

ID	Reviewer Name	Country of residence	Affiliation	Government Representative	Chapter	From Page (start)	From Line (Start)	To Page (End)	To Line (End)	Comment	Answer
13	Margot Hurlbert	Canada	Johnson Shoyama Graduate School of Public Policy, University of Regina, Regina, Sk, Canada	No	Ch. 5	80.	2122	80	2145	While polycentric governance is an important conceptualization of how governance operates, it doesn't recognize power differentials within the governance system. Basically no one is in control which is simplistic. Local action at local scale is important (Ostrom 2012), and international governance in relation to climate change is important Young, O. R. , 2017a: Governing Complex Systems. Social Capital for the Anthropocene. Massachusetts Institute of Technology, Massachusetts. However government plays an important role and the public sector. Hybrid governance is a more accurate description Gupta 2014 Global Climate Governance. Liniger, H., N. Harari, G. van Lynden, R. Fleiner, J. de Leeuw, Z. Bai, and W. Critchley, 2019: Achieving land degradation neutrality: The role of SLM knowledge in evidence-based decision-making. Environ. Sci. Policy, doi:10.1016/j.envsci.2019.01.001. Williamson and Nelson Barriers to enhanced and integrated climate change adaptation and mitigation in Canadian forest management. Can. J. For. Res.,	Agree. The concept of hybrid governance has been touched on in section 5.3.5.2 of the SOD.
14	Margot Hurlbert	Canada	School of Public Policy, University of Regina, Regina, Sk, Canada	No	Ch. 5	80.	2122	80	2145	This doesn't explain why governance is important. See the excerpt from Hurlbert 2018 Adaptive governance of drought and flood in rural areas.	Thanks. We have now created separate figures for each archetype and linked these to the SDGs that they support.
15	Margot Hurlbert	Canada	Johnson Shoyama Graduate School of Public Policy, University of Regina, Regina, Sk, Canada	No	Ch. 5	80.	2122	80	2145	Adaptive governance is appropriate as it allows for the systemic nature of climate change to be addressed, the politics and technological transitions and reflexivity required to address the complex problem of climate change and global environmental change (Hurlbert 2018 Adaptive governance of disaster: drought and flood in rural areas, Springer).	Partially agree. We have now engaged more with different governance systems and their effectiveness in policy and decision-making contexts (such as climate change).
57	Bob Watson	United Kingdom	N/A	No	Ch. 5			6	17	This is not a finding of this assessment - it is text book, albeit important - so what does a policymaker do with this information?	We have restructured this introductory text for clarity.
58	Bob Watson	United Kingdom	N/A	No	Ch. 5			18	25	The problem is that "just" and "sustainable" are both very subjective terms - and plenary will argue about these terms all day long given they are both very context specific.	We agree. These concepts have been extensively integrated into many preceding UN documents and declarations. Our work rests on these UN definitions and approaches.
59	Bob Watson	United Kingdom	N/A	No	Ch. 5			26	35	Totally academic - full of jargon - not helpful for a Minister of senior civil servant - again what does a policymaker do with this finding -	Agreed. We are reworking all of the text in the chapter to be less academic. This particular key message has now been removed.
60	Bob Watson	United Kingdom	N/A	No	Ch. 5			36	39	No empirical evidence - only theoretical???? If so, again what does this tell a decision-maker	This KM no longer exists. We have created more clarity with the KM in the SOD.
61	Bob Watson	United Kingdom	N/A	No	Ch. 5			40	49	All true - but please give some substantive examples of success otherwise it is just a description of an idealistic world which is not the real world we all inhabit	This is still work in progress and will evolve based on ongoing literature reviews. We will provide examples.
62	Bob Watson	United Kingdom	N/A	No	Ch. 5			50	55	Give an example of success	This is still work in progress and will evolve based on ongoing literature reviews. We will provide examples.
63	Bob Watson	United Kingdom	N/A	No	Ch. 5			56	59	Please define exactly what is meant by institutional change and give an example where this has occurred and what the implications were for policy formulation	We provide examples in 5.3.1 including formal institutions of laws. 5.3.5 provides a much deeper exploration of institutions and is largely new material for the SOD
64	Bob Watson	United Kingdom	N/A	No	Ch. 5			64	67	Just futures - Very subjective within and between societies; common good - Very subjective, no practical definition, most goals and targets of MEAs are simply political - e.g., the 1.5 to 2C target of the Paris agreement is not scientifically based - it is simply a political compromise because one cannot define and agree on what dangerous anthropogenic perturbation to the climate system means - it is highly context specific - regionally, sectorally, culturally, socially etc.	Yes this is a subjective space, but we are clear on this and striving for just and sustainable futures is well in keeping with a multitude of UN documents and studies.
65	Bob Watson	United Kingdom	N/A	No	Ch. 5			68	73	Totally subjective - always synergies and trade-offs among and between societies and nature	This is still work in progress and the KM will be refined based on the results of the review.
66	Bob Watson	United Kingdom	N/A	No	Ch. 5			74	76	Trade-offs - They are inevitable - there are no win-win-win solutions	This KM no longer exists.
67	Bob Watson	United Kingdom	N/A	No	Ch. 5			77	82	agree	Thanks but this KM has been deleted / reworked
165	Michael Bordt	Canada	None (Member of SEEA EEA Technical Expert Committee and Editorial Board)	No	Ch. 5	78	1782	79	1816	This would be an opportunity to reiterate the utility of coherent national level planning approaches for market valuation by applying the SEEA.	We agree with the importance of the topic but we think that the focus on SEEA is provided in Ch4
250	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 5	41.	994	42	995	In Table 5.4 - nature connectedness can be added to "Stewardship, relationships and interactions between people and nature, conservation activities, contemplation of nature..."	Thank you. We have added these sections as suggested.

											Abson et al. (2017) features strongly in this chapter, he asserts that people's connections to nature is one of three key realms for sustainability, and that "psychological connection with nature needs to be coupled with institutional structures" for a good life. However, psychological connection with nature, i.e. the construct of nature connectedness, isn't discussed yet it is linked to pro-environmental/conservation behaviours and quality of life, is measurable at population scale (Richardson et al., 2019) and the pathways to nature connectedness highlight the types of relationship (based on Kellert's values) to foster, and the types of relationship to moderate. There is relevance to sections 5.2, 5.3, 5.4 and 5.5. The pathways to nature connectedness provide a new and applied methodological development for improving human-nature relations. The framework provides great flexibility of application, often with simple changes, in a range of circumstances, including leverage points where minor interventions can lead to important changes. The pathways can be applied to individual activities in nature, to nature engagement programmes and to the design of infrastructure to improve relationships between humans and nature on a larger scale, through active engagement, or through prompting behaviour through affordances. There are empirical interventions and case studies from organisations using the pathways (e.g. National Trust, Wildlife Trusts, Durrell Wildlife Conservation Trust in the UK) that demonstrate how the pathways to nature connectedness have influenced decision making and management, and been applied to practically enhance human connectedness to nature.	Thank you for this general comment on the topic of nature connectedness as a pathway for sustainability transformation. Thank you also for all the suggestions for organisational case studies. Within the available wordcount we will try to mention suggested examples and additions, such as we did under subsection 5.3.2.2 "Values as leverage points": "Leveraging nature connectedness is empirically supported by case-studies from organisations such as e.g. National Trust, Wildlife Trusts, Durrell Wildlife Conservation Trust (Richardson et al. 2020)."
252	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 5	1	1	1	1			
291	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 5	7	180	7	180	Is sustainability really an "end-state"? Would not it required to be "sustained" by future generations as well? I claim that this static understanding of sustainability is not helpful, better to focus on it a dynamic process to be pursued over time.	Yes, this is a wording issue and has been changed. Intended meaning was 'when considered as a goal, sustainability.	
292	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 5	18	522	18	525	Instead of identifying justice as "intersubjective" concept, would not it be more appropriate to treat it as a value, more specifically as an overarching and universally-shared value?	The concept of justice has been adjusted to align with chapter 1 and 2.	
293	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 5	20	593	20	594	This statement sounds too sweeping. While argument can be a crucial tool to reach consensus, other factors may be decisive (e.g. building trust).	This section has been removed.	
294	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 5	61	1506	61	1508	This is incorrect. The source (Asara et al. 2015) has been misinterpreted. The concept of 'green economy' is radically different from the idea of 'degrowth'. For an additional source, see Sandberg, M., Klockars, K., & Wilén, K. (2019). Green growth or degrowth? Assessing the normative justifications for environmental sustainability and economic growth through critical social theory. Journal of Cleaner Production, 206, 133–141. https://doi.org/https://doi.org/10.1016/j.jclepro.2018.09.175	Thank you. Our take is that the term green economy is too broad and generic for appropriation by any particular strand, so we use it here as an umbrella concept covering different notions of a green or ecological economy and transition strategies, from green growth to green growth. We make this point clearer in the new version and have included the reference to Sandberg et al	
295	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 5	72	1870	72	1874	The international organizations mentioned (OECD, World Bank) are designed under the rational of economic growth and may not be the most suitable to advocate a change of such paradigm. It would be better to suggest a reform of these institutions here.	We agree that the current institutions may not be best suited to contribute to a transformation towards just and sustainable futures. Yet, the section is not set up to suggest specific reforms to international organizations such as OECD or World Bank.	
329	Margarita N. Lavidés	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	4	96	4	99	Intrinsic values of nature are likewise not effectively evaluated. Therefore, intrinsic values should be included also in the sentence along with instrumental and relational values of nature.	Intrinsic values are now included here.	
330	Margarita N. Lavidés	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	22	648	22	649	This statement may not be true because the environment or nature have also power and impact over current humans. Socio-ecological systems have feedback loops and where when nature is abused, e.g. excessive burning of fossil fuels/deforestation, nature gets back to us with the impacts of excessive CO2 in the air and therefore global warming and its impacts.	This section has been removed to create better alignment and focus in the chapter.	

331	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	25	744	25	752	The following statement is suggested in line 749 after "...value...": This is already manifested in the concepts of Earth Law including Rights of Nature which though has its theoretical origins in the 1970s has been gaining grounds globally especially in the last ten years since the first legislation of rights of nature in Pittsburgh, USA in 2006 followed by constitutional legislation in Ecuador in 2008. Then followed by Bolivia, New Zealand, India, Mexico City and three dozen cities and municipalities in the US. Further Earth Law including Rights of Nature is being taken up and manifested in the UN initiative called UN Harmony with Nature (www.http://www.harmonywithnatureun.org/)	This section has been radically reduced for better alignment of the chapter and because many of these issues relate to the entire assessment and need to be dealt with in Ch1
332	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	27	823	28	829	The CBD Preamble addresses intrinsic value in its first sentence yet this is not included in the discussion of the different kinds of values that follows for 5.2.3.4. I suggest to include it in this discussion as obviously the CBD Preamble is carrying it in its opening sentence.	This section has been entirely reworked, and this sentence has been removed.
333	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	28	839	28	839	This statement should be further elaborated.	This section has been entirely reworked, and this sentence has been removed.
334	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	30	871	30	871	Intrinsic value should be included in the examples to complete the context.	No action needed. Intrinsic value has been included in this review.
335	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	30	878	30	878	"....difference..." should be "differentiated."	Thank you for the pointer. We have applied your correction.
336	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	32	927	32	931	It would be good to also search along with value or the term "ecocentric" instead of non-anthropocentric or along with non-anthropocentric.	Thank you for pointing this out. The present draft reflects our updated keyword string including "ecocentric" and related terms and corresponding search results
337	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	34	945	34	945	The following can be added and referred to: UN Harmony with Nature (http://www.harmonywithnatureun.org/); Earth Law Center Suggested Readings (https://www.earthlawcenter.org/literature/); Global Alliance for Rights of Nature (https://therightsofnature.org/ron-conference-articles/), (https://therightsofnature.org/related-books/), (https://therightsofnature.org/videos/), (https://therightsofnature.org/articles-by-ron-friends/).	Thank you, we have incorporated your suggestions.
338	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	39		39		For value focus and and value, to include intrinsic value, justifications can be found in the reference mentioned above previous to this comment.	Thank you- we hope our updated section 5.2 includes this suggested consideration
339	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	41	994	42		Table 5.4, non-anthropocentric can be referred to also as ecocentric and example targets of valuation should include Earth Law including Rights of Nature.	Here we were drawing on the framework of the IPBES, preliminary values guide. These suggestions have been broadly integrated into the revised text.
340	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	45	1071	46	1085	Both options can be done and presented in the next Order Draft.	The comment is not clear enough to act on.
341	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	66	1637	66	1648	Beyond the described analysis for NBSAPs, it would be good to see and indicate the implementation side of NBSAPs. Which advocated interventions and policies were actualized and achieved beyond being formalized in NBSAP documents within national governments and CBD. Another area that can be explored for this section is the pro-active environment or pro-nature provisions in constitutions of nations which results to real implementation on the ground e.g. supplemented by other national laws or supportive court rulings/decisions consistent with that constitutional or national laws.	The comment is valid, however for identifying and analyzing implemented interventions and policies it would be more difficult to get the data and this would be outside the scope of this section. It might be something to tackle in Ch.4
342	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	75	1978	76	1986	The following example should be included: The case of New Zealand giving rights to rivers to give an specific example of environmental policy instrument/legal framework that addresses biocultural diversity.	This is a relevant case and we are analyzing it in combination with cases or rivers that have been designated as subjects of rights in Colombia, and India
343	Margarita N. Lavides	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	78	2081	78	2082	Regarding question of responsibility: every other sector has its own roles in ensuring that multiple values of nature are integral part of decision making. I suggest to indicate each sector i.e. governments, NGOs, academia etc. and its suggested roles in this matter.	We agree with the comment - however refrain from making sector specific recommendations or conclusions, as this is way beyond the scope of the assessment. We do however attempt to make conclusions with respect to values for adaptation and transformation of governance systems towards JSF

344	Margarita N. Lavidés	United States	Earth Law Center/Samdhana Institute/Independent	No	Ch. 5	89	2399	89	2406	Mazzucato M, Messner D, Nakicenovic N, Rockström J (2019). Six Transformations to achieve the Sustainable Development Goals. Nature Sustainability. doi: DOI 10.1038/s41893-019-0352-9 Researcher contact: Guido Schmidt-Traub Executive Director SDSN Tel: +33 1 84 86 06 63 guido.schmidt-traub@unsdsn.org. Abstract The Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change call for deep transformations in every country that will require complementary actions by governments, civil society, science and business. Yet stakeholders lack a shared understanding of how the 17 SDGs can be operationalized. Drawing on earlier work by The World in 2050 initiative, we introduce six SDG Transformations as modular building-blocks of SDG achievement: (1) education, gender and inequality; (2) health, well-being and demography; (3) energy decarbonization and sustainable industry; (4) sustainable food, land, water and oceans; (5) sustainable cities and communities; and (6) digital revolution for sustainable development. Each Transformation identifies priority investments and regulatory challenges, calling for actions by well-defined parts of government working with business and civil society. Transformations may therefore be operationalized within the structures of government while respecting the strong interdependencies across the 17 SDGs. We also outline an action agenda for science to provide the knowledge required for designing, implementing and monitoring the SDG Transformations.	Many thanks. This has been done.
359	Droz Layna	Japan	School of Global Environmental Studies	No	Ch. 5	1.	12	1	14	On what ground and according to who is this claim made? Where "a consensus is now emerging"? Idem for p. 24, lines 693-696.	This comment have now been removed
360	Droz Layna	Japan	School of Global Environmental Studies	No	Ch. 5	23.	666	23	680	According to who? References are needed.	This section has been removed. These concepts are now addressed upfront at the start of ch1 as they relate to the entire assessment.
361	Droz Layna	Japan	School of Global Environmental Studies	No	Ch. 5	58.	1392	58	1395	Unclear sentence (what is "the inner sphere and personal and human disconnections"?)	Thank you for indicating this needed clarification. We reworded.
435	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 5	32	900	40	965	Besides the keyword search, the biodata of Enviornmental Researchers can be made, or environmental researchers from different research institutes can be asked to contribute their research if it matces 3 or mode keywords.	This is beyond the scope and focus of this assessment in this chapter.
436	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 5	62	1521	62	1547	important information missing here is that values about nature can be altered in case of catastrophe, war or any event that adversely impact nature. In such scnerio values can be changed over the years. We have studies proving farmer changing their traditional farming practices & knowledge to align it with nature based solutions	The different ways how value can change are also discussed in Ch.2 and we will include it here more explicitly.
437	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 5	89	2407	91	2472	Knowledge & capacity bulding are very important on all levels, governments, social, local & others. Either there should be studies on such Diplomas. MOOC courses which provide capacity building ot there should be collaboration with such organizations which provide capcaity building to futhur streghthen it. This can also result in change in vaulues and beliefs.	This is a valuable comment but we believe that it is an issue that needs to be picked up (and has been picked up) in ch6. We have now also reflected more extensively on capacity and capacity requirements in our governance section.
461	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No	Ch. 5	77	1747	78	1793	Line 1747 states "A green economy can be defined as...", but then line 1792 states "A green economy by definition..." The first implies there's more than one definition while the latter suggests there's only one.	One thing is that there may be different exact definitions of "green economy". However, all of these exact definitions have in common that social and environmental cost-shifting are prevented and in which the stewardship of nature's values is recognized and appropriately compensated. We dropped the "by definition" at the later instance to avoid confusion.
491	Henry Mcghie	United Kingdom	Individual	No	Ch. 5	1.	11			UDHR capitalised. What about environmental rights list by UNEP	The Key messages have been extensively reworked and reshaped in producing the SOD.
492	Henry Mcghie	United Kingdom	Individual	No	Ch. 5		26			have something somewhere about social norms and institutions forming positive social norms, such as museums and cultural sites	We have more effectly integrated were possible the concept of social norms and institutions into the key messages.
493	Henry Mcghie	United Kingdom	Individual	No	Ch. 5	2.	60			some of the discussion of values throughout is a bit unclear. Difference between values held by individuals and communities, and the value[s] assigned to nature. More discussion somewhere of Schwartz's work on 58 supposedly universal values, and work of Crompton and others on working with intrinsic and extrinsic values, and also of Kellert's work. These explore what 'nature is for'	We hae tried to provide more clarity on this issue through out the chapter. This is also something we are resolving in Ch1.

