Trickleback Document

Text / figure location in FGD version									Description of Change
No	Chapter	From Page	From Line	To Page	To Line	Section	Figure	Table	
1	5	10	18	10	18	5.2.1			"Fossil CO2 emissions made up the largest share (80%)" --> "CO2 emissions from fossil fuel combustion and industrial processes made up the largest share (78%)"
2	6						6.25		Include feasibility statistics in right panel on 2050-2100 cost increases (same panel as in TS.13)
3	6	44	21	44	28	6.3.6.2			Chap. 6: Add 2-3 sentences on annualized growth rate reductions. First (two) sentences explaining what it is, and what complementary information it shows. Last sentence specifying the numbers.
4	6					6.8.2	6.34		In response to government comments on the FGD version of the SPM, the left panel of Figure 6.34 was merged with the two panels of Figure 6.35 into Figure SPM.10 (FGD numbering). To allow for a direct comparison between the left and right panels of the approved Figure SPM.10, the emissions from the energy supply sector were changed to electricity sector emissions in the left panel. Given that this information was not explicitly shown in the underlying Figure 6.34, it will also need to be added to Figure 6.34 as an additional column on the left panel (also Figure TS.15). The figure caption will need to be amended accordingly.
5	6	78							Update Figure 6.33 and caption
6	6	63							Update Figure 6.32 And caption
7	6	38	6	38	17				Indicate fossil share in scenarios with and without CCS
8	6	75	8	75	26				clarify the fossil fuel share in scenarios without CCS
9	6	24	13	24	19				Update figure 6.7 and caption
10	6	23							Update table 6.3 and footnotes

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11	7	57	25	57	25	7.11.1			In Section 4.2.1 of the SPM a paragraph on energy supply decarobonization was added during the plenary. The numbers in that statement are extracted from Figure 7.9. To make this more explicit, the sentence needs to be added after "...fundamental change in the global energy system 25 relative to a baseline scenario.": "For example, in mitigation scenarios reaching 450 ppm CO2eq concentrations in 2100, CO2 emissions from the energy supply sector decline over the next decades, reach 90% below 2010 levels between 2040 and 2070 and in many scenarios decline to below zero thereafter."
12	7	67							Update Figure 7.16 and caption
13	7	4	14	4	19				Replace statement related to energy-related emissions by the related TS statement on energy supply emissions. Add the sentence on fuel availability.
14	7	4	32	4	37				Replace statement by the related one on decarbonization in the SPM
15	7	4	38	5	7				Align the wording of the statements related to RE with that in the respective SPM statement
16	7	5	20	5	31				Align the wording of the statements related to nuclear power with that in the respective SPM statement
17	7	5	32	5	47				Align the wording of the statements related to CCS with that in the respective SPM statement
18	7	6	1	6	7				Align the wording of the statements related to BECCS with that in the respective SPM statement
19	7	6	8	6	18				Align the wording of the statements related to gas fired power plants with that in the respective SPM statement
20	7	57	3	57	16				Change the part in order to be consistent with the latest statements in the SPM on the relationship between emissions, concentrations and associated temperature changes
21	7	57	17	57	18				Include the SPM on future energy sector emissions here.
22	7	57	18	57	18				Write the word energy-related in italics.

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23	7	16	2	16	2				Include the fuel availability sentence of the SPM here.
24	11	28	29	28	29	4.2.4			In TS 3.2.6 (page 67, line 4) and Ch11 ES (page 4, line 14) - change "~9-12Gt CO2eq/yr" to "~10-12Gt CO2eq/yr" as approved in the final version of the SPM
25	11	29	10	29	23	4.2.4			In Ch11 ES (page 6, line 17 to page 7, line 5) replace the text in Ch11 final draft "WGIII_AR5_Ch11.docx" with the agreed final text from the SPM: "Bioenergy can play a critical role for mitigation, but there are issues to consider, such as the sustainability of practices and the efficiency of bioenergy systems (robust evidence, medium agreement) [11.4.4, Box 11.5, 11.13.6, 11.13.7]. Barriers to large-scale deployment of bioenergy include concerns about GHG emissions from land, food security, water resources, biodiversity conservation and livelihoods. The scientific debate about the overall climate impact related to land-use competition effects of specific bioenergy pathways remains unresolved (robust evidence, high agreement) [11.4.4, 11.13]. Bioenergy technologies are diverse and span a wide range of options and technology pathways. Evidence suggests that options with low lifecycle emissions (e.g., sugar cane, Miscanthus, fast growing tree species, and sustainable use of biomass residues), some already available, can reduce GHG emissions; outcomes are site-specific and rely on efficient integrated 'biomass-to-bioenergy systems', and sustainable land-use management and governance. In some regions, specific bioenergy options, such as improved cookstoves, and small-scale biogas and biopower production, could reduce GHG emissions and improve livelihoods and health in the context of sustainable development (medium evidence, medium agreement) [11.13]."

