4	General		The three main areas in need of attention are (1) readability, (2) definitions of scope of cap-and-trade system and its relation to reductions achieved through regulations, and (3) accuracy or completeness of a number of statements (as detailed in the items below).	X						
04-034	8	4	General		The Chapter is, no doubt as a consequence of the attempt to cover a great deal of complex material in very few pages, written in a very terse manner. A good editor could, and should be used to, render the text smoother and more easily readable.	X						
04-035	8	4	General		The most serious problem with the chapter is the disconnect between the primacy given to an emissions trading program and evidence presented which suggests serious limitations of such a program. This problem is compounded by the omission, throughout the chapter, of any definition of the scope of the cap program and of the emissions trading program. The chapter seems to imply that a cap-and-trade program would be confined to large point sources but never states this, and it is never made clear whether only capped sources could trade or whether the emission trading system is envisioned as including both capped sources and emission reductions achieved through other regulatory approaches. The chapter should specify which sources are envisioned as being covered by a cap and whether the trading system is confined to capped sources or not.					X		Emissions trading is not given primacy.Specifying a design for an emissions trading program would be inappropriate. The description given could apply to large sources only or to the carbon content of fossil fuels or designs that involve a mixture of both. Whether sources not covered by the cap should be able to generate emission reduction credits for sale to affected sources is a detail.
04-036	8	4	General		Two limitations on a cap-and-trade program discussed in the chapter seem to raise questions about the primacy of its role suggested by the chapter. These items are detailed in the following two comments.					X		Emissions trading is not given primacy.
04-037	8	4	General		A. Need to use regulatory approach for some sources. The chapter acknowledges that many sources of CO_2–both where energy efficiency is key to reductions and where industries or individuals do not respond well to price signals--will need to be addressed through regulations (i.e. energy efficiency standards), which would "complement" the cap-and-trade program. Energy efficiency is a major avenue for emission reductions from buildings, transportation, and appliances, "sources" which, together, are responsible for a very large fraction of CO_2 emissions. These are also sectors in which response to price signals are dampened due to a multiplicity of factors. Thus if these are not part of the cap-and-trade program, the ground for primacy of a cap-and-trade program are unclear. This is particularly true if these emission reductions (i.e., those resulting from efficiency regulations) would not be part of the emission trading system. As pointed out above, the chapter fails					X		The chapter states that appropriate regulations to complement the emissions trading program or emissions fee should be adopted for sources or actions subject to market imperfections such as energy efficiency and co-generation. It is not appropriate for the chapter to specify a design for an emissions trading program nor to specify the level of an emissions fee. Whether to allow emission reductions from sources not covered by a trading program to generate credits for sale to affected sources, if a trading program is implemented, is a detail that is beyond the scope of the chapter in part because it would also require all of the issues noted by the reviewer to be discussed.

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04-037 (cont)					to clarify whether they would or would not be. As part of clarification of this question, the chapter should mention the difficult issue that would need to be resolved for such emission reductions to trade into a cap-and-trade system, e.g., establishment of baselines (to achieve "additionality" and avoid compromising the cap); avoiding double-counting; and establishing equivalencies between (fungibility of) very difference types of reductions.							
04-038	8	4	General		B. Inability to incorporate ancillary benefits or costs. The chapter correctly points out that many options to address GHG emissions have ancillary benefits which are not taken into account by a cap-and trade approach and that there are potential conflicts between emission reduction goals and other societal goals. These are serious issues that do not seem to be reflected in the chapter's evaluation of cap-and-trade approaches. The inability of a cap-and-trade program to incorporate multiple values is a major drawback in land use where the land use with the highest carbon benefits may conflict with other societal priorities, e.g., land for food production. The single issue focus of a cap-and-trade approach (or any other approach designed solely to reduce GHG emissions) is also likely to be a major drawback for many countries and in other sectors. For example, a cap–assuming it functions as envisioned to elicit least-cost reductions--would very likely fail to support biofuel production at					X		The chapter states that appropriate regulations to complement the emissions trading program or emissions fee should be adopted for sources or actions subject to market imperfections such as energy efficiency and co-generation. Emissions could be covered by an emissions trading program or an emissions fee and still be subject to other regulations to address ancillary benfits or costs. For example an emissions trading program or an emissions fee based on the carbon content of fossil fuels would cover vehicle emissions from gasoline and diesel fuel. But it might still be appropriate to implement CAFE standards for new vehicles. Efficiency standards for appliances, equipment and buildings might be appropriate in those circumstances as well.