494	Henry Mcghe	United Kingdom	Individual	No	Ch. 5				could do with more on capacity building, and links to eg Paris Capacity Building Committee document, and alignment with a range of policy agendas to ensure capacity can be built effectively	Capacity is now discussed in more detail in the final section. This is a key component of Ch6 and we have been careful not to overreach our scope here.
525	Rafael Calderón Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 5				Make more emphasis on the socio-ecological limits in the whole chapter.	No rationale or context is provided for this comment. This is a theme that engage with explicitly and in great detail through our focus on just and sustainable futures.
526	Rafael Calderón Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 5				Relate Just and Sustainable futures with the Good Anthropocene.	I'm not sure how well known the term 'good anthropocene' is with policymakers and don't think it is a well defined term in the literature.
536	Juan Manuel Frausto	Mexico	Fondo Mexicano para la Conservación de la	No	Ch. 5				Keep the message: a fundamental engine that will keep the movement going, is not to loose hope.	This message makes no sense. Such wording has not been included in the SOD.
537	Juan Manuel Frausto	Mexico	Fondo Mexicano para la Conservación de la Naturaleza	No	Ch. 5				What will happen in a world without biodiversity? Also in terms of inequality and poverty. What are the implications of biodiversity loss for development countries?	Thanks. This section has now been removed.
552	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				Justice linked to natural processes, not only justice link to specific species.	I'm not sure exactly where in the text this refers to but we will certainly ensure we are not only concerned with justice to species. WE have now also clarified this in Ch1 and sought to harmonise our use fo justice across teh assessment
553	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				Clearly explain what is understood by the term "governance": representation vs. participation. Participation in decision-making is very important.	We have refrained from using one definition of governance, however have focused on some common elements.
554	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				Value of ecosystems' functions and its implications for the scenarios needs to be reflected.	We cover these values in great detail through our focus on instrumental values.
555	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				Scenarios to be presented, need to be clearly linked to the urgency and the scale of biodiversity loss.	We are presenting the results of existing scenarios/futures, we do not decide what they focus on but do assess whether they focus on BD and in what way
556	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				It would be interesting to have scenarios of the loss of values within the different Life Value Frames.	We have included an assessment of how existing scenarios incorporate dimensions of the LVF however we are not generating new scenarios
557	Fernando Jaramillo Monroy	Mexico	FAUNAM, A.C.	No	Ch. 5				Establish what has worked, what has not worked and what is urgent towards th future.	We do value this comment, and in the current version of the chapter, highlight key capacity enbalers and barriers.
579	Sofía Treviño Heres	Mexico	CONABIO	No	Ch. 5				The scenarios from the Regional Assessments and from the Values Assessment are supposed to be different, but understanding how other scenarios present what works and what does not work to generate change is extremely important.	The regional scenario work has now been better reflected on in section 5.2 of the SOD.
592	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 5				Should the chapter be talking about transformation or integration? It is the integration of the values of biodiversity in productive practices which will have an impact on the transformation.	Whilst we reject the invitation to replace transformation with integration, we do see integration of values as one element of transformation
593	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 5				Consider: How closely related nature do people feel? How is biodiversity important in people's everyday lives?	No context is provided, nor linand and page numbers - no action can be taken.
594	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 5				Be clear about how different actors have different values.	We value this comments, however, it is too generic to address in the current form. We do however discuss diversities of values people hold for others, and ways these values shape governance choices.
600	Valeria Cruz Blancas	Mexico	Alianza Mexicana para la Biodiversidad A.C.	No	Ch. 5				Biodiversity-related-topics to communicate about scenarios need to be fundamented on very clear base lines.	We do not understand what the reviewer means here, however if this is about generating new scenarios, we are not doing this as we are focussing on the assessment of existing scenarios
601	Valeria Cruz Blancas	Mexico	Alianza Mexicana para la Biodiversidad A.C.	No	Ch. 5				IPBES and IPCC have been compared, and there has been a politization that has made them seem paralel, but that has not been beneficial for biodiversity. The discourse around biodiversity has lost strength. Climate change finds in the CBD solutions based in nature to manage and extract resources.	The comment is not clear , nor the desired change. We do not agree with the statement either that the biodiversity discourse has lost strength. IPBES stands as testement to this.
617	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 5				Three axis (social, environmental and economic) are being considered, but what are the influeces that each one will have to achieve just and sustainable futures?	I do not see how this comment can be meaningfully addressed - it is too broad and unspecific
622	Lizzeth Moreno	Mexico	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 5				The term "non-human" can easily become a discriminatory term. Be careful when you use it (for example, during a while, some aboriginal groups were denominated "non-human"). Find a term that will communicate the message in a clearer manner.	Valuable point. We will discuss the option of using the term "other-than-huamn" instead of " non-human"
623	Lizzeth Moreno	Mexico	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 5				The use of terms along the different chapters brings consistency to the Assessment.	We have strived for consintancy between chapters - TSU please assist us in ensuring alignment here.

624	Lizzeth Moreno	Mexico	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 5				In order to have a clearer picture of what will happen in the chapter, it would have been interesting to know the scenarios typology that the chapter will use. A well-built typology will allow the communication of the outcomes to have a deeper impact.	We hope that our updated draft provides a clearer picture on the scenario approach we have taken- see section 5.2.1
638	Julio Campo	Mexico	Functional Ecology Department, Ecology Institute, UNAM	No	Ch. 5				Could there be sustainability without justice? I think justice should be part of the definition of sustainability.	We have discussed this in depth and we do agree in principle with the reviewer. However, we also observe that in practice sustainability is often pursued without attention to justice. That is why we follow others in separating out these terms. This position is also now clarified in Ch1
654	Ricardo Iván Cruz Cano	Mexico	FESI Igg, UNAM	No	Ch. 5				Format needs to be improved to make the chapter more understandable and readable (i. e. figure 5.3).	We are working towards enhancing the formate for readability and increased understanding.
655	Ricardo Iván Cruz Cano	Mexico	FESI Igg, UNAM	No	Ch. 5				Is it pertinent to have Anex 5.1? Should the case studies to be reviewed need to appear in the chapter? Is it worth it to put a list of examples of the case studies?	We have removed this table 5.1? We agree there is no need for this detail here. Thanks.
656	Ricardo Iván Cruz Cano	Mexico	FESI Igg, UNAM	No	Ch. 5				Does the scale of values (Macro, Meso, Micro) takes into account the scale or variation of time?	The text has been clarified in section 5.3
666	Adriana Carolina Flores Díaz	Mexico	CENTRUS, Universidad Iberoamericana	No	Ch. 5				Consider the work of Maass that nests the social system within the bio-ecological system within the physical/chemical system.	Thanks for the suggestion, but we are not sure how this relates to the specifics of Ch 5 and its exploration of the futures works.
691	Patricia Koleff	Mexico	CONABIO	No	Ch. 5				The questions are crucial, but they seem circular. Beyond multiple values, it would be interesting to identify drivers. Also, there needs to be an emphasis on what is helpful for decision-makers and how the chapter helps achieve the overall objective of the assessment.	We acknowledge this point. We have reworked the questions and paid more attention to drivers throughout the chapter.
692	Patricia Koleff	Mexico	CONABIO	No	Ch. 5				To achieve a just and sustainable future will require to address many dimensions - only one of wich are multiple values.	There is not line numbering attached to this comment. We believe the text concures with this.
701	Diana López Higareda	Mexico	CONABIO	No	Ch. 5				For now, the chapter does not offer a conclusion - it opens the panorama too much and only presents an idea of where you want to get to. You will need to clarify what you mean by a "desirable future" and which values and elements play a role in building that future.	We have made extensive progress in the SOD is completing reviews and creating more clarity around desirable futures - these being just and sustainable futures. The conclusion with be addressed in the TOD.
734	María Perevochtchikova	Mexico	CEDUA, COLMEX	No	Ch. 5				Why are value typologies different between ch2 and ch5? They should be the same.	We have reworked our value typologies as they relate to futures works. Chapter 2 will be consulted for further alignment in the TOD.
735	María Perevochtchikova	Mexico	CEDUA, COLMEX	No	Ch. 5				Chapters 2, 3, and 5 have the same problematic bias: Chap 2 has a bias towards an occidental vision. Ch3 has a big presence of enomic valuation methods compared to other methods. Ch5 talks about "the green economy".	Chapter 5 uses the green economy as one small component case study to explore futures and trasntions within mainstream contexts. Much of the chapter is dedicated to non-economic contexts.
736	María Perevochtchikova	Mexico	CEDUA, COLMEX	No	Ch. 5				How will you determine which values are "desirable"? And for whom? How will this be linked to the three types of justice and sustainability? (for instance, what is desirable may be different taking a human justice approach vs a non-human justice vs a human/non-human justice approach). And how will these three types of justice or desirable futures, be communicated/"translated" to decision-makers? Will decision-makers be encouraged to "choose" one desirable future, or how should they balance the diversity of desirable futures?	Thanks. We only seek to highlight which values align with just and sustainable futures. Section 5.1, and 5.2 have been reworked to demonstrate this point and the linkages.
737	María Perevochtchikova	Mexico	CEDUA, COLMEX	No	Ch. 5				How will indigenous knowledge be included in the literature review?	We have included ILK sources in this chapter, please see 5.2.1, we also have a box focusing on ILK
741	Jorge Ramírez	Mexico	Sciences, UNAM	No	Ch. 5				Justice for whom? A just world, defined how?	Not clear what the commentary refers to. The whole chapter deals with this question.
742	Jorge Ramírez	Mexico	Sciences, UNAM	No	Ch. 5				The methodology includes revision of blogs, media and other non-academic sources. This may potentially bias the results (as it will analyse personal opinions rather than scientific facts). The methods section does not clearly acknowledged how this bias will be addressed.	We have made our methods clearer in the now separate methods report for the chapter.
750	Eduardo Robelo	Mexico	CONANP	No	Ch. 5				You may want to work on a simplified scheme that helps align the chapter's general objective with the overall assessment.	We are taking guidance from the co-chairs on this issue of alignment.
751	Eduardo Robelo	Mexico	CONANP	No	Ch. 5				Please present the cases and sources of data in a homogenised way (for instance, with the same criteria across cases). Authors should reflect on what key information is useful for decision-makers, and provide it for each case.	We agree with this comment but we will need to continue working on this aspect for the next iteration
754	Sandra Solís	Mexico	CONABIO	No	Ch. 5				Clearly define the concept of 'bioculture' or 'biocultural diversity' in Chapter 2, to retake, making it concrete, in Chapter 5.	We will work on the concept of biocultures and biocultural diversity with chapter 2 - TUS please can you assist here.
767	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5				Will two examples be sufficient to exemplify transformative change?	We have re-defined two broad pathways of transformation, each other includes numerous case stuidites. First, green economy..., and second Earth Stewardship will include Conservation of Biocultural diversity as one of the cases along with others
768	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5				Why were these two cases chosen ('buen vivir' and green economy)?	The justification for each of these case studies has been strengthened.

772	Fernando Estañol Tecuatl	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					I suggest that as part of the continuum of just and sustainable futures, to add as an axis the democratic planned economy and the communal, municipal, public, social and collective property towards building a better world.	We have not employed such an axis in a deductive fashion but, more inductively, we have found the importance of values linked to collectivism.	
778	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 5					Successful cases are only successful for the ones not involved in the cases, how will successful case be defined, successful about what and for whom?	We agree that it is difficult to judge "success". We have deleted this term.	
779	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 5					UN Assessments use justice and sustainability concepts that were built at a national level, but the authors are looking for evidence of the cultures, how to solve this issue?	There is an unclear connection to text - no changes made.	
786	Ariana García Galván	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					I think this chapter has many challenges ahead. One of the objectives is to report successful cases about multiple values within decision making towards a desired futures, yet each of the examples (green economy and 'buen vivir') have already a very well defined context, which make it hard (Or impossible) to replicate in other countries, that said, it maybe good to highlight generalities of each of the cases, and even propose other examples.	This is not one of our stated aims. Our aims are to explore the literature and to see which values may possible align better with just and sustainable futures. The examples noted here are only one small section. We have explored hundreds of case studies in this chapter.	
796	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					In the quest for a change in how justice and sustainability are defined, has the influence of power systems been consider?	Power is discussed at various points throughout the chapter.	
797	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					Within the changes proposed, which are the ones suggested from the individual perspective? Which is the role of society?	In the SOD we try to be more specific about how the individual perspective and the societal perspective complement each other.	
799	Óscar Armando Ugartechea Salmerón	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					How will the values to achieve a transformation be analyzed at an individual level?	In the SOD we included a literature search on the role of values for transformation, looking at both the individual level and the societal level. There are however limited results on which specific individual values would be needed for a transformation. I remember that there ws a discussion in our chapter to do survey on this, but I am not sure if this was taken forward.	
800	Óscar Armando Ugartechea Salmerón	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					Will cases of failure be mapped as well as the success ones? It would be interesting to know the reason of failure.	We are mapping all values related to scenarios and futures works. Here there is less known about what has failed as these works are mostly forward casting and not retrospective analyses, so evaluating successes or failures the focus. The focus is on determining the values combinations related to different possible futures.	
804	Andrea Velásquez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					The concept of "transformative change" should include in its definition "... constant reorganization ..." since it also refers to the transformation of values over time	We have fully revised the definition of transformative change	
805	Andrea Velásquez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					Very ambitious and utopian. But I love it!	Thanks.	
809	Ernesto Alonso Villalvazo Figueroa	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 5					Of all the chapters, it seems to me the most interesting, especially with regards to "Transformative change". I think it would be convenient to explain more in depth why the authors use as more desirable futures those that are more just and sustainable.	We have now clarified the use of this term and concept more clearly in the SOD.	
961	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	7		177	7	180	From the tekst it is not clear why exactly you consider just and sustainable as separate goals. Can you clarify it better?	Thanks. Yes, we understand the concern and we now provide a stronger rationale for this. In principle we see the two as inseparable. In practice however we observe that sustainability is often pursued with insufficient attention to justice. This point is also now addressed in Ch.1
962	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	7		200		205	The former has become associated with..... What about the latter 'transition'? Give a definition of transition or rephrase	The introduction to why transformations has been reworked for clarity.
963	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	9		241	9	299	For non specialist readers it would help if a concrete example was given for the different approaches to transformation. Now it is very conceptual.	Agreed, we have now integrated more suitable examples, but 5.3.1 remains quite conceptual and this is something we still plan to work on
964	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	16		473	16	474	explain what you mean with ' the capacity to vision better futures '	This sentence has been removed in the restructuring of this section.
965	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5			486		486	How can you produce a public value?	This phrase has been removed in the restructuring of this section. Deliberative multi-stakeholder processes as part of networked governance are often conceived as producing public value
966	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	31		902	31	902	how do you take into account google algoritmes and the fact you search history actually influences your search result.	Thanks. Yes, we understand the concern and we have include an acknowledgement of this in our methodology and data management plan