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26	11	29	10	29	23	4.2.4			In TS.3.2.6 (page 70, line 22 to page 71, line 17) replace the text in TS draft "WGIII_AR5_FD_TS.pdf" with the agreed text from the SPM: "Bioenergy can play a critical role for mitigation, but there are issues to consider, such as the sustainability of practices and the efficiency of bioenergy systems (robust evidence, medium agreement) [11.4.4, Box 11.5, 11.13.6, 11.13.7]. Barriers to large-scale deployment of bioenergy include concerns about GHG emissions from land, food security, water resources, biodiversity conservation and livelihoods. The scientific debate about the overall climate impact related to land-use competition effects of specific bioenergy pathways remains unresolved (robust evidence, high agreement) [11.4.4, 11.13]. Bioenergy technologies are diverse and span a wide range of options and technology pathways. Evidence suggests that options with low lifecycle emissions (e.g., sugar cane, Miscanthus, fast growing tree species, and sustainable use of biomass residues), some already available, can reduce GHG emissions; outcomes are site-specific and rely on efficient integrated 'biomass-to-bioenergy systems', and sustainable land-use management and governance. In some regions, specific bioenergy options, such as improved cookstoves, and small-scale biogas and biopower production, could reduce GHG emissions and improve livelihoods and health in the context of sustainable development (medium evidence, medium agreement) [11.13]."
27	12	6	2	6	3				Wording of Executive Summary statements
28	12	6	5	6	5				Wording of Executive Summary statements
29	12	6	7	6	8				Wording of Executive Summary statements
30	12	6	13	6	13				Wording of Executive Summary statements
31	12	6	37	6	40				Wording of Executive Summary statements
32	14	5	20	5	23				clarify that the uncertainty for oil refers to conventional and unconventional resources and not all oil occurences

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33	14	42	4	42	18				clarify that the uncertainty for oil refers to conventional and unconventional resources and not all oil occurences
34	16	3	38	3	38				for clarification the bracket should read (median: -20% compared to 2010)
35	16	3	41	3	41				for clarification the bracket should read (median: +100% compared to 2010)
36	16	3	44	3	44				for clarification add after the uncertainty qualifier ", frequently involving modernization of existing equipment. "
37	16	3	15	3	15				change uncertainty qualifier into "medium confidence"
38	16	3	18	3	18				change uncertainty qualifier into "medium confidence"
39	16	3	21	3	21				change uncertainty qualifier into "medium confidence"
40	16	3	21	3	22				Sentence should read "This range covers public and private flows for mitigation and adaptation. "
41	16	3	25	3	26				Delete "This range covers public and private flows for mitigation and adaptation. "
42	16	3	31	3	31				Add after the uncertainty qualifier "Estimates of international private climate finance flowing to developing countries range from USD 10 to 72 billion (2009/2010 USD) per year, including foreign direct investment as equity and loans in the range of USD 10 to 37 billion (2010 USD and 2008 USD) per year over the period of 2008-2011 (medium confidence). "
43	16	10	1	10	2				Delete "Robust information on the magnitude of private flows from developed to developing countries is highly uncertain."
44	16	10	2	10	6				Sentence should read "Clapp et al. (2012) estimate the private investment at 37-72 billion USD (2009/2010 USD) per year based on 2009-2010 data and Stadelmann et al. (2013) estimate foreign direct investment as equity and loans in the range of USD 10 to 37 billion per year based on 2008-2011 data (2010 USD and 2008 USD). "

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45	16	4	24	4	24				Replace first sentence by "Within appropriate enabling environments, the private sector, along with the public sector, can play an important role in financing mitigation "
46	16	4	32	4	34				The sentence should read "The quality of a country's enabling environment — including the effectiveness of its institutions, regulations and guidelines regarding the private sector, security of property rights, credibility of policies and other factors—has a substantial impact on whether private firms invest in new technologies and infrastructures."
47	A.I								Insert new definition for Cancun Pledges
48	A.I								Revise definition to traditional biomass for increased consistency with IEA.
49	A.I								Add detail to carbon price, climate finance and cost-effectiveness definition
50	TS						TS.13		Include feasibility statistics in right panel on 2050-2100 cost increases (same panel as in 6.25)
51	TS	29	11	29	24	3.1.3			TS: Add 2-3 sentences on annualized growth rate reductions. First (two) sentences explaining what it is, and what complementary information it shows. Last sentence specifying the numbers.
52	TS	43	31	43	39				Replace statement by the related one on decarbonization in the SPM
53	TS	43	40	44	20				Align the wording of the statements related to RE with that in the respective SPM statement

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54	TS	44	21	44	33				Align the wording of the statements related to nuclear power with that in the respective SPM statement
55	TS	46	17	46	32				Align the wording of the statements related to CCS with that in the respective SPM statement
56	TS	46	33	46	39				Align the wording of the statements related to BECCS with that in the respective SPM statement
57	TS	46	10	46	16				Align the wording of the statements related to gas fired power plants with that in the respective SPM statement
58	TS	43	17	43	17				Add the SPM sentence on fuel availability.
59	TS	all							All TS elements which have an exact counterpart in the SPM will be updated to exactly reflect any changes made to the SPM. All other TS elements will be carefully considered and updated as necessary to ensure consistency with the approved SPM.