04-038 (cont)					societally desirable level because they are a relatively costly reduction option that has energy security and enhanced rural income benefits. This suggests that regulatory approaches that can take multiple societal goals into account (e.g., a biofuels mandate) may be more useful and more likely to secure support.							
04-039	8	4	General		Finally, the chapter points out that choosing the least-cost combination of options would be a daunting task and that it is unlikely that policy-makers can do so. It then goes on to state that policy-makers can adopt permit trading and allow the emitter to choose the lowest cost options. This assumes that the emitters (i.e., the private market) will be better able to find and choose the least-cost emission reduction path. However, the chapter fails to provide any support for this position. One option would be to define the circumstances under which the private market will be better able to select least-cost options than the government. Furthermore, if least-cost options occur through energy efficiency regulations – and there is good reason to suppose that energy-efficiency improvements in sectors such as transportation, buildings and appliances may indeed be a major source of low-cost reductions -- it is unclear whether such			X				A reference (Swift, 2001) has been provided that compares responses under regulation and emissions trading and finds that the affected sources find lower cost emission reductions under the trading program.
04-039 (cont)					reductions would be available for use by capped entities (see A above). If they are to be available, the chapter should acknowledge circumstances under which companies may not select such options, e.g. preference for options over which they have more control, about which they are better informed, or which provide ancillary benefits (e.g., learning by doing, PR, etc.).							

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04-040	8	4	General		In short, the chapter should clarify the envisioned extent of a cap-and trade program (e.g., large point sources) and whether reductions achieved through other types of regulation are envisioned to participate in the trading scheme. Its evaluation of cap-and-trade should also reflect the seriousness of the limitations described in the chapter					X		See responses to the previous 5 comments.
04-041	8	4	4-2	31	List of options to reduce energy-related emission. The chapter covers both energy and non-energy based emissions. Therefore there should also be a list of the non-energy related options covered in the chapter.			X				Revised the headings. A new sub-heading -- Energy-related CO2 Emissions -- is introduced after SOUURCE REDUCTION OPTIONS. The next three headings -- Energy Efficiency, Fuel Switching, and Electricity and Hydrogen… become sub-headings. Industrial Processes and Methane Emissions remain as is to complete the SOURCE REDUCTION OPTIONS section.
04-042	8	4	4-4	17-18	Other factors in the CO_2 reductions achieved should be listed, e.g., the inputs used to produce the biomass (fertilizer, irrigation water), whether the land is existing cropland or converted from forests or grasslands, and the management practices used (no-till, conventional till).			X				Has been added as a footnote.
04-043	8	4	4-5	13	While perhaps technically correct, the statement that integrating CO_2 capture and storage into our energy system is mainly a long-term option may mislead readers into thinking that one can not start deployment of CCS today. CCS can currently be undertaken in "niche" situations, and its more widespread deployment is feasible both in the near and medium-term.				X			This is true, but the same is true for photovoltaic, wind, ethanol, biodiesel, and many energy efficiency technologies. The phrase "mainly a long-term option" is sufficient.
04-044	8	4	4-5	30-32	It should be pointed out both that the opportunities to reduce ruminant emissions in the United States are limited (due to the fact that animal feed is in most cases already optimized) and that little is known about the costs of achieving such reduction.				X			This is a level of detail beyond the scope of Chapter 4. It would be better in Chapter 10 if livestock are covered there.