967	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	46		1082	46	1085	Personally I would choose for value archetype. Afterall people can more relate to values than to scenario's (which are very artificial).	The emergence of the archetypes was unclear in the FOD. The analysis and development of the SOD has now clarified the relevant archetypes.
968	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	47		1120		1120	typo: inStrumentental	Corrected. Thanks for pointing this.
969	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	47		1130	47	1130	Explain in more detail how the analysis was done and how you know a sgd has been reached.	We have added much detail into a methods report in the production of the SOD.
970	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5			1238		1238	typo: the use of...	Thanks. This section has now been removed.
971	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	51		1241		1241	define option value when first used. Sentence is too long, doesn't make sence	Thanks. This section has now been removed.
972	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	53		1276		1276	Sentence not clear. Do you mean that a pathway in which biodiversity option value play as central role is a game changer?	Thanks. This section has now been removed.
973	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	54		1308		1315	First sentence doesn't make sence. Rest of paragraph needs more explanation as well.	Thanks. This section has now been removed.
974	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	56		1328		1328	three main types of role for values-> only two discussed, what about c)?	Thank you for this observation. This section is no longer present in the SOD.
975	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5			1448		1459	A concrete example would would make this paragraph more understandable.	We add a concrete example about cultivating values.
977	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	GENERAL		1120			I miss a bit the reasoning behind the analyses. More details on the types of values analysed would be good.	This section have been extensively revised in the SOD and the types of values explored in now clear.
978	Helen Michels - INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	GENERAL					The text is very conceptual especially the second half, which makes it sometimes hard to read. So more boxes with concrete exmples would improve readability .	This is done - with many more examples and more relevant to biodiversity. However, we realise that we still have further to go to fully respond to this important point.
979	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	1					The statement that institutons 'determine' decision-making is a very structuralistic view of the world. Other views in literature exist (for instance 'new institutionalism') in which the relationship is much more bidirectional and not as deterministic, leaving more freedom to agency: institutions rather 'shape' decision-making while they are reproduced but also changed by decision-making. So agents are not entirely determined by the institutional context in which they operate.	We very much agree that individuals shape institutions as institutions shape the behaviour of individuals. Please note that we have further developed this section and seize now more the bidirectional relationship.
980	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	3				96	explain instrumental & relational values: they are not necessarily clear to the reader at this point; or add reference to a previous chapter or box, if they were already explained	These concepts are used through out the assesment, and cannot be explained in every chapter. They need to be clarified in a glossary and in chapter 1
981	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	7				200	The definition of transformative doesn't seem to differ too much from how transition is defined and applied in research. For instance, notions of power struggle and lock-in mechanisms are also part of transition research. From what is discussed here it seems that the difference between 'transition' and 'transformative change' is more a matter of semantics. If there is a more fundamental difference, please explain. From lines 342 (p.12) and 445 (p.15) it seems that the authors also see transitions and transformations as interchangeable constructs.	Thanks, we agree this is problematic. The transformation section has been reworked to better define transformations within this context.
982	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	8				207	What you call 'proximate drivers' here, is typically referred to as 'response' (policy instruments like incentive schemes, protected areas, ...)	We have removed this term. We still consider the examples stated as drivers - e.g. an incentive system that favours agriculture can be a driver of deforestation. But we also agree that an incentive system can also be a response (to another problem).
983	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	10				295	forms of knowledge' or 'types of knowledge' in stead of 'knowledges'	Agreed, 'knowledges' is not good english and has been removed.
984	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	11		335	12	350	nature's in stead of natures; centered i.s.o. centred; decentered i.s.o. decentred	Thanks, has been changed.

985	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	12	343	12	355	for an excellent text on the coevolution between ecosystems, values, knowledge, technology and social organisation, which backs up what is being told on this page about coevolution (e.g. in line 363), see also Norgaard R.B. (1992) Coevolution of economy, society and environment. In Ekins P., Max-Neef M. (Eds.). Real-life Economics: Understanding Wealth Creation. London: Routledge, p. 76-86.	Thanks - I have the Norgaard on my shelf from long back and will refresh myself!
986	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	15	393		411	In addition to 'power' and 'values', I would also expect 'discourse' to be mentioned here. It could refer to the structures of meaning from which narratives are drawn. See for instance structuration theory (Giddens, 1979, 1984) or theory of policy arrangements (Arts, B., Leroy, P., & van Tatenhove, J. (2006). Political Modernisation and Policy Arrangements: A Framework for Understanding Environmental Policy Change. Public Organiz Rev, 93-109. Dordrecht, The Netherlands: Springer Science + Business Media BV.; or Arts, B., van Tatenhove, J., & Leroy, P. (2000). Policy Arrangements. In J. van Tatenhove, B. Arts, & P. Leroy, Political Modernisation of the environment. Dordrecht, The Netherlands: Kluwer Academic Publishers). Discourse is briefly mentioned in line 440, but I wouldn't put the notion of discourse in political ecology, it is rather part of mainstream policy science (see references given above).	Thanks. we will work on this and we think it is important, especially given connections between discourse and values. We have however removed this section and integrated some of these aspects later in the chapter (see SOD section 5.3). We refer to discursive power in a current text box but have not analysed this in detail.
987	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	15	445			see earlier reference of Norgaard (1992), who links values with coevolution & change	thanks again for this suggestion
988	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	16	460			See also Giddens' structuration theory (1978,1984), in which he refers to structure of signification/domination/legitimation on which we draw to communicate meaning, exercise power and justify or sanction actions; and which are reproduced, or may be changed, in this way too.	Thanks. We do not explicitly introduce Giddens although the way we present the role of both power and values in social change does align with his thinking.
989	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	16	468			Not sure what the shape of the blue triangles means: does it suggest that they are less important or less diverse at the micro scale and more so at the macro? Please explain.	We have removed this diagram. The intention was not about importance but about the scale of transformation increasing. But we agree this can be better presented.
990	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	19	556	19	565	Not sure whether this distinction between factual, evaluative and normative statements is always relevant. For instance, I can empirically observe that a car drives 60 km/h where the speed limit is 50 km/h and that he therefore does not respect traffic regulations. This seems both a factual statement (driving 60 km/h) and an evaluative statement (he does not respect speed limit). So I would argue that evaluative statements needn't necessarily be phrased as good/bad claims, but also in empirically observable categories.	"He does not respect speed limit" ist not an evaluative but a factual claim that can be true or false. the evaluative claim is: not respecting the speed limit is bad, the normative claim is: one ought to respect the speed limit. The three dimension are interconnected, but not identical
991	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	21	623	21		It could also be argued that sustainability has become a 'boundary object' (see Star & Griesemer, 1989) as its clear definition is hindered by both cognitive and normative insecurity. For instance, we often lack knowledge on critical minimum or maximum levels & tipping points (= cognitive insecurity); or we disagree on which values are more important in a given situation (= normative insecurity). This makes pursuing sustainability a 'wicked problem' (Rittel & Webber, 1973).	This section has been removed and aligned to the formulation of these sconcepts in chapter 1 and 2
992	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	26	796	26	797	Health also makes use of cultural services, for instance the proximity and accessibility of green space in which one can spend time.	This section has been entirely reworked, and this sentence has been removed.
993	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	30	871		874	If you refer to some typology of values that was developed or presented earlier, please refer to it.	Thank you, we have updated our section to reflect the links to different chapters and frameworks of value typologies- see section 5.2.1
994	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	30	878		880	check the grammatical structure of the sentence	Thank you for the pointer. We have altered the sentence.
995	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	37				In the 'Who acts?' row, individuals and communities are mentioned, households are not. The fact that households have evolved in much of the western world from producing entities to (mostly) consuming entities is major shift in our social organisation which co-evolves with other spheres like technology, ecosystems/landscapes, etc. Institutionally, households are not at all identical to individuals, so perhaps they should be added to the analysis as a separate social entity.	Thank you for this suggestion, we have included 'households' in our assessment

996	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	39		40	962	In the 'Value justification line': Jax et al., Ecosystem services and ethics in Ecological Economics 93 (2013): 260-268 distinguishes inherent moral values (=intrinsic), instrumental values, 'eudaimonistic' values (=relational) but also a fourth type, 'fundamental values' which relates to basic requirements for life on Earth. This value type is not withheld in IPBES it seems. It could however be linked to Paul Ekin's notion of critical natural capital (CNC, see Ecological Economics 44 (2003):165-185), which suggests a threshold below which values get a fundamental character. For instance food & water, typically associated with provisioning services and measured via economic/instrumental values also represent fundamental values, if critical life support issues are involved. Perhaps also relevant for chapter 2 (typology of values), which I didn't review.	Thanks, but as you note, the comment may be more appropriate for chapter 2. TUS please assist in passing this suggestion to CH2.	
997	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	45		1075	46	1085	While option 2 would certainly be interesting as an academic exercise and a journal publication, I think option 1 would be more accessible and practically useful for a broad IPBES audience. So I suggest option 1.	The emergence of the archetypes was unclear in the FOD. The analysis and development of the SOD has now clarified the relevant archetypes.
998	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	46		1094			Not always disregards values of nature: sometimes it appears to assume that by focusing on a strong economy also professional care of nature can be improved. Similar to the reasoning that economic growth will foster more social security, better healthcare & education, ...	We are refining the descriptions of the Archetypes. Some of these are detailed in the SOD, the remainder of changes will follow in the TOD.
999	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	47		1121	48	1125	I prefer stacked bars for these comparisons to the presentation used here, because of the better visual grouping of data per scenario archetype.	We don't agree stacked bar graphs can be more difficult to read and one is constantly having to visually calculate the values. We feel this is a clear easier to read output.
1000	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	50		1162	55	1316	The storyline of the case study under 5,3,3 isn't clear to me, the key question in line 1168 is quite vague, and its relevance unclear also. This section seems anecdotic at this stage of writing.	Thanks. This section has now been removed.
1001	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	57		1374	57	1377	see the Flemish 'Nature Outlook 2050', available at www.inbo.be (english website) which gives an account of both positive and negative effects during stakeholder workshops when developing & discussing alternative pathways	Thank you for suggesting this useful reference. We added it.
1002	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	58		1415	58		add a reference to figure 5.7 here, which contains examples of the rather abstract statements of lines 1415-1418	We now reference Fig 5.7 at line 1415
1003	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	59		1430			Can you add some references of this 'vivid debate in literature'?	The references are given in the following paragraph, but we will make this more obvious.
1004	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	59		1433			What is the difference, in Abson's figure between level 5 (the rules of the system, e.g. incentives) and level 12 (parameters, such as subsidies)? Because subsidies may exactly alter incentives.	We now recognise interlinkages and overlaps between the levels in the text.
1005	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	60		1461		1462	The question whether values are a means or rather an outcome, seems to be based in a rather rational-positivist, unidirectional cause-effect logic. While at other places in the tekst you have referred to framework of co-evolution of multiple spheres, which offer a richer framework to understand the complex an ongoing dynamics of how values, instutions, technology, ecosystems act & react on each other. Isn't the question whether values are a leverage for change or rather the outcome of change, trying to frame the question in a rational-positivist, Newtonian logic?	We try to add more nuance. However, we do specify in our text that values are both a process and an outcome, hence recognising ciclicity.
1006	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	60		1482	60	1484	Can you give some examples of such initial transformation frameworks to clarify/back-up your statement?	We now provide Brand 2016 as reference.
1007	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	61		1506		1507	green economy' or expressions like 'greening the economy' do not always adhere to degrowth or steady-state economics, they also may use a 'green growth' discourse; see also comment on line 1617	Thank you for this useful distinction. We now clarify this point as suggested. See also response to teh previous comment
1008	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	63		1556	63	1587	There isn't of course one best way to categorize and label values. But perhaps the typology used/presented here could be more closely aligned with the categories discussed earlier.	We will build on the terminology from Ch2 and explain better how values fit into the BCW framework
1009	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	63		1588	64	1636	While the BCW provides a nice and quite broad structure for coding policy documents, the relationship between these codes and the values remains somewhat underdeveloped here. Can you elaborate on this? Since you suggest in line 1588 and further, that the intention is to close this value-action gap.	We have clarified the role of values in the BCW framework and analyzed the extent to which interventions relate to values

1010	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	68			Here you link 'green economy' with 'sustainable economic growth', while earlier you linked it with degrowth. See also comment on line 1506.	We have dropped the close link to degrowth.	
1011	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	71		1807	"If wisely designed": please clarify what this means	Replaced "if wisely designed" by "in principle".	
1012	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	71		1815	You could link this to, or explain this by, the notion of co-evolution, e.g. as illustrated by Norgaard (1992): changing the subsystem of social organisation (e.g. by policy instruments that tries to correct for market failures) may affect the subsystem 'ecosystem/landscape' (e.g. different management practices by private land users) but also affects the subsystem 'values' (e.g. by altering their motivations).	We agree. However, we prefer to not introduce another concept, as even without this, the section utilizes rather many concepts and ideas.	
1013	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	71		1819	"in terms of prices, which represent exchange values"	Rephrased.	
1014	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	79		2089	with' in stead of 'which'? Grammatical structure not correct.	Corrected.	
1015	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	79		2103	institutions are the formal and informal rules and behavioural patterns by which we co-ordinate social interaction	Definition of institution has been added to the assessment's glossary	
1017	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	81		2170 81	2172	these 4 types of interaction are not self-explanatory, so if you introduce them, better explain or illustrate them	The text has been substantially revised.
1018	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	83		2218	check paragraph numbering: 5,5,2,1 i.s.o. 5,5,1,1	Thanks.	
1019	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	85		2282	I'd include something about multifunctionality in your search, since these function often are proxies of the type of values that policy instruments embrace. E.g. the economic, climate, recreation & ecological functions of forests.	We agree and use multi-functionality as a keyword search	
1020	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	90		2447	2448	I disagree with the first statement, and agree with the second. The exercise of (political) power is typically based on an agenda that requires an understanding of what interests to defend, and how to defend them. It does not necessarily require a basis of scientifically grounded knowledge. But it is correct to state that scientific knowledge production is not independent of power relations or struggles.	Text has been substantially revised in light of this comment
1021	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	81		2188 82	2193	These lines again make a case for 'transformational governance' that can be delineated from 'adaptive governance', much like the suggested difference between transition and transformation at the start of the chapter. But throughout section 5 references are made made to the adaptive governancen/management literature, so the delineation isn't clear at all. If there is a clear difference and if it has added value, please indicate so, but refrain from shifting to a new vocabulary which is still mixed with the old one.	Agree. Section 5.5.1 (now section 5.3.5 has been updated in delineating these concepts.
1022	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	82		2199	Figure 5,3 needs more explaining what it involves and why it is relevant for the point that you're making.	We have removed fig 5.3.	
1023	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	91		2464	Very vague statement, not clear in what way facilitation & ind. Leadership is essential to 'robust learning'; also not clear what 'robust learning' means.	Text has been substantially revised in light of this comment	
1024	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	91		2471	This question focuses ILK, but the focus could just as well be on the role of knowledge developed by private funding (e.g. from business dependent research centres) vs. Publicly funded science.	We value this comment, and would be elaborating on this in further work. Literature for drawing conclusions has been located.	
1025	Wouter Van Reeth INBO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 5	GENERAL			Section 5,4 & 5,5 are more 'intentions at analyses' than actual results - apart from some references to literature & conceptual frameworks, so they need further work before allowing a proper review	Yes, this is correct. We have now formally reviewed the literature in relation to these two sections. Please see section 5.3 SOD.	
1050	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5				General comment: It is clear that this chapter has been written without acknowledging the problems of the CBD definition of biodiversity. It could be rephrased to include a more utilitarian approach (as a quality defined by a variety of property indices) as described by Feest (2010). In this way indices such as biomass or evenness might be regarded a relevant to the "value" of Biodiversity and NCP.	The VA has not resolved issues about "biodiversity" definition, but our focus on values seems to point to advantages in the interpretation as "variety" - so having a compatibility with the CBD def and previous 50 years work; adding in other aspects is not required for having a link to human benefits and NCP	

