CHAPTER	FROM PAGE	LINE	TO PAGE	LINE	COMMENT
General	0				The report stresses the co-benefits of GHG mitigation for other social goals, such as energy security. There is, however, a strong counter-balancing tendency for concerns about energy security to lead to increased GHG emissions. Regions that are not well endowed with high-quality formations for carbon sequestration will be unable to engage in sequestration, but will remain strongly motivated by energy security concerns to use domestic resources for electric power generation, including coal. If the price of oil remains high, there will be also be strong motivation world-wide to produce liquid fuels for transportation from coal, leading to increased GHG emissions. This highlights the need for technological change. **U.S. Government**
Glossary	16	48	16	50	Market-based incentives is defined thusly: "Measures intended to use price mechanisms (e.g. taxes and tradable permits) to reduce **greenhouse gas emissions**." However, there are clearly market-based incentives that are not regulatory in nature. As the reference here clearly is to cap-and-trade, the definition should be changed to: "Market-based regulation: Regulatory approaches intended to use price mechanisms (e.g., taxes and tradable permits), among other instruments, to reduce greenhouse gas emissions to a specified level." **Develop a definition for market based approaches. U.S. Government**
Glossary	0				Definitions of afforestation, reforestation, and forests should be commonly accepted and not unique to the Kyoto Protocol. **U.S. Government**
SPM	0				Mitigation potential and cost are the among the most important outputs in this report. The chapter indicates that CH_4 is the most important GHG emission from the waste management system. Table 10.6 contains a comprehensive analysis of mitigation potential and cost for CH_4 in 2030 by region. This information should be summarized in the chapter's Executive Summary, and also added to Tables SPM.2 and TS.19, to provide the same information for the waste sector that is provided for other sectors. The Chapter enumerates the authors' concerns about data quality. These concerns should be noted in footnotes to tables SPM.2 and TS.19. **U.S. Government**
SPM	0				Footnote 9 says 1% loss of GDP in 2030 is equivalent to 0.05% per year. Assume what is meant is that the loss in 2030 represents the integrated loss of GDP from time zero. It isn't clear to me. **U.S. Government**
SPM	0				Modifying solar radiance may be an important strategy if mitigation of emissions fails for one reason or another. Doing the R&D to estimate the consequences of applying such a strategy is important insurance that should be taken out. This is a very important possibility that should be considered. Should also be included in Figure SPM.6. Add a indication of radiative offset. needs to be also coordinated with WG1 on radiative offset .

CHAPTER	FROM PAGE	LINE	TO PAGE	LINE	COMMENT
					U.S. Government
SPM	0				Both bottom-up and top-down analyses are an important part of the literature and both should be reflected. Chapters 4-10 should, at the very least, present the sectoral estimates from top-down models. A more appropriate approach for Chapters 4-10 would be to present both the global and bottom up estimates at the regional level (leaving global estimates to global models) and then discuss the differences in estimates, the strengths and weaknesses of the alternative approaches, and key priorities for improving estimates. This same comparison between the top-down and bottom-up estimates should be made within each sectoral discussion. The following table provides an example. | Sector	TS-8 Range of Model Results	TS-19 Estimate	Comment
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Forestry	0-604	2,700	Why is TS-19 so much higher? Is this a limitation of the IAMs?
Energy supply and transportation	6,500 – 16,000	5,200 – 8,100	Why is the TS-19 estimate lower than most standard models?
Agriculture	604 – 1,656	3,300	Why is the TS-19 estimate so much higher?
Buildings	627 – 2,238	3,700 – 4,100	Why is the TS-19 estimate so much higher?	 Our specific comments on Chapters 4 to 11 detail these and other concerns and offer a recommendation on an appropriate comparison of the bottom-up estimates from Chapters 4 to 10 and the top-down estimates from integrated models in Chapters 3 and 11. **U.S. Government**
SPM	0				Advanced technology should play a much more central role in the SPM. Material should be brought forward from Chapter 2 into the SPM. Suggested insertions to the SPM can come from: -Chapter 1, p. 17, paragraph beginning w/line 33: the key concepts this para should be better covered. -Chapter 1, p. 20, line 46: Generally speaking, it would be economically impossible, without technology research, development, demonstration, deployment and diffusion (RDDD&D) and Induced Technology Change (ITC) to stabilize GHG concentration at a level that would prevent DAI with the climate system. -Chapter 2, p. 65, Figure 2.2: The point that distribution "optimal" (cost-minimizing) emission scenarios is bimodal,