04-045	8	4	4-6	14	The rate of sequestration following conversion to forestland depends on a good many factors other than soil type, including both environmental factors (such as climate, topography, type of trees planted) and management practices (including thinning, fertilization, pest control, etc.).		X					
04-046	8	4	4-6	22-24	Policy makers also need to know the magnitude of reductions likely to occur in response to pursuing reductions of a given type or at a given price.		X					
04-047	8	4	4-6	28	Insert ",in addition to the factors previously cited," prior to "...on other measures as well, such as telecommuting,…"		X					
04-048	8	4	4-7	1-2	Provide some substantiation of this claim or delete.		X					
04-049	8	4	4-7	18	In the Text box an excellent job is done of explaining supply curves and informing the reader of their pitfalls. Similar cautions should be provided for the costs presented in Table 4.1 as these cost estimates involve as least as many problematic assumptions as the supply curves.	X						
04-050	8	4	4-20	Table 4-1	See comment # 04-049		X					
04-051	8	4	4-8	11-12	If examples are provided in other chapters, the numbers of such chapters should be specified.		X					

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04-052	8	4	4-10	5	Insert “technical” into the list, i.e., the choice of policy instrument also needs to consider technical constraints.		X					
04-053	8	4	4-10	14	Explain the term compensating variation or delete.		X					
04-054	8	4	4-10	Footn 15	While this may be true of some regulatory approaches, I doubt that it has been proven, in general, for all regulatory approaches, e.g., for those than require a certain efficiency level. I doubt there has been enough experience with trading programs in general to support this.					X		There is theoretical and empirical literature indicating that emissions trading and emissions taxes are better at inducing technological change than regulations. Regulations deliberately designed to force technological innovation sometimes succeed (refrigerator efficiency standard) and sometimes fail (California's zero emission vehicle standard). The possibility of such regulations being successful is covered by the qualifier "generally".
04-055	8	4	4-11	13	There is contradictory evidence about the impact of taxes on vehicle fuels, at least at any level likely to be imposed. Although there may be some demand response to price spikes, transportation demands appears to be relatively inelastic.			X				A footnote has been added.
04-056	8	4	4-11	18-19	While the diversity in sources of CO_2 may mean that emissions trading could yield significant cost-savings, this same diversity poses serious problems for such a system (see discussion above) and this should be acknowledged.			X				Added "but may also be difficult to implement"
04-057	8	4	4-11	28	Change the title to “Terrestrial Sequestration Policies”		X					
04-058	8	4	4-12	7-12	Both the establishment of baselines and leakage also poses a major challenge for such polices. These should be added.			X				Addressed by addition of a footnote.
04-059	8	4	4-12	27	While induced technological change may justify earlier targets, either support the statement that it justifies more stringent targets or delete.					X		Induced technological change reduces the cost of meeting a given emissions target. Thus the optimal emissions target at any given time is more stringent if the effect of induced technological change is considered than if it is ignored.
04-060	9	4	General		There are a number of statements made in the chapters that also lack any source reference. Some examples are detailed in the following items.	X						
04-061	9	4	4-6	22-24	As is clear from the previous sections, there are thousands of options to reduce emission of or to sequester CO2. To help decide which options to implement, policy makers need to know which are the most cost-effective – have the lowest cost per metric ton of CO2 reduced or sequestered.			X				"thousands" changed to "many"
04-062	9	4	General		*Note from Coordinating Team: The reviewer seems to take exception to the claim that the report is "policy neutral" by citing examples of where Chapter 4 describes "options" and "measures." See the comments in the reviewer's file on Chapter 6 for a list of these examples, which are too lengthy to be included here.*	X						

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04-063	9	4	4-6	22 et seq	The subsection begins by stating that it is "clear from previous sections" that "there are thousands of options to reduce emission of or to sequester CO2" and to "help" policymakers "decide" which to "implement" they "need to know which are the most cost-effective – have the lowest cost per metric ton of CO2 reduced. . . ." (emphasis added). However, there are often many more considerations that are not noted in this comparison section. While we would agree that energy improvements and fuel switching are possible "measures" or "options" for "reducing energy-related CO2 emissions," the draft should not give the impression, even inadvertently, that they would contribute significantly to stabilizing "atmospheric concentrations of CO2."			X				Text revised to: "As is clear from the previous sections, there are many options to reduce emissions of or to sequester CO_2. To help them decide which options to implement, policy makers need to know the magnitude of the potential emission reduction at various costs for each option so they can select the options that are the most cost-effective—have the lowest cost per metric ton of CO_2 reduced or sequestered."