1051	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5					This is a closely argued and detailed chapter and one I found difficult to encompass so comments are brief and only for the first parts.	Thanks.
1052	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	2		63		Individuals and groups	This typo has been corrected, but please note this is still work in progress and the KM will be refined based on the results of the review.
1053	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	19		451		Starting sentences with But is ungrammatical!	This sentence has been removed.
1054	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	20		Box 5.1		Does not fit! Check for other occurrences	This box has now been removed.
1055	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	29		762		Here a better definition of biodiversity might give a more relationship with the various values	This section has been entirely reworked. Better definition of biodiversity can be found in section 5.2 (UN Box).
1056	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	47		Table 5.4		The biodiversity value and intrinsic value would be expanded by the biodiversity quality concept (as above)	Thanks for suggesting your paper and its definition. We will consider further, but for the SOD we have stuck this intrinsic value.
1057	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	53		Figure 5.6 & 5.7		Note that despite the personal valuation of intrinsic value it is of low value in these histograms. Is this correct?	Thanks. Yes relative to instrumental values, intrinsic value were found to be fewer in the assessed works.
1058	Alan Feest	United Kingdom	University of Bristol/ecosulis	No	Ch. 5	58		1170 & 1183		Note the difficulties created by considering biodiversity as defined by the CBD. The quality concept makes these assessments much easier	We are taking the lead from the Co-chairs and Ch1 on the "biodiversity" definition, but our focus on values seems to point to advantages in the interpretation as "variety" - so having a compatibility with the CBD definition and previous 50 years work; adding in other aspects is not required for having a link to human benefits and NCP.
1100	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	7		174-180		This is a key point. I understand the utility to separate outcomes from processes, and "just" from "sustainable". I am however not sure that the pathway itself can be considered as a value.	Thanks, we will clarify. Our intention was not to propose pathways as a 'value'
1101	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	8		211 and 216		"Co-evolution" and "punctuated equilibrium" come from the vocabulary of evolutionary biology. I am not sure of their meaning as metaphors in the context of values. This should be better explained.	Thanks, these terms are used in social sciences to describe dynamics of societal and social-ecological change as opposed to biological change. However, we are removing them from the chapter.
1102	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	9		249-264		Also cite the sociology of translation by Callon and Latour.	We do not believe this suggestion fits here. This work on translation might add a more critical dimension but that is not really what we aim to do here.
1103	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	11		332		Maybe precise co-evolution between what and what	Agree, thanks. We have removed most use of co-evolution as we found that biologists find the social science use of this term to be imprecise
1104	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	12		351-355		Not clear	Thanks. We have adapted this.
1105	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	12		366		"finance needing new opportunities" - I would prefer a less money-connected example	This has been removed.
1106	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	13		Figure 5.3		The figure suggests that the links only binarians (each sphere with its two neighbours), which is probably not what you mean.	We have replaced this figure.
1107	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	17		points c and d		See links with Chapter 2, section 7	Thanks, we have attended to this.
1108	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	19		Box 5.2.		A very useful clarification	Thanks.
1109	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	22.23				Repetitions, e.g. 639-647 and 682-689	these sections have been removed in the SOD.
1110	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	25		739-743		The metaphor of the "cake" is a bit easy, and rather misleading. Some uses and options can coexist - providing certain conditions that the chapter attempts to clarify.	This has now been removed.
1111	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	30-43				The section is very interesting, but the "arterial and Method" section is too long. It should be synthesized here, and put as a whole in an annex.	Thank you! We will include the full methodology in an annex
1112	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	43		998-999		What do you mean by "in parallel"?	We have clarified parallel as being carried out separately but at the same time.

1113	Anne Atlan	France	Recherche CNRS, Laboratoire ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	45	1071-1092		As the author clearly asks the question, I will answer. I prefer to work on scenario archetypes. I tried to identify some "value archetype" in a study on subantarctic islands (Atlan and van Tilbeurgh, Vertigo, mars 1999), and it provides helpful keys of reading. I am convinced that such archetypal combinations of values are strongly dependent of situations and cultures, and is not appropriate to the global survey of this report. Scenario archetype already encounter these variations, and are therefore easier to compare.	Thanks for the references and the pointer. We have now developed a link between the archetypes and values. Please see section 5.2 SOD.	
1114	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	47	119-120		Is inequality only similar to regional competition ? Does it not also include dominance of the values of one social group/community/culture ?	(Correct lines: 1119-1120). Thanks for the comment. We have now provided clearer descriptions of the different archetypes in the SOD.	
1115	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	47	Figure 5.6		What are the "other" values ?	Thanks, the category 'other' have now been removed from figure 5.6, which have also been reworked	
1116	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	51	1172-1183		I would need more concrete examples	The section has been removed.	
1117	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	53	1250		Also environmental justice and intersectionality	We have tried to provide more examples here, and adapted the text for greater clarity.	
1118	Anne Atlan	France	Recherche CNRS, Laboratoire ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	56	1318-1319		As I said in my remark on line 174, I am still not sure that a process is a value. I guess I understand what you mean, but I would prefer a different formulation. " The role of values at different levels of the changing process" (line 1325) is clearer.	We expand on what we mean by values as process in sub-sequent sections. We link values as process to mode 2 science.	
1119	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	57	1358-1359		please clarify the difference between socio-cultural and contingent valuations, maybe with examples	Although this is not within the scope of Ch5, as Ch3 is dedicated to methods, we crossreference Ch3 and provide short examples.	
1120	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	59	1431		Could you provide references ?	References follow in the following paragraph, as we now specify.	
1121	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	59	Figure 5.7		I would have like see more detailed comments on that figure	We crossreference this figure in the text several times, and expanded the legend.	
1122	Anne Atlan	France	ESO - Espaces et Sociétés, Université Rennes, Campus de Villejean	No	Ch. 5	66-91			I found these sections enlightening, and I have no further specific comments.	Thank you!	
1200	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	4	96	4	99	These values are "not being evaluated" by whom? I think it would be valuable in the introduction to be clear who, or what processes, are not taking these values into account. If these values do exist, it must be because some people hold them. This is not hair-splitting. I think it is important to be clear on the nature of the problem, in your view: is it a problem that individuals are hypocritical and don't act on their values, or is it an issue that corporate and political powers impose action frameworks on people in spite of their values? You lose nothing from being clear here.	We have augmented this sentence to better reflect who we are talking about. Much of the details related to this issue are unpacked in the sections that follow. Given that this is the introduction we have kept this brief.
1201	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	12	346	12	341	I think that your challenge here (not just in this Chapter but throughout the report) is to decide whether this list of important factors includes values as one element (as suggested by this list), or whether values englobes and stands in for all of those factors. I see both of those positions being used at different points of the report. I realize that your challenge in this particular chapter is to try to make values appear to be relevant to transformative change, despite the lack of literature on this particular issue. I hope that it will at least be clear whether values are an overarching stand-in concept for all social science issues, or a specific concept that may have limited relevance.	Thanks, our SOD highlights a more values-centred perspective.
1202	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	14	404	14	408	As already hinted by the comment in parentheses, I think its critical that you figure out what values are so that you can determine whether "interests", but also, I would suggest, "justice norms" are values.	Thanks, we have developed a stronger cross-chapter set of definitions that includes a distinction between justice and values.

1203	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	17								Honestly, isn't that exactly what this report does? I hope that at some point you address how this report and the IPBES recommendations do or do not risk doing this.	Maybe i misunderstand the comment, but my understanding is that the aim of the report is to move away from this practice.
1204	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	20		483	17	485		20	582	Sorry, isn't recreation instrumental? People don't form relationships with the forest by jogging, at least not more so than by collecting firewood (arguably less so!).	This sentence has been revised.
1205	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 5	10						20	585	Aesthetic value isn't a value recognised by IPBES, that is to say, it is not part of the three kinds of value. Please change, this is confusing.	The preliminary guide explicitly mentions aesthetic value
1298	Simoneta Negrete Yankelevich	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Decision making in natural resources go through religion cosmovisions and are influenced by the notions and ideas of the church leaders. For example, the forest is being taken for wook to build churches bigger and bigger. There is a regional pressure to build them. Influence agents, such as spiritual leaders, are really important to be considered. It is a great opportunity to involve religous institutions, it has to be considered as a "leverage point".	We have literature in place, and will include the results in the next iterations of the chapter.
1299	Patricia Gerez Fernández	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Instrumental values are not bad necessarily, they can provide important aspects for the community.	We agree, they are essential but where the are the singular focus then there are issues. We have made this point more explicitly in the reworked section 5.2.
1300	Ricardo Contreras	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									This text eliminates conflicts in a local leve and legitimate power in a local way. For example: churches, priests, etc. Decisions shouldn't be based on opinions, but on legitimate governments that guarantee the conservation of resources, even if the other leaders do not care about conservation.	This comment is not linked to any any text or numbering. We cannot work out what it is refering to - no action is taken.
1301	Elisa Peresbarbosa Rojas	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Churches have different points of view, like" teoría de la liberación" that is linked to the defense of territory. Religion leads communities to organize themselves and participate. As society does not have spaces for reflection and generation of awarness, these religous spaces are key.	This comment is not linked to any any text or numbering. We cannot work out what it is refering to - no action is taken.
1302	Simoneta Negrete	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Laws are not linked to values of people, they do not reflect them.However, there is people in communities that already have a decision making power and values. We need to consider them and involve these people in these processes. It is not generating the influence, but taking them in consideration.	This comment is not linked to any any text or numbering. We cannot work out what it is refering to - no action is taken.
1303	Citlalli López Binqnqüist	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Guillermo Bonfil's work cultural control theory (80s): The external influence imposed that does not take people in consideration.	Thanks - we will look at this work.
1304	Simoneta Negrete	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									We need religious key people of the communities "on board" of these situation (leverage points).	Not enough context here. We are not sure what the connect is refering to in the chapter.
1305	Mirna Ambrosio	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Religious linking has helped in several places, such as Misantla by the construction of "Pastoral Ecológica". It is important to communicate and interact with religous leaders.	We have literature in place, and will include the results in the next iterations of the chapter.
1306	Patricia Gerez Fernández	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Public policy does not only come from the government, but from religious leaders, a.c, and local people that organize themselves and that create real local and world changes. Who can make decisions? Not only governments.	We have literature in place, and will include the results in the next iterations of the chapter.
1307	Simoneta Negrete Yankelevich	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5									Public policies could be reactive. Is this considered? Reactive in short-term: That has triggered complexity on natural resources managment in Mexico (i.e PROCAMPO, PROCODES, etc.) It has generated an elimination of perception and clarity of what happens if you misuse natural resources.	We focus on the capacity of institutions to be adaptive and learn from experiences, including the outcoms of reactionary approaches..

1309	Ricardo Contreras	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						The environmental agenda of the country is built after the international one, so it ends imposing the global vision into local aspects. There is no analysis of the concrete mechanisms, not even in a national level of how to build more just and sustainable futures. It needs to be considered that Latinamerican countries have a system of justice that works in a specific way. It needs to be built a system of governance really high that also considers the local. When you read the document you do not know in which scenario it ca be settled.	This comment is not linked to any any text or numbering. We cannot work out what it is refering to - no action is taken.
1312	Simoneta Negrete Yankelevich	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						Have you considered the structuration of public policies around different scales? Because neither values, nor contexts are similar in different countries.	This comment is not linked to any any text or numbering. We cannot work out what it is refering to - no action is taken.
1314	Miguel Escalona	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						It should be included the concept of: civilizatory crisis. It is a mix of crisis. The statement should be from this perspective. How do we understand the system of social metabolism? It needs to be considered the multiple interaction that influences In order to undertsand the root of each problem and process.(i.e La Tosepan as an example of governanza, that includes other values towards the crisis).	We recognize the value of social metabolims concept and have located the literature. We will be includign conclusions in the next iteration of the chapter.
1315	Elisa Peresbarbosa Rojas	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						Toledo: sustainability as a capitalist invention in order to continue with extraction. We need a civilizatory crisis to really change. / The are local experiences that demonstrate how people can organize themselves in a different way (Tosepan i.e) Why is it so important to talk about different values, what is behind it?	We are understanding values as one, central dimension, of the current socio-environmental crisis (embedded in a civilizatory crisis, in terms of Toledo and others). IPBES - Values Assessment does not claim that values encompass all dimensions of the civilizatory crisis
1317	Araceli Aguilar Meléndez	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						Some terms are not being used such as "usos y costumbres" of different communties. It is important not to forget that we cannot generalize. Include more terms that link to autodetermination y autogovernment. The term exists and needs to be considered in the document.	we will incorporate the terms "usos y costumbres" (customs and habits, as well as customary or consuetudinary law), and emphasize the relevance of self-governance
1318	Simoneta Negrete	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						International policies need to be done in order to considir that when something happens in a place, it repercutes in other places. However, we cannot only see the international way, but the local too. / We need to consider the "usos y costumbres" but not in an extreme point of view, because it can also limit people towards change.	we will use cross-scale analyses, addressing iterrelationships among local, national, and international scales
1320	Ricardo Contreras	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 5						There are just a few case studies on the document. They need more in order to make them representative of the world situation.	we are making an effort to include multiple cases studies from different regions of the world, embedded in broad pathways of transformation
1347	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	13		371	13	371	citation format is wrong	We could not find a citation at this on this line. We have tried to einsure that all citation formats have been corrected.
1348	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		801	31	801	citation to be merged	Not sure what the reviewer means here.
1349	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		803	31	805	citation to be merged	Not sure what the reviewer means here.
1350	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		810	31	811	citation to be merged	Not sure what the reviewer means here.
1351	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		813	31	814	citation to be merged	Not sure what the reviewer means here.
1352	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		825	31	825	citation to be merged	Not sure what the reviewer means here.
1353	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	31		831	31	831	citation to be merged	Not sure what the reviewer means here.
1354	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	32		836	32	836	citation to be merged	Not sure what the reviewer means here.
1355	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	32		847	32	847	citation to be merged	Not sure what the reviewer means here.
1356	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	32		852	32	852	citation to be merged	Not sure what the reviewer means here.
1357	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	36		946	36	946	citation to be merged	Not sure what the reviewer means here.
1358	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	43		1089	43	1093	citation to be merged	Not sure what the reviewer means here.
1359	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	43		1093	44	1096	citation to be merged	Not sure what the reviewer means here.
1360	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	55		1375	55	1377	citation to be merged	There are no references at these lines.
1361	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	83		2069	83	2070	citation format is wrong	Thanks, we've improved our citation format in the Second Order Draft.
1362	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	90		2201	91	2202	Is it he/she? (...she travels more with public transport....)	This sentence has now been rewqorded for clarity.
1363	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	71			71	1827	Is green economy (partly/fully) applied anywhere or not, please? Some strong economies are still depending on fossil energy production. How would they switch to 'green economies' please?	We do not think that a fully green economy is in place anywhere, and hope this becomes clear in the revised text.
1364	Kuenda Laze	Albania	Polytechnic University of Tirana	No	Ch. 5	78		2079	78	2080	The concept of multiple values should be highlighted in education system. Education system should play a greater role starting from preschool to high school/more advance education. This would affect young population, future decision-making and future society.	Educational systems (in all education levels) are critical to support and/or transform different social-political models, reproducing or transforming life habits, life styles, and values. For these reasons, we will include education as central theme in the Earth Stewardship pathway, and illustrate it with case studies.

1387	Javier Cabello	Spain	Dept. Biology and Geology, Program in Applied Sciences to the Environment, Andalusian Center for the Evaluation and Monitoring of Global Change (CAESCG), University of Almería	No	Ch. 5	88	2366	88	2373	The science-policy interface processes coordinated by brokers and boundary entities can be very useful in the visualization of shared responsibilities on the environmental problems solutions. Boundary objects, such as the triangle used in López-Rodríguez et al. 2015, are very useful in this sense. Through this triangle the actors visualized the different roles that intervene in the solution of environmental problems, and communicate what is their level of knowledge or implication with such problems. In this way they got relax in the need of having to be at the level of the other actors in their respective epistemological scopes, but they also gain in responsibility. This is possible because each actors group (scientists, managers, civil society) visualize the complementarity of their own knowledge with respect to the knowledge from the others. Reference: López-Rodríguez, M.D., Castro, A.J., Castro, H., Jorreto, S. & Cabello, J. 2015. Science-policy interface for addressing environmental problems in arid Spain. Environmental Science & Policy 50: 1-14.	Thanks for your suggested paper, we will take a look. We have now included greater emphasis on boundary organisations and their role here. See section 5.3.5.2 SOD.
1406	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	4	84	4	85	Just and sustainable are ultimate values. a situation is either just or unjust, something is sustainable or unsustainable. Partially sustainable is unsustainable and partial justice is still unjust. Therefore, I'd rephrase the sentence to '... more desirable future, one that is just and sustainable'.	This suggested change have been incorporated.
1407	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	19	553	19	555	Ambiguous syntax	This sentence has been removed.
1408	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	19	568	19	568	Where did this definition come from? citation is needed.	This sentence and definition has been removed.
1409	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	19	573	19	573	Although values are not empirically verifiable, it might be useful here to state that they're open for reasoning about ethics (which would pave the way to balancing diverse values against the target of sustainability and justice).	Thanks we will consider this inclusion into the SOD as it is developed.
1410	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	25				This is a shallow statement compared to the depth of discussion in hand over values. Please compare to page 26 lines 767 770. this specific human rights rules are violated in the constitutions and laws of many countries (Middle East for example) and therefore, the United Nations documents as normative as they are, they cannot be said to be as a representation of 'almost all nations'. It's only when people are truly participating in the UN decision making processes that those decision maybe said to represent a justified vision of our common future. Participation of people are restricted to those who can afford attending the meetings, those who are compliant to their governments specially when oppressive regimes restrict the right of peaceful assembly, and finally those who can fund the meetings.	We acknowledge this is an important issue relating to access nad participation in the UN processes. For this assessment the vision of a common future for all is very general we believe incorporates a visions for all of humanity irrespective of nationalities and access.
1411	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	25	759	25	759	This is a shallow statement compared to the depth of discussion in hand over values. Please compare to page 26 lines 767 770. This specific human-rights article is violated in the constitutions and laws of many countries (Middle East for example) and the participation of civil society is not always guaranteed due to political and financial restrictions. It's better to acknowledge the shortcomings while stating that the documents represent the highest-order normative consensus that's ever been made so far.	This section has been radically reduced for better alignment of the chapter and because many of these issues relate to the entire assesment and need to be delt with in Ch1
1412	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	30	878	30	878	(syntax) differentiate *	Thank you for the pointer. We have applied your correction.

1413	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	31				under the 'fiction, utopias, distopias, blogs, predictions', my personal blog 'My Own Education' might be a relevant source containing several academic and non academic posts related to our shared future. Also the website of the Permaculture Association (Britain) and the International-Curricula Educators Association with several relevant publications. There is also my self-published science-based book ' Conservation of the Homosapiens; the Survival of the Wise is on Amazon but I would send an e-copy upon request.	Thanks for the pointer. Our methods and the literature that we are uncovering needs to be consistent and repeatable.
1414	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	32			896	I'm surprised that the 'Holistic Darwinism' for Peter Corning, has not been included in the reference list since the word holistic has been used in search. Also permaculture books. Permaculture is a holistic approach to conservation correspondent to the SDGs to a great level- only much older.	Thanks for the pointer. Our methods and the literature that we are uncovering needs to be consistent and repeatable.
1415	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	46			929	This is only partially true. It is true that Economics optimism is blind to 'externalities' such as environmental cost and intergenerational justice, and appears as indifferent to the idea of intrinsic value of nature but the reality is that economic optimism as we know it today bases itself on the Invisible Hand Theory by Adam Smith which in turn is based on evolutionary theorem such as the the Survival of the Fittest. While the traditional interpretation of Darwinism now has been overridden by the multi-level selection (natural science) and Holistic Darwinism, Capitalism - which dominates our economics today, is still based in the concept that selfishness, exhaustive exploitation of resources , maximization of profit, and cut-throat competition are the paths to the common good. Please compare to page 18 lines 541, 542, 543 (of the current chapter) by Adam Smith. This notion is somehow a reflection of an awareness (as outdated as it may be) of nature as a living ecosystem rather than a pot of minerals. Re-reading economics, and standing up to Capitalism as it stands, is key to a sustainable and just future.	We are refining the descriptions of the Archetypes. Some of these are detailed in the SOD, the remainder of changes will follow in the TOD. These will however be based only on scenario studies and with not go into the literature suggested by this reviewer.
1416	Gihan S.Soliman	United Kingdom	Permaculture Association Britain, Institute of Food Science and Technology, British Soil Science Society	No	Ch. 5	general			1098	Great work so far.	Thanks.
1438	Neville H McClenaghan	Ireland	Galway-Mayo Institute of Technology (GMIT)	No	Ch. 5	75			1982 75 1982	Perhaps need to make clearer to Reader why these "specific examples" were selected?	These rivers encompass different regions and continents, at the same time illustrate the complexities of differents drivers of social environmental change, In addition, we found an idoneous contributing author who is familiar with these cases. We are including an explanation in the methodology
1455	Melissa Vogt	Australia	UNSW, Australia	No	Ch. 5	14			412	436-440 The power and agency classification is not obviously integrated after or through the values discussion and how it might influence dominant values. Chapter 6 pg 10, line 286-294 integrates the influence of power relations on how knowledge systems influence capacity development for incorporation of multiple values. How the assessment seeks to address discursive power and perhaps institutional power through improved understanding of values and how they influence institutional priority as a section as well as a paragraph in the conclusion could be useful. This might include reference to consideration included in chapter 6.	Agreed, this did not really feed into later analysis. We have now attended to this in the SOD
1456	Melissa Vogt	Australia	UNSW, Australia	No	Ch. 5	68			3764	Consider referring to the blue economy, it includes more detail than green economy.	We agree that the blue economy is an interesting example for the green economy, but we have chosen to present the green economy, as this is more comprehensive term with broader relevance for the topic of the chapter.

						21					Is there actual evidence presented or discussed in this chapter, on how actual "sustainability" can be met or has been met using examples from different world regions? Section "5.2.2.3 Sustainability: core characteristics" is where the authors state that their "sustainability" definition [is] based on Millennium Ecosystem Assessment (MA)", and where a general framework and set of concepts is provided. I would draw attention to biological sustainability, specifically on how food can be sustainably harvested or cultivated. The most immediate examples I can share (ahead) come from my field of research, but there might be much more as forest and water products are diverse. --- Garibay-Orijel, R., Córdova, J., Cifuentes, J., Valenzuela, R., Estrada-Torres, A., & Kong, A. (6). Integrating wild mushrooms use into a model of sustainable management for indigenous community forests. Forest Ecology and Management, 258(2), 122–131. https://doi.org/10.1016/j.foreco.2009.03.051 --- He, J., Zhou, Z., Yang, H., & Xu, J. (2011). Integrative Management of Commercialized Wild Mushroom: A Case Study of Thelephora ganbajun in Yunnan, Southwest China. Environmental Management, 48(1), 98–108. https://doi.org/10.1007/s00267-011-9691-7 --- McLellan, T., & Brown, M. (2017). Mushrooms and Cash Crops Can Coexist in Mountain Livelihoods: Wild Mushrooms as Economic and Recreational Resources in the Greater Mekong. Mountain Research and Development, 37(1), 108–120. https://doi.org/10.1659/MRD-JOURNAL-D-15-00087.1					
1629	Luis Pacheco Cobos	Mexico	Facultad de Biología Xalapa, Universidad Veracruzana	No	Ch. 5				607						This section has been removed.	
1672	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										Chapter 5 - Justice and sustainability section. Gaps in knowledge: Agrobiodiversity in terms of native seeds. It would be interesting to analyse cases such as the trade of local seeds in the European Union. In particular, a law that put limitations on the trade of local seeds was recently derogated. Kokoplli cooperative was convicted of this type of activities. From a plant businesses perspective (phyto-imroving enterprises), the effect of that law was severe on diversity loss. In Colombia, we also face that battle.	This is a very specific request that we will consider but at this stage we are not sure that this example will best serve the text.
1673	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										Chapter 5 - Realising change section. How to govern environmental change. Local governance of biodiversity is a decisive point that could be analysed. For instance, local peoples have a choice between mining (i.e. job) and water: they opt for water as the vital principle. However, other interests are predominant on decisions by exceeding local sociocultural values related to nature protection. Therefore, it would be useful to emphasise on capacity needs such as the strengthening of tools for a dialogue between priorities. Public consultation processes about mining at municipal level face that debate and struggle.	An elaborated section on social learning capacities is included.
1675	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										Chapter 5 - Clear and pertinent questions.	Thanks.
1676	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										Chapter 5 - The role of values in transformation towards Just and Sustainable Futures (Figure). It is important to also emphasise the role of values across scales especially at macro-scales, where many relevant decisions take place.	The diagram has been replaced. However, it is in the text that we mainly refer to issues of scale.
1677	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										Chapter 5 - Realising change section. The use of the term "governance" has not reached a consensus. From an indigenous viewpoint, it is preferable recognising "forms of own government". The latter is based on indigenous language with roles given according to "someone who care the territory".	We realize this tension, and hence just focus on elements that are common in several definitions and discussions on the topic. We also discuss governance from IPLC perspective.
1678	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 5										From an indigenous perspective, we are talking about "revitalization" of language, government and own dynamics. In terms of actions that can be change enablers, it would be suggested to conduct researches aimed at understanding us by using indigenous languages as communication bridges and means of trasmitting knowledge. In line with this, it would be great to translate the Values Assessment to indigenous languages.	Thaks for the suggestion. Because this is not a chapter 5 specific issue we pass this on to the TSU to carry forward.

1703	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Justice and sustainability. It would be suggested to also analyse justice principles focused on a collective perspective for decision-making.	This comment on justice and decisions making relates directly to the work of Ch4 - TSU please can you assist in passing this comment for Ch4. Thanks.
1704	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - It would be suggested to highlight the role of knowledge in decision-making processes in the context of transformative change.	Thanks. Our SOD of this section has a stronger focus on values and knowledge.
1705	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Realising change. It would be advisable to take into account the type of value incorporated and prioritised in decision-making at national levels e.g., conservation policies. For instance, some experiences show that goals of reduction on deforestation are focused on protected areas. The latter make invisible deforestation levels on other areas.	We recognize multiple levels of governance, and interactions within these, and propose social learning processes that can lead to shared goals and outcomes
1723	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Protected areas in Colombia can be also a successful case study for analysing pathways of change.	Thanks. We are carefully considering the examples and cases we use to improve the text but can't currently commit to the Colombian suggestion. However, we expect some reference to Colombian experience in our cases on biocultural diversity.
1724	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Justice and sustainability. It would be suggested to use the phrase 'Justice towards living beings' instead of 'Justice towards non-human beings'. In relation to cases of environmental justice, the Constitutional court ruling (T-622, Nov 2016) has declared the Atrato river as subject of biocultural rights in Colombia. That case generates a great deal of interest in three focus: anthropocentric, biocultural and ecocentric.	Thanks - we have opted for 'other than human' for the time being.
1725	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Guiding questions. What type of values underpin what type of futures? What type of values and combination of values underpin sustainable and just futures? What impact would have including values of nature on policy decision-making? The latter could connect the Values Assessment with the Global Assessment because entailing recognising causes of biodiversity loss i.e., the way plural values of nature has been included/excluded into policy to date. That could be also useful for the SPM.	Thanks. We have tried to make these connections to the GA in our reworking of the chapter in the SOD.
1738	Viviana Moreno	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 5						Chapter 5 - Literature review. It would be interesting to review policy relevant documents at national levels e.g., policies, goals of a country, government intervention strategies aimed at the maintenance of values of nature e.g., reduction of national budget for protected areas; reduction of national budget for environmental education; prioritization of mining and fracking in opposition to conservation and values regarding biodiversity.	It would be interesting to review policy relevant documents at national levels, but this is impractical given the unfunded IPBES mandate, and the people available to undertake this task. The approach that we have adopted here is to explore a few NBSAP documents from a number of countries in trying to draw out some lessons. See Section 5.3.3 SOD
1833	Francois Sarrazin	France	Sorbonne University	No	Ch. 5					whole chapter 5	On the whole chapter 5, it might be relevant to consider the Life Framework developed in chapter 2.	We have made linkages with the life framework in this chapter in the SOD. However, there is large scale disagreement regarding the validity of adopting a highly reductionist approach to understanding for people value nature, and is not really in keeping with the intent of this assessment which is focused on daylighting different and diversity of values, especially where they do not fit with western stereo type frameworks.
1834	Francois Sarrazin	France	Sorbonne University	No	Ch. 5					whole chapter 5	Despite evolution appears as a property of biophysical systems in several places of this chapter, it is not considered per se when accounting for the irreversible evolutionary consequences of present uses of biodiversity that may affect future generations of both humans and non humans.	This chapter cannot be all things. It must however be a methodological values assessment. Exploring evolutionary process disruptions to future generations, cannot be examined in detail but fall into the broader engagement with sustainability (for which it is a requirement).
1836	Mari Peltola	Finland	Independent researcher	No	Ch. 5	23.	684	23	687		Why is there distinction between 'current generation' and 'future generation'? Are future generations a generation not born yet or do they refer to children / young people as well?	The explanation has been enhanced here.
1837	Mari Peltola	Finland	Independent researcher	No	Ch. 5	26.	793	23	793		What is considered as productive life? In the developed south it could be considered achieving a certain living standard, which on a global scale is unsustainable.	This section has been entirely reworked, and this sentence has been removed.

1886	Kowarsch, Martin	Germany	Mercator Research Institute on Global Commons and Climate Change (MCC), Berlin	No	Ch. 5					Beyond analyzing how the simple inclusion of a more diverse set of values can help achieve transformation, it would be great to hear more details about how exactly assessment processes (and, based on this, policy processes) can appropriately respond to divergent values and worldviews. For instance, this chapter might discuss promising deliberative options (e.g., outlined by Tom Dietz, PNAS 2011: Bringing values and deliberation to science communication; or the empirical & conceptual works by deliberation experts such as Simon Niemeyer) or attempts towards moral re-framing of policies (as done, e.g., by the US social psychologist Robb Willer), or attempts to make use of different (ethically perhaps more convincing) social welfare functions when it comes to economic modelling of "ecosystem services" etc. (e.g., M Fleurbaey, M Adler, A Sen, ...).	Thanks. Our revision - section 5.3.5 is focused on the kind of governance needed to manage this challenge - as a handover to ch6 which will consider more concrete actions.
1911	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	4	91	4	96	Unclear whether development has lead to all these problems - would suggest that this sentence be fleshed out and broken down into components.	We have adjusted this sentence for clarity.
1912	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	7	182	7	182	Unclear what example this refers to for "scaling up" of protected areas - making them bigger? enforcing more regulations? replicating? Also requires a reference	This was an incompleated argument that has now been removed from the section.
1913	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	8	227	8	240	How was literature on transformation identified? It is hard to guage what the critical review encompasses without detail on what literature was included.	We have a clearer and more systematic methodology for selection which is desrived i detail in the data management file
1914	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	13	275	14	411	Pathways are certainly important, but in identifying transformation - it will also be critical to identify key assumptions and pre-conditions that form the context for change to occur. We would like to point to research in program theory and program design such as Theory of Change: Funnell SC, Rogers PJ. Purposeful program theory: Effective use of theories of change and logic models. Vol. 31. John Wiley & Sons; 2011. and Vogel I. Review of the use of 'Theory of Change' in international development. Am J Eval. 2010;24(3):501-24.	Thanks, those looks useful and we will review how we use theory of change
1915	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	30	890	30	892	Unclear what mapping non-academic resources "through their existing analyses in peer-reviewed literature" means - i.e. the resources will be mapped onto the analyses that is conducted in peer reviewed literature? Or the resources that are analyzed in peer-reviewed literature (which is less understandable)	This wording has been adjusted for clarity.
1916	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	32	932	33	938	Unclear what the criteria is for including or excluding peer-reviewed articles. In addition, refining by search areas in Web of Science is a useful exercise but there likely many articles focusing values that are not encompassed by these two areas. Consideration for social sciences, anthropology, ethology, development - types of areas - would be key to a comprehensive review.	We have revised and clarified our search methods, please see the methods and data report CH5 SOD.
1917	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5					We don't fully understand Figure 5.7 - what are the different colored wedges representing? what data is this based on?	Thanks, we have now reworked this figure (5,7) for better clarity.
1918	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5					Figure 5.6 is confusing without clear explanation of how it is linked to the systematic review data. Understandably these are different hypothesized scenarios - however, is this the hypothesis that you are aiming to investigate with the review? that does not seem to be the case - thus the links need to be better clarified	We have reworked this figure and adapted the text for better clarity.
1919	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5					For a systematic review, we would need to see how different types of evidence and study designs factor into how sources of information are assessed - in particular when trying to synthesize the relative importance of values for different archetypes - critically appraising study quality using a transparent methodology is important for reliability	We have clarified the review approach - see SOD section 5.2 and also created a data management report to make our methods explicit
1920	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	45	1073	46	1085	General comment for section 5.3 It isn't clear how the value archetypes might look - but if the intention to illustrate how values can factor into future planning - option 1 seems most useful	The emergence of the archetypes was unclear in the FOD. The analysis and development of the SOD has now clarified the relevant archetypes.

1921	Samantha Cheng	Unites States	American Museum of Natural History	No	Ch. 5	51	1176	51	1183	This statement that recent literature forgets that biodiversity itself is about human well-being is a bit shortsighted. Certainly human well-being has been considered in understanding the value of biodiversity, but is also a preponderance of literature that states the opposite - that biodiversity's value is inherent and not intimately tied to human well-being. The position stated here is then a bit confused by the following paragraph that argues the balance of relation, instrumental, and intrinsic frameworks.	We have clarified the text noting that "biodiversity" here is used in sense of variety. The literature shows that this value per se is under-appreciated; and re intrinsic value, the clarification is needed that sgl sp etc have intrinsic vlaue but as recent authors suggest, it is harder to argue that variety per se has intrinsic value.
1976	Simone Athayde	Mexico	Second ILK Dialogue on Values, Oaxaca, Mexico	No	Ch. 5					It is evident that there needs to be communication of ILK based values to the broader society, through a link created by reuniting the indigenous with the non-indigenous. Strategies to work with for policy making need to be rights-based. So, for Chapter 5, when talking about justice, it would be crucial to not separate it from the environment or the society: so, talk about social environmental justice, and the rights of people and nature together. Other important element that has come out is the strengthening of institutions, because even though ancestors generations passed by and new ones will come, but the institutions remain. Also, there needs to be a stronger connection between the people that live in areas with conserve natural spaces and people from the cities, who are generally more disconnected from nature, but still play a role in decision-making processes.	We have included these ILK issues - please see section 5.2.1 SOD.
1989	Chile Workshop Group	Chile	de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					To recognize multiple values are necessary but not sufficient to achieve Just and Sustainable Futures (JSF). Also, is important the values hierarchy (axiology) identified in the assessment to understand the negotiation, the mechanisms of dialogue between social groups with different and contrasting values.	Thanks. Necessary but not sufficient is precisley how we now characterise the role of plural valuation and value change. We are not so familiar with a values hierarchy used in the assessment. However section 5.3.3 is now very much focused on dialogue.
1990	Elie Poulin	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					Multiple values are necessary for JSFs in a planetary sense (the earth), so that ecosystems continue to exist as they are now. The central questions posed in Chapter 5 can be understood in two ways: that JSFs are for humans themselves (as emphasized in the title of this chapter "Values towards nature and the benefits of nature for people") and JSFs are for ecosystems. HOWEVER, WE MUST CONSIDER THAT THE FEW PEOPLE OR INSTITUTIONS ARE CONTROLLING THE VALUES IN THE DEBATES ON NATURE AND CLIMATE.	Your point goes to teh heart of what this report seeks to achieve. Based on our systematic review, we present this in terms of 'barriers' to the mobilisation of multiple values, and indeed the right kind of values.
1991	Daniel Alvarez	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					Recognizing multiple values is the first step towards a transformative change and SJF. Values do not necessarily modify consumption patterns with nature towards more virtuous forms. Different perspectives and actors are not necessarily going to modify their vision because they know that there are other different perspectives. For this, is necessary an internal conviction that recognizes the "others" and their importance, and that implies that one can set aside things and allow modifying their actions and their own values.	We explore this issue in section 5.3 SOD relating to role of values in individual behaviour change
1992	Patricio Morales	Chile	de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					How do we incentivize the conversation about the multiple realities? The multiple values of nature? E.g. talks between values of entrepreneurs, scientist and civil society.	A very good point. I think this relates to methods for bringing stakeholders together to share and discuss their values (Ch.3?) and also the practical means of finding the spaces and resources for such encounters (Ch6?). So I would pass it on to those chapters.
1993	Elie Poulin	Chile	de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					That IPBES recommends recognizing multiple values is a slight solution. The recognition of multiple values by itself will not generate the changes that are needed to stop the erosion of biodiversity. The idea is how we can change the human-nature relationship to change values.	The SOD now specifies values as a necessary but not sufficient component of change. It is clear that simply valuing more values, or valuing them better - has not by itself achieved desired changes.
1994	Eduardo Barros	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					It is very important to recognize those values that have determined the perception of justice and sustainability. It is important to re-know or recognize the perception of different communities. But there has to be legitimacy for the values to be sufficient to achieve the JSF (to generate mechanisms to do accessible the information to all people). Thus, to build agreements, dialogues, which allow reconciliation to be achieved in the eyes of the current historical context. JSF in nature calls to not-Westernize the gaze, nor to return the gaze to the ancient east, but to recognize the silenced voices in regional eyes (for example, Latin America).	We do agree that it is the silenced voices and values that are a key concern. This is now much clearer in the text of 5.3.5

1995	Lea Cabrol	Chile	de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					After recognizing multiple values it is important to know a scale of values (values axiology), to understand the steps that will be taken towards change. How to order values that necessarily contradict each other? What is the weight that will be assigned to different values?	Value axiologies are as diverse as values, we have therefore focussed on just and sustainable as universally accepted "overarching values".
1996	Daniel Alvarez	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					It is proposed to review the 6th Report of the State of Biodiversity of Chile to the CBD (2019). It is relevant to review the implicit axiology in these reports because it is the one that is influencing decision making. This is an analysis and exercise necessary to examine possible and desirable futures, would changing the hierarchy of values change futures?	Thanks for the suggestion, but it would not be valid to focus on a single countries biodiversity report here.
1997	Maria de Jesus Valle	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					In addition to political instruments considered, is important to bear in mind others such as the new post-Aichi goals. One problem is that the reports (for example national biodiversity strategies) have a free format and therefore their indicators are not comparable with other reports from other countries. Additionally, how could the different political instruments talk?	Thanks. This section has now been removed.
1998	Patricio Morales	Chile	de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					Chile has led with the formulation of Royal Conservation Rights. This could be a substantial contribution to chapter 5. WE NEED TO LOOK UP THE SPECIFIC REFERENCE TO GIVE AT CHAPTER AUTHORS.	Thanks for the suggestion - please send a reference if you have one.
1999	Eduardo Barros	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					There are successful public policies such as reducing child mortality, intra-household abuse, which have changed values and behaviors. These precedents generate an optimistic view towards transformative change. Therefore, it would be a contribution to have transversal values and place conservation in public policies. For example, biodiversity can be placed as a transversal value in the different public policies, also put it on the agendas of companies. Also important is the regional dialogue between countries, which allow favorable actions for habitats of species shared between neighboring countries.	We do emphasize on learnign from successful policies, and includgn those learnings in adapating and even transforming governance arrangements. We intend to include regional dialogue in a case study in the next iteration of the chapter.
2000	Maria de Jesus Valle	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					Once possible, it is important to add in this, and at the beginning of all the chapters, the definition or meaning for values, so that it is not confused with the monetary valuation with which the valuation is conceived from other areas. Thinking about key messages for decision-makers it is important that misinterpretations are avoided. It is suggested to reorder the ideas of the paragraph in such a way that a proactive language is used, and not in a negative (L50-55, pg 2).	Definitions regarding value will from from chq, there is no space to repeat these in this and other chapters.
2001	Maria de Jesus Valle	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					There is an agreement with the content, but it is considered that it could be deepened. For example, why and how key elements are considered or what type of compensation or externalities can be had or the type of positive consequences. Thinking about key messages for decision-makers, it is important that these ideas are clear and do not lend themselves to free "wrong" interpretations (L74-76, pg 3).	Thanks for the warning. This particular key message has been removed.
2002	Maria de Jesus Valle	Chile	Ministerio del Medio Ambiente de Chile (MMA), Instituto de Ecología y Biodiversidad (IEB-Chile), empresa Fibra Optica Austral (CTR), Centro Sub-Antártico Cabop de Hornos	N/A	Ch. 5					Agree with the 3 aspects of justice that are included in the principle of sustainability. But just and sustainable are not concepts clearly exposes. So it would be good to explain this sustainable principle in its broadest range and to detail the aspects related to justice. The same logic applies to clearly explain what is meant by fair, since it is only explained with whom it relates, but not what is just (L100-104, p. 4).	We has incorporated this comment in general terms in to the chapter. It more specifically relates to chapter 1 where the principles and foundations of the assessment are established.
2069	Sana Okayasu	The Netherlands	TSU for Scenarios and Models at PBL Netherlands Environmental Assessment Agency	No	Ch. 5	45.	1071	46	1081	This kind of analysis would be very useful and relevant to the work of the IPBES task force on scenarios and models. Although the nature futures scenarios are still in the process of being developed, this analysis would allow us to situate them within the broader landscape of the types of values addressed across scenario archetypes.	We would be happy to collaborate on these issues. Please be intouch through the TSU.

2070	Sana Okayasu	The Netherlands	TSU for Scenarios and Models at PBL Netherlands Environmental Assessment Agency	No	Ch. 5	46.	1082	46	1085	If this option 2 is chosen, it would be confusing to have completely new names as it would create yet another typology of values (and the assessment already has so many categorisations). I think it would flow better if typologies already mentioned in the earlier chapters were used, like the Life Frames or the intrinsic/instrumental/relational distinctions. Also, I am curious about what the purpose of creating value archetypes would be? Especially since the preliminary results presented in the previous sections suggest a gap in representation of intrinsic values in future visions and scenarios, would the creation of archetypes from this biased set of materials be useful to tell a certain story?	The emergence of the archetypes was unclear in the FOD. The analysis and development of the SOD has now clarified the relevant archetypes.
2071	Sana Okayasu	The Netherlands	TSU for Scenarios and Models at PBL Netherlands Environmental Assessment Agency	No	Ch. 5	49.	1134	49	1139	Figure 5.6 Top matrix: Assuming that the right hand columns would represent the value archetypes, what would the targets per archetype be? Would it be a reinterpretation of the ABTs and SDGs shown in the table below it?	We have adjusted this figure. Each of the Archetypes is represented separately with the associated SGD's that they feed into mapped out.
2072	Sana Okayasu	The Netherlands	PBL Netherlands Environmental Assessment Agency	No	Ch. 5	60.	1472	60	1476	This seems to point to potential literature, but could it instead conclude on what that literature is saying about values and desirable change?	Thank you for this good point. We proceed as suggested.
2073	Sana Okayasu	The Netherlands	PBL Netherlands Environmental Assessment Agency	No	Ch. 5	63.	1577	63	1587	The title does not appear to match the content, which is more on examples of values motivating pro-environmental behaviour.	We have revised the title accordingly
2074	Sana Okayasu	The Netherlands	TSU for Scenarios and Models at PBL Netherlands Environmental Assessment Agency	No	Ch. 5	66.	1637	66	1648	This analysis could also be useful for the development of the nature futures scenarios under the task force on scenarios and models, especially if it can link values and interventions, and point to intervention opportunities, as this needs to be strengthened in the next steps of the scenario-building process. Grateful if we could share progress across deliverables.	Yes, glad to share progress with the other assessment
2148	Fischer, Markus	NA	MEP/Bureau	No	Ch. 5					when justifying the need for transformative change, make use of the scenario findings of the global (and other) IPBES assessment(s)	We have include outcomes of the IPBES GA, RA as well as other environmental assessments (e.g. GEO and MA) in our grey literature search
2172	Rovshan Abbasov	NA	MEP/Bureau	No	Ch. 5					in the section 5.3. What the difference between Nature and NCP? Why do you distinguish it? (5.3 Nature and Nature's Contributions to People)	This distinction is based on the IPBES conceptual around which this assessment is being built we are therefore required to consider these terms both individually and together.
2173	Rovshan Abbasov	NA	MEP/Bureau	No	Ch. 5		102	102		How about justice between countries? If China's nuclear waste is buried in Sudan, does this cover sustainability?	Justice between countries is part of justice within generations, This comprises global and social justice issues.
2174	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	1			3	Key messages of chapter 5 are important and looked very interesting but they looked a bit too general focusing on "just and sustainable futures" with little remarks on nature and nature's contributions to people. I wonder if it is possible to narrow the scope of KMs.	Yes, the KM of the FOD were quite generic and derivative. We have tried to enhance these and make them for specific in the SOD.
2175	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	29	5			Please explain the relationship between scenarios and visions. Scenarios in the environmental assessment are not often built as a vision or a desirable future state of the world because scenarios are the tool to explore impacts of future uncertainties. Some scenarios, especially target seeking scenarios, could contain information about the desired future but not all scenarios such as exploratory and policy screening scenarios, contains such information. As such, it is very important to explain how did this chapter extract visions "sometimes" embedded in existing future scenarios.	Thanks, scenarios have now been more clearly defined. See SOD section 5.2
2176	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	32	947	32	955	provide a timeframe of the literature search (e.g. from 1965 to 2018)	We have reworked the methods of this sections - please see separate methods review.
2177	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	33	5.3.2.1			I would suggest using the IPBES Catalogue of Relevant Assessments (http://catalog.ipbes.net/) as one of sources of snowball sampling. IPBES Asia-Pacific Regional assessment also used it as one of the sources.	Thanks for the suggestion, we will incorporate if appropriate.

2178	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	33	Table 5.2.			<p>better to include IPBES's land degradation and pollination assesment. Also, GBO4 and Roads from Rio+20 (https://www.pbl.nl/en/publications/2012/roads-from-rio20). Also, it time allows it would be a good idea to look at reports and articles from IPCC and climate change community such as IPCC SRES report, articles on SSPs and RCPs (I presume they have different visions and scopes). For national scale scenarios of nature and nature's contributions to people, final report of the Japan Satoyama Satoumi Assessment (http://catalog.ipbes.net/assessments/62) and "O. Saito, C. Kamiyama, S. Hashimoto, T. Matsui, K. Shoyama, K. Kabaya, T. Uetake, H. Taki, Y. Ishikawa, K. Matsushita, F. Yamane, J. Hori, T. Ariga, K. Takeuchi (2019) Co-design of national-scale future scenarios in Japan to predict and assess natural capital and ecosystem services. Sustainability Science, 14-1, p.5-21." that introduce future scenarios examined in the ongoing national scale assessment will be interesting to include.</p>	Thanks for the references. We have reviewed and incorporated your suggestions as appropriate.	
2179	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	35	scenario archetypes in Table 5.2			<p>Scenario archetypes suggested in the Scenario and Model assessment is not universal classificatoin. So, this implies that if you try to classify all the reviewed scenarios by the scenario archetypes suggested in the Scenario and Model assessment, there is a possibility of facing scenarios that cannot fall into the existing archetypes and also missing some values embedded in existing scenarios. It is better to critically evaluate existing scenario archetypes in light of its capacity of capturing wide spectram of values before using the archetypes for classification of scenarios.</p>	Thanks, for the comment we are mindful of this. We have expanded our archetype analysis to 7 different archetypes now. in the SOD (see section 5.2).	
2180	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	40	nature futue framewor k in Table 5.2			<p>three visions in the nature future frameworks represent intrinsic, instrumentan and relational values respectively. So, this categorization seems to be a duplication with value justificaton in the previous page.</p>	Thanks, we have now reworked and reworded this section.	
2181	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	42	table 5.4			<p>nature's benefit to people -> nature's contribution to people</p>	Thank you for the pointer. We have applied your correction.	
2182	Shizuka Hashimoto	NA	MEP/Bureau	No	Ch. 5	46	1147		46	1151	<p>please be aware that scenario archetypes suggested in the Scenario and Model assessment is not universal classificatoin. For example, Adapting Mosaic scenario, the best scenario examined in the Millenium Ecosystem Assessment, was not captured by the above mentioned archetupes. So, this implies that if you try to classify all the reviewed scenarios by the scenario archetypes suggested in the Scenario and Model assessment, there is a high possibility of facing scenarios that cannot fall into the existing archetypes and also missing some values embedded in existing scenarios. It is better to critically evaluate existing scenario archetypes in light of its capacity of capturing wide spectram of values before using the archetypes for classification of scenarios.</p>	Thanks, for the comment we are mindful of this. We have expanded our archetype analysis to 7 different archetypes now. in the SOD (see section 5.2).
2292	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5		General				<p>The amount of work done for the FOD is very impressive and is commendable. The chapter is very comprehensive, has a very detailed outline and is very well thought out both conceptually and in terms of structure of the chapter. The earlier sections of the chapter are clearly articulated and the latter sections require more time - this is definitely possible given such an impressive start for the chapter and the assessment in general.</p>	Thanks - no action required.
2293	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5		General				<p>I hope the note that the key messages are placeholders doesn't deter external reviewers from reading them and commenting on them substantively. Given how comprehensive the chapter is, it would benefit the experts to have comments on key messages from the current draft.</p>	We received many comments on the key messages. No action required here.
2294	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5		General				<p>It is important for the authors to ensure consistency between the scoping of chapter 5 in the scoping document and how it is framed currently. The current framing of the chapter is quite sound and understandly builds on the work of the global assessment. Perhaps, the CLAs should reflect on the scoping mandate and give attention to addressing full what is scoped and then some more.</p>	The inconsistency was a major concern for us, which we raised with the Co-chairs. They have assured us that they are keeping track of the overall scope of the assesement ensuring that all componets are included into one or other chapters.

2295	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				SCOPING DOC: Chapter 5 will highlight knowledge and data gaps and uncertainties in terms of the bridging and integration of diverse conceptualizations of values of nature and its benefits to people into governance, institutional and policy design relevant to policymaking and decision-making. It will emphasize (a) the types of conceptualizations of the value of nature and its benefits to people that have not been explicitly addressed or have not been explicitly incorporated into decision-making; (b) the types of valuation approaches, as well as their articulation, integration and bridging, that are underdeveloped or have not been explicitly incorporated into decision-making; (c) the challenges that have hindered the incorporation of diverse conceptualizations of values of nature and its benefits in a range of decision-making and policymaking contexts and levels as well as their implications for sustainability; and (d) the implications for different stakeholders of applying a subset of values rather than the full suite of relevant biophysical, social and cultural, economic, health-related and holistic (including indigenous and local community-based) values when those values are at stake.	We acknowledge the scope and refer the reviewer to the comment above.
2296	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				Please clarify the difference between the IPBES conceptual framework vs a framing of values in Section 5.2. The authors should make some effort to demonstrate the link between the current framing of the chapter and the IPBES conceptual framework.	Agreed, we have now made this link in section 5.2
2297	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				It would be useful to understand why are the authors only focusing on the UN targets when assessing how multiple values might enable transformation.	We have rework this section and section 5.3, expanding greatly on enablers of transformation.
2298	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				Section 5.2 describes in detail the methodology used to frame values within the context of just and sustainable transitions. The authors should aim to shorten this section perhaps by deciding which information should be in the chapter and which information can be expanded in the appendix/annexure section of the report	Thanks. We have shortened this section substantially.
2299	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				In Table 5.2, is there room to add visions from a regional level such as visions of regional economic bodies like the EU, African Union (Agenda 2063) or subregional or even selected examples of national development plans? However, please avoid it being too long.	We adopted a snowballing approach here and documents and sources emerged from this methodology. The table and all of the associated methods have been placed in a different documents and directed by the TSU and MEP.
2300	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				Table 5.3 on Future Works should definitely go to Appendices/Annexures - it is too long. Perhaps having a short summary and a website link or reference can be useful.	See comment above. Methods tables are now in a separate document.
2301	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				5.3 Nature and Nature's Contributions to People in future visions of Just and Sustainable Future currently describes the approach/methodology the authors plan to follow in their analysis. Some analyses of futures might help but this will be developed as earlier sections are being fully developed.	Yes, this is correct. This analysis is now presented in SOD section 5.2
2302	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				The descriptions of methodologies or typologies of methods used in the chapter should be summarized in the beginning of the chapter. The authors should avoid doing this per section. It should even perhaps be described for the whole assessment - Chapter 1 should set the context and framing for the whole assessment including the assessment methodology used, typology, framing etc of the whole assessment. That might even contribute to shortening the chapters.	See comment above. Methods tables are now in a separate document. We have removed much of the foundational descriptions to avoid repetition with chapter 1.
2303	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5	General				The case for choosing the two emblematic case studies - the Green Economy and Biocultural diversity - can be made stronger.	These two cases have been redefined as two broad pathways that include clusters of particular case studies. First, Green Economy represents a pathway that is transforming "narrow monetary economy" into broader transdisciplinary approaches linked to ecological economics and other realms. The second pathway has been redefined as Earth Stewardship that includes Conservation of Biocultural Diversity, and also includes "Buen Vivir" and specific conflicts such as resistance to dams and other mega-projects that entail losses of biological and cultural diversity. We will work to offer a solid rationale that explains and justifies why we consider that Green Economy and Earth Stewardship.

											General								There are strong political objections to the use of biocultural diversity among some governments. The authors should refer to the Pollination Assessment and see how its used there and perhaps underpin its use with solid literature and remove any political references where possible and necessary.	As stated in IPBES Pollination Assessment, "biocultural diversity" is basically defined as the interrelationships between biological and cultural diversity. In some cases cultural diversity will imply conflicts among different views, interests, and stakeholders. Socio-environmental conflicts are embedded in biocultural diversity are studied by applied anthropologists, conservation biologists, and other disciplines. We will be precise in providing sources of information and cited studies for particular cases.
2304	Luthando Dziba	NA	MEP/Bureau	No	Ch. 5															
2428	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5														The FOD for chapter 5 provides an impressive start to what promises to be an outstanding product. A lot has already been covered and it is clear that the authors have a vision of the messages they want to convey. Nevertheless the coverage is very extensive and does not always appear to strictly address the scoping objectives for this chapter - especially in going beyond the question of multiple values for just and sustainable futures. The text is highly stimulating, though in places rather academic. Authors need to focus on structuring and communicating the evidence for a non-specialist audience.	We are rewording the text to be more precise, focussed, and easier to interpret. For comments on scope please refer to comments above.
2429	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	1													Key messages: these high-level messages convey an ambitious vision. In the current state of development of the chapter they can be treated as hypotheses against which the evidence needs to stack up.	This is correct, they've been used between the FOD and the SOD to present hypotheses that have been tested and refined through the literature review process.
2430	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	13	386												authors may also consider conceptualisation of pathways by Wise and colleagues (2014) Global Environmental Change 28: 325-336	Thanks for the reference. We have now made reference to pathways in this Chapter.
2431	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	14													Pathway characteristics: as highlighted later in the chapter, knowledge also needs to be considered. Moreover interactions among values, governance, norms and knowledge are key to windows of opportunity / decisions along pathways (see Gordard et al. 2016 Envir. Sci. Pol. 57: 60-69 and Colloff et al. 2017 Env. Sci. Pol. - already cited from review)	Thanks for the reference
2432	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	30													Scope of the review of visions: the breadth of sources that the authors intend to cover is to be commended. I hope that they do manage to incorporate the diversity of non-academic sources.	Thanks. We have managed to now incorporate an extensive range of non-academic sources.
2433	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	34													I am pleased to see how the structure of the data base expands and improves on the data base developed for the European and Central Asia Regional Assessment (Chapter 5.4 / 5.5). For fairness this could be mentioned. Importantly a more in depth re-analysis is in progress for trends in nature, NCP and good quality of life (along with scoring of corresponding indicators). I will be happy to share the resulting data base (publication in prep.), along with insights into methods for analysis - given the gappy nature of a data set with strong reporting biases.	Collaborations here are being established. We have acknowledged the links to the ECA assessment.
2434	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	41	1022												How will sustainable and unsustainable futures be judged a priori? (same applies p. 50)	Yes, this is correct. This analysis is now presented in SOD section 5.2
2435	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	46													Option 2 of reviewing results according to value archetypes would be more in line with the objectives of the chapter. Ideally one would want to see a link between scenario archetypes (option 1) and value archetypes (option 2) - which will be a challenging exercise.	We agree, and have used this approach in the SOD (see section 5.2).
2436	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	49													SDGs and archetypes: in the ECA RA chapter 5.5 we linked value scores (for nature, NCP, good QoL) to SDGs through a quantitative method. This could be applied here too and I would be happy to help (also with post assessment progress on methods to handle data uncertainties)	Thanks, we have now adopted a similar approach in this assessment in producing the SOD (see section 5.2).
2437	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	52													I suggest incorporating to this section an additional perspective on NCP18 and biodiversity option value is provided by the concept of 'adaptation services' (Lavorel et al. 2015 Global Change Biol., Colloff et al. 2016 Ecological Applications), recently refined as 'Nature's Contributions to Adaptation' (Colloff et al., in review). I will be happy to supply text if this is considered relevant.	Thanks. This section has now been removed because it was not aligned with the emergent focus of the chapter.

						68					The presentation structure for the two exemplary pathways (Green Economy and Biocultural diversity) is rather different and needs to be unified. For green economy the focus is strongly on economic valuation principles and methods, whereas for bioeconomy among historical introduction is followed by a discursive comparison of failure vs. success cases which is not tightly related to the core topic of the chapter.	These two cases pathways, Green Economy and now Earth Stewardship (instead of Biocultural Diversity) include clusters of particular case studies. Both share common attributes of transforming the status quo in decision-making and economics. They are complementary pathways, insofar Green Economy represents a transformation of "narrow monetary economy" while Earth Stewardship enables the consideration of worldviews that are incommensurable with monetary economy and utilitarian ethics. Often these worldviews, which form part of the Biocultural Heritage, have been marginalized. With the Green Economy and Earth Stewardship pathways, we expect to encompass a broad array of values, expressed in representative case studies.
2438	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5				76			
2439	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5	80					Section 5.5 is rather generic and somewhat strays away from the core focus on multiple values and just and sustainable futures.	We have reworked this section to better reflect these core issues.
						108						
2440	Sandra Lavorel	NA	MEP/Bureau	No	Ch. 5						Possible additions of references: Coreau, A., Narcy, J.-B., Lumbroso, S., 2018. Who Really Wants an Ambitious Large-Scale Restoration of the Seine Estuary? A Strategic Analysis of a Science-Policy Interface Locked in a Stalemate. Environmental Management 61, 834-847. Lavorel, S., Colloff, M.J., Locatelli, B., Gorddard, R., Prober, S.M., Gabillet, M., Devaux, C., Laforgue, D., Peyrache-Gadeau, V., 2019. Mastering the power of ecosystems for adaptation to climate change. Environmental Science & Policy 92, 87-97. Prober, S.M., Colloff, M.J., Abel, N., Crimp, S., Doherty, M.D., Dunlop, M., Eldridge, D.J., Gorddard, R., Lavorel, S., Metcalfe, D., Murphy, H.T., Ryan, P., Williams, K.J., 2017. Informing climate adaptation pathways in multi-use woodland landscapes using the values-rules-knowledge framework. Agriculture, Ecosystems and Environment 241, 39-53.	Thanks for the references we will review these for incorporation into the SOD.
2442	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	1	1		3	82	As in all the chapters, this should be written in a much simpler manner and act as the Executive Summary for this paper	We are reworking all of the key messages so that they are simpler and incorporating these into an executive summary.
2443	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	4	110		6	170	The review of transformative changes leading to a sustainable future sounds very promising and hopefully will present some examples of how such changes can take root in various societies.	We have used clusters of cases in the chapter to help give a sense of how change can (and doesn't) take hold.
2444	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	7	172		29	861	we need to ensure that the term transformative does not frighten policy makers in thinking that the transformed future will be uncomfortable.	We aim to present the science in clear and policy relevant way.
2445	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	30	862		55	1316	References to values should also be mindful of the fact that some readers (and policy makers) will assume that this means one value system is trying to take over another one. I look forward to seeing examples of how the macro levels link to the micro ones.	This section has been reworked, to better incorporate the importance of a plurality of values and approaches.
2446	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	56	1317		78	2082	the answer to the question as to which values support sustainable outcomes is important, although it will depend on different cultures. I also hope that more information about how to achieve the green economy will be provided in this section.	This section has been supplemented to incorporate sustainability futures and explanations on the Green economy
2447	Julia Marton-Lefèvre	NA	MEP/Bureau	No	ch. 5	79	2083		91	2472	the role of governance in bringing about change is essential and hopefully this section will give some concrete examples of how this can happen. The role of actors and their actions must be recognized as key in governance arrangements.	We intend to add more case studies in the section to address this.
2476	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	1	18			19	Values can be considered as part of the process occurring now, not just for changes to happen but for to remain. There are values involved in the current life. Why not to recognize that we all make decisions (individual and collective ones) that involves a value system?	This is correct but it is the focus of Chapter 4. Chapter 5 focuses on futures.
2477	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	1	24		1	24	How can sustainability meet the social goals it should?	We have clarified the links between sustainability and the SDGs.
2478	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	1	30			31	Do you mean "inter-subjectivity"? It is really needed a clear distinction between personal values and values systems.	This KM no longer exists.
2479	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	1	33		1	33	And feelings... Because we live and make decisions in a "senti-pensante" (feeling-thinking) world.	We have restructured this KM. We are however just starting to touch on the issue of feelings in section 5.3 SOD.
2480	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	2	36		2	37	This sentence is not clear: "... for sustainability transformations" or "transformations towards sustainability"?	This is still work in progress and the KM will be refined based on the results of the review.
2481	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	2	42		2	42	Plural? Inclusive? "Democratic" is a system that is not shared among most of indigenous communities. It is an occidental invention.	The word democratic has been removed from the KM.

2482	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	2	49	2	49	Since "human rights" have mostly an individual perspective, please clarify that the recognition of values can enhance the collective rights, the rights for the peoples, too. See Gustavo Esteva discussions about human rights and indigenous peoples.	The discussions on human rights and values are complemented by the inclusion of discussions on the rights of indigenous peoples. They are not contradictory but complementary.
2483	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	2	66	2	67	What is the role of the values in this agreement? Clarifying can help in connecting this paragraph with the precedents.	KM has been rephrased.
2484	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	2	69	2	71	Does it mean that values are driving the future?	Yes our archetype analysis indicates that values affect futures. The phrasing of this KM will be refined once the literature review is finalised.
2485	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	3	72	3	73	For a better understanding please provide some examples of what values or combination of values are associated with sustainable futures.	We have significantly reworked the keymessages with many examples and reference to the text.
2486	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	3	77	3	82	This paragraph seems to be disconnected from the rest of the text.	TSU suggestion of response: This KM no longer exists.
2487	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	4	95	4	95	Processes are not associated to ecosystems but part of the existence of the ecosystems.	This is a difference in style - associated mean part of, and is a standard way of describing ecosystems.
2488	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	4	93	4	98	Too long sentence. Please make two shorter ones, or rewrite with a new structure.	This sentence have been shortened.
2489	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	4	112	4	119	Too long sentence. Please divide it by numbers (1), (2) ... the many questions addressed in this chapter.	This section have been reworked and this sentence have been adjusted.
2490	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	5	122	5	122	Why is Transformative changes here? The text has only identified the justice issues as central for sustainability.	The introduction to the chapter has been reworked to highlight why the need for transformation.
2491	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	4	119	4	119	I understand the importance of this tasks and goal. I have concerns about the scope of this particular goal, and how to maintain the "focus" on this assessment on values, dialoging with the TC one which has not already begun.	Our revision of 5.3 maintains questions about transformation but focuses on the role of values within this. Thus it is a much narrower focus than the TC assessment.
2492	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	5	128	5	128	Which are the reasons to consider transformative change and not simply review values and valuation in their own contexts and meanings? This seems to be more close to the TC Assessment which will be beginning, soon. Before the TC approach, I think it is needed to recover the own values and valuation systems to help us understand how those multiple values and views are becoming together. Given the interplay values systems have, what multiple results are we having and how close are they of sustainability paths?	First, I guess we took on this 'futures' chapter before knowing about a TC assessment. Given that the 'transformations to sustainability' research is an important and vibrant part of the futures body of work it would have been a huge oversight not to include. Later discovering that there is a TC assessment does not seem a good reason to abandon the work/team that had come together. There is an increasingly important sub-set of transformations work that hypothesises that changing values is a necessary condition for transformative change. That is where 5.3 is focusing.
2493	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	5	133	5	134	Is it about typologies of values or about typologies of values systems? Or even more... about typologies of values systems' interplay?	We have clarified that we are focussed on typologies of values.
2494	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	5	137	5	138	Are you figuring out the values in one study or paper? Or are you just putting together the values previously identified by other authors? This should be stated in the method section because it refers to "whose" views are we reading.	We have clarified the review approach- see SOD section 5.2 and also created a data management report to make our methods explicit
2495	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	5	142	5	142	What does it mean? Broader literature?	We assume this is a typo for broader literature, but do not fine the error in the submitted pdf.
2496	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	6	163	6	163	Did you explore how useful is to consider the social capital for analyzing this point? Is it possible to consider this approach?	Please forward this comment to ch 6.
2497	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	6	164	6	170	Please verify that these guiding questions are properly justified and that they come from the previous paragraphs. I feel links are missing between the previous explanation of each section and the guiding questions. They should match.	Questions, were not aligned and have now been removed.
2498	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	6	172	6	172	Figure 5.1 I feel this figure is out of place because it is about the relationship between chapter 5 and the rest of the assessment. The previous chapters we were reading about how chapter 5 is being built, but this figure is not referred in any place of the previous text. Then, it is no clear the connection and flow of the manuscript. Please relocate it. In addition, given that there is no clear explanation of this figure, it is no clear what is the function of the curve arrows (up and down in the figure) of "Instrumental". Please explain these arrows and the question marks included.	The figure have been removed.

2499	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	7	184	7	189	<p>This is a great example of the challenges we have in this assessment. Is it just a matter of scale? Is it about history and the trajectories of both systems?</p> <p>We all can agree in the importance on caring and conserving wildlife, so we can identify here a "value" or or group of them. However, we are not talking about the same values in (a) a protected area decree by a national law - institution, and (b) a natural area protected by an agreement of a local community.</p> <p>The rationale behind each one is different, as well as the values involved in each, and the values systems that are part of the structure of each of these cases. Then, both can be part of the same country, so... how are they interplaying? How is this interplaying participating in a sustainable pathway - sustainable living? Is it just a matter of scale? Is it about history and the trajectories of both systems?</p>	Thanks for the important questions, we have tried to reflect on there in our reworking of the chapter.
2500	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	7	193	7	193	<p>Is it just a matter of scale? Is it about history and the trajectories of both systems?</p>	see previous comment
2501	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	7	224	8	224	<p>... and because of the need of Justice. There are hundreds of environmental conflicts and people is been killed because of the defense of the territories and the rights their have to make decisions on them. These are values in conflict, and they are not related only to change with reference on biodiversity. There is more than that.</p>	Yes, we agree. It is clear from the literature, we will ensure that we don't imply that biodiversity is the only cause.
2502	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	8	231	8	231	<p>In this section, please explain very clearly the way you are doing to answer the guiding questions, and do it in the same order you have stated in the introduction section of this chapter. This can help the reader in following you. I also recommend a diagram for a better explanation of the methods used for the chapter.</p>	Methods have now being clarified.
2503	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	9	255	9	255	<p>The three approaches explained below do not exclude each other. It is an important question to remark, because it is no necessary to choose one of those approaches to frame the TC analysis. It can be interesting to have more comprehensive tool, what about having the three of them together? Can we have a better understanding of transformations?</p>	Yes, thanks. Our approach in the revised 5.3.1 is to look at the convergence and emerging consensus across these approaches - but specifically for the role of values in TC.
2504	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	11	334	11	334	<p>It is important to recognize that any change in some of these levels has an effect (or not) in the others. There is a lot of theory on how "Hierarchies" work and it depends on the "internal" cohesion of the level and what do the interconnections let. This is about systems dynamic.</p>	This work on system hierarchies has not featured much in our selected literature and thus has not gained specific discussion in the text
2505	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	14	405	14	405	<p>This is a very important gap, that should be not just filled. Multiple values perspective cannot be represented just by filling the previous conceptual construction, otherwise we cannot have the multiple perspectives in the own "building".</p>	Whilst we partly agree, the presentation of these as separate approaches is based on reviewing literature. However, we will place more emphasis on pulling out the common threads that will make our own framing partially cross-cutting
2506	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	14	423	14	423	<p>There can be another important concepts in framing the pathways, such as wellbeing, good quality of life, or "Buen vivir". Defining this can help in setting values' place.</p>	Thanks, we have especially referred to wellbeing in the cases.
2507	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	15	438	15	438	<p>It is critical to integrate the Latinoamerican perspective, with Luis Aguilar Villanueva (2012) and his literature on governance systems and governability. This is to properly frame this discussion.</p>	No link to governance could be identified on p.15.
2508	Adriana C. Flores-Díaz	NA	MEP/Bureau	No	Ch. 5	17	507	17	507	<p>Luis Aguilar Villanueva approaches can be helpful and complementary, too.</p>	No specific reference or link is provided in the comment.
2521	Gorucu Ozden	NA	MEP/Bureau	No	Ch. 5	29	888	30	910	<p>As a finance mechanism PES algorithms to the nature investments could be more clarified and explained from the point of rehabilitation and restoration actions</p>	This comment appears to relate to a different chapter.
2634	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	1	26	1	29	<p>Yes!!! But must be said in a much simpler and direct way. In addition, are these notions of broad and specific values, meso and macro scales of values really relevant and effective. They seem to hide rather than reveal the substantive issues at stake when we discuss values.</p>	This was clarified.

2635	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	36	2	37	This may be key in understanding the potential breaking points in this early work, the ones that relate to an unspoken theory of change. Is the assessment team working on the assumption that by "intervening" (directly) on values, they might be able to achieve or direct sustainability transformations? This would imply that social values are born out of direct interventions (transformative valuation in chap 2?), which is not an assumption backed by considerable facts or historical precedence. It is important to define or hypothesize the relational framework through which we believe values emerge and are transformed. This also means understanding that value "systems" are the ones that matter most for this assessment.	This section was edited substantially.
2636	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	40	2	40	This terms is used in several chapters, e.g. 2 and 5, which chap 1 tries to make a not-so-convincing case about values of, values about and values for... There is the apparent belief that values directly related to nature are the most significant to explaining the decline of nature and defining transformation pathways. Nature does not necessarily explain itself or change through direct intervention in Nature.	This is an assessment level issue, here the definition needs to be lead by ch1.
2637	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	41			Is this what this assessment is going to be about? Some form of well-meaning cultural relativism that does not address core systemic questions about global socioeconomic conditions, relations and the value system that enables them?	We are not sure what is meant by the cultural relativism concern but that is not the way that the evidence is handled in Ch5. E.g. The evidence points to values we need to erode - such as individualism and accumulation - and there is no shying away from this or claiming that it is complex, context dependent, realtive etc etc etc..
2638	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	42			All this seem to be at the level of good intentions. Participatory processes are essential, but they are only facilitating conditions for transformative change. Core conditions must be addressed for the rest (respect for each other values, democratic deliberations, etc.) to truly matter. Note that People do this already and have designed and applied innovative methodologies to negotiate meanings, values and interests through deliberative processes in concrete places in Africa, Asia and Latin America (an example is CIFOR's Adaptive management program, circa 1999-2007; another is with Integrated Landscape Management (ILM) initiatives and communities around the world). The question is where is the game changer???	We have tried to build moer realism and examples as suggested here into the chapter looking to art, ILK and other issues.
2639	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	43	2	44	This sound overly naive and idealistic. What are the "values" that are "co-produced" through inclusive governance? This is from the standpoint of 30 years of co-constructing common ground with people in Africa and elsewhere in the world. Of course, actors in multistakeholder governance develop something valuable - some forms of shared values - when they develop a common vision, common goals and transform into a community of practice despite fundamental differences in values and interests. But what are the values that should interest us most? There is a big problem of scale and boundaries in this nascent discussion of values for the assessment. So far, we have failed to circumscribe the subject in a way that can prevent going in all directions and over-analyzing everything of value to human-nature relationships...	Thanks for your comment. The text has been improved aiming to clarify these concepts and make them practical.
2640	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	46	2	49	This is not untrue, but the whole paragraph gives the false impression that things are wrong mainly because different people do not share the same values. This idealism is counterproductive. Fundamental problems in the environment are linked directly not only to conflicting interests and unequal powers in environment matters, but also, and more fundamentally, to the broader political economy of value creation in places around the world.	This was not out intention. Whe have reqorked the key messages to better reflect the importance of diversity.
2641	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	50	2	50	Are "institutionalized values" the key to this process or the very process of value creation and value accumulation in the global economic and financial sphere? Societies only "institutionalize" the things that have already been created in practice.	We are in agreement here, and have clarified this key message relating to the creation and change of institutionalized values.

2642	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	56	2	56	Again this inversion of the relative importance of values and hard economic processes (value creation). Why would such a sophisticated group of experts, mainly social scientists, never want to address capitalism and the global economy, in order to identify the values promoted by the dominant economic system worldwide, its nuances and variances, along with their diverse impacts on the natural world, the people living in it, and international relations. Several analyses (see, e.g. Arturo Escobar) actually show that global environmentalism has a functional role within this system. I can't fathom an assessment of values that does not address this in a non dogmatic way.	We have reviewed literature focussed on future visions and the transformation towards more just and sustainable systems. Our work now highlights the the impacts of the current dominant capitalist system, and shows the value in collective approaches to issues through the use of archetypes. See section 5.2
2643	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	60	2	60	w the hypothesis is that change is going to happen through some kind of demiurgic individualism????	The role of individual value change and behavior change is one aspect we are discussing in section 5.3. We are not in any way proposing that self-development is a sufficient basis for change. But there is a lot of evidence that behavioural change must be part of the solution
2644	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	64	2	67	Just futures do not depend primarily on cultural inclusiveness and a sense of responsibility. It is first based on our capacity to change globally our extremely extractive and speculative system of accumulation to replace it with more generative and regenerative socioeconomic systems. So far, the FOD is extremely unclear on this point.	We agree with this comment. The evidence in our reviews points to this, so tho the IPBES global assessment. We made multiple changes to the SOD in this regard.
2645	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	2	71	3	73	That depends on how these models were built, on what assumptions and theories... It should be presented clearly and critically; not as a foregone conclusion.	Agreed we have adn continue to refine this message making the assumptions transparent
2646	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	3	74	3	74	trade offs, yes! But striving toward what? You can't reach that just by playing around things that are in the heads of people; you must address material conditions!	We are adapting these messages based on the findings that emerge.
2647	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	3	77	3	79	Yes. But all the talking points relate to soft transformations in the heads or hearts (values) of people. Never to the hard truths of economic and power struggles over world resources, including nature. Why is that?	This is the first draft of a key message which is evolving. It is based on out survey to the literature - related to values of people for nature not economic powers struggles. IN the SOD there is greater emphasis on the relationship between these soft and hard elements (although we don't adopt this language)
2648	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	4	86	4	86	YES.	Thanks
2649	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5					Not OK. You cannot tag this on "current development", a position sometimes advocated by extreme environmentalists. Not all development is bad. We must be clear about that. You must specify the economic system that actually prevents certain regions from "developing". The vagueness is counterproductive and brings to mind headline conservation attacks on "development" (e.g Soule and Terbogb, 1999).	We have adjusted the text to current global socio-economic systems - this is inline with the IPBES global assessment findings
2650	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	4	109	4	110	Yes, and for this you need to address economic strictures and injustices, not merely between "people of the present generation" but between the peoples of the earth and different social classes and interest groups. The current wording is acting as mantle or a veil obscuring the realest and hardest issues.	We have adjusted the text throughout to demonstrate the differences between peoples, bowth within generations and intergenerational.
2651	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	4	113	4	114	this FOD never addresses the creation of value in the economy	This is not within the scope of this chapter. This is an issue for ch1,2,4
2652	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	5	150	5	150	And its limitations (and going beyond them)! See Diaw 2015	We have incorporate this point made by Diaz et al 2015
2653	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	6	161	6	161	Isn't that approach too conservative and influenced by the privileged position of the scientists in the world? Can we keep talking about ideas and values, and cooperation, etc... without ever addressing the hard fundamentals of economic and social justice? I am afraid that, though essential, openness, pluralism, negotiation, and "deliberative processes will never be enough. Goodwill will never be a good enough substitute for "the real thing"	This text has been evolving. We are here to present review results of available literature in a clear an transparent way.
2654	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	6	164	6	166	Yes it helps, but that is neither the whole story nor the fundamental change pathway! Change will happen by displacing the unequal order of things and through co-constructing an ecological and generative economy that will go beyond carbon and waste.	We believe that the by using the word 'enable' we recognise that this is not the whole story.
2655	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	7	178	7	180	yes. Note that they also are leftovers from the past, including from historically marginalized but resilient value systems, e.g. in the commons.	thanks
2656	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	7	190	7	191	Overall way more clearer and deliberate approach of chap 5 to the problem. This is very helpful. It enables more constructive criticism (in addition to appreciation of the many good points made).	Thanks. No action required.

2657	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	7	193	7	195	This is where we diverge with this FOD that wants to put (almost) everything in the transformation of people values (and behaviors). This is not how transformative change happened in the past and the authors propose no argument or justification about why/how it should happen differently now.	We did not intend to convey this. The review in 5.2.1 is of literature that has studied past transformations. We have also now reworked section 5.3 covering transformations and the review of this literature in more detail.
2658	CHIMÈRE DIAW	NA	MEP/Bureau	No	Ch. 5	46	1128	51	1237	The vision for values in the future, including the Life framework and Nature's Future framework, of course, rightly emphasizes the vital importance of integrating ecological futures in the options available to humans right now. But it does it in a way that assumes that all this will happen in the confined boundaries of the existing socioeconomic system. There is not proposal for addressing fundamental world and regional inequalities and poverty embedded in our modes of appropriating nature and extracting value and super profits from people and nature. There is no proposal for the economic development of poor regions of the world through new means of decoupling industrialization from the degradation of nature (through what I considered to be "the structural transformation SDGs" 8, 7 and 9). By making the "instrumental" category the proxy for the current corporate world system, the assessment seems to be moving in a direction that will downplay the problematic values specific to the current financial and economic system. Ch2 (p. 33, line 891) talks, for instance, of taking "economics beyond self-interested instrumental rationality", conflating the two notions and lumping self-interest seeking, the heart of capitalist corporate rationality, into the same "instrumental" category as the share system in coastal fisheries or the petty commodity production systems of millions of small-scale farmers around the world. This will risk tainting all "material/instrumental" alternatives to the system with the flaws of that system, when hard material alternatives are indispensable to addressing the system-wide problem of declining NCP, not just work on the values of managers and decision-makers. This is a serious discussion that must take place now, in order to seek the necessary complements and compromises that will help readjust the fundamental orientations of the SOD.	We note the reviewers concerns. We have reworked section 5.2, which now links instrumental, relational and intrinsic values to seven different archetypes, and highlights how instrumental values connect to these different archetypes.
2710	Edward Gregr	Canada	University of British Columbia	No	Ch. 5	14	393			Here is a list of attributes of the Pathways 'thing', which seems important to the decision making typology.	Insufficient detail in the comment to formulate a response.
2711	Edward Gregr	Canada	University of British Columbia	No	Ch. 5	21	607			Here are some attributes of sustainability, which seems important to the decision making typology.	Insufficient detail in the comment to formulate a response.
2712	Edward Gregr	Canada	University of British Columbia	No	Ch. 5	23	665			And here of justice. All three of these things (Pathways, Sustainability, and Justice) are