04-064	9	4	4-8 and 4-9		Again, we recognize that there are a number of policy options that are worthwhile in addressing greenhouse gas (GHG) emissions. These include "nuclear power," but we question what the draft means by stating that nuclear energy is "very controversial." Nuclear energy comprises 20 percent of the nation's electric generation mix, and there is growing recognition that non-emitting sources of energy, such as nuclear energy, are clearly part of the mix of options in addressing GHGs. Indeed, President Bush in his most recent State of the Union address and in his Advanced Energy Initiative has spoken quite favorably about encouraging its use.			X				"nuclear power" deleted here
04-065	9	4	4-8 and 4-9		As to the "controversial" subject of "geoengineering," an article in the June 27, 2006, edition of "Science Times" of the New York Times, titled "How to Cool a Planet (Maybe)," discusses geoengineering favorably and quotes Dr. Ralph J. Cicerone, President of the National Academy of Sciences: "We should treat these ideas like any other research and get into the mind-set of taking them seriously."					X		The article cited by the reviewer specifically acknowledges that geoengineering approaches are controversial.
04-066	9	4	4-9	15 et seq	Under the title "General Considerations," the chapter discusses various "policies," which clearly are not part of "the current state of scientific understanding about key issues related to climate change" but rather are what might best be called policy-prescriptive measures or options aimed at influencing or making decisions. For example, the chapter states (p. 4-9) that "[p]olicies to encourage reduction. . .of CO2 emissions could be information programs, voluntary programs, conventional regulation" – which presumably means command and control –, "emissions trading and emission taxes." As to "information. . .and voluntary programs," the chapter contends that "voluntary programs are generally not effective"; see also Footnote 13 in Chapter 4.					X		This comment is not clear. The claim that the chapter is policy prescriptive appears to be based on the sentence that "Information and voluntary programs are generally not environmentally effective". This is the subject of the reviewer's next two comments. That sentence has been revised.

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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
04-067	9	4	4-9	15 et seq	In support of the contention about the effectiveness of voluntary programs, the draft refers to a 2003 report by the Organization of Economic Co-operation and Development (OECD) titled "Voluntary Approaches for Environmental Policy," which, as the title suggests, is about the "use of voluntary approaches in environmental policy," not energy policy. Indeed, the report lists the following "case studies made especially for this report," which obviously are not energy related and hardly relevant to the scope of the SAP: (1) The Accelerated Reduction/Elimination of Toxics program and an Environmental Management Agreement with the steel company Dofasco Inc. in Canada; (2) The agreement scheme on industrial energy efficiency in Denmark, with examples from the paper and milk condensing sectors; (3) The Pollution Control Agreements negotiated in Yokohama City and Kitakyushu City in Japan; and (4) The experiences of Intel Corporation and Merck Pharmaceuticals in Project XL in the U.S.			X				Text on voluntary agreements revised to acknowledge that some programs have reduced emissions.
04-068	9	4	4-9	15 et seq	On the contrary, voluntary programs such as the Environmental Protection Agency's (EPA) Climate Leaders and DOE's Climate VISION are "effective" in reducing, avoiding and sequestering GHGs. See the Energy Information Administration's (EIA) annual report on voluntary reporting of such reductions (the most recent is titled "Voluntary Reporting of Greenhouse Gases 2004," March 2006), which indicates that the electric utility industry alone reported 282 million metric tons of CO2-equivalent reductions, avoidances and sequestrations in 1994. In short, reliance on the OECD for comments on voluntary programs is at best misplaced.			X				See previous comment
04-069	9	4	4-9	15 et seq	In the first place, the above discussions about information, voluntary programs, regulations, emissions trading and taxes are cursory and inadequate. More importantly, the relevance of this discussion in what purports to be a scientific and policy-neutral paper is lacking. We strongly suggest that Part I be rewritten, that the questions be reconsidered, and that much of Chapter 4 be discarded.					X		A discussion of possible policies is the agreed focus of the chapter and these are all possible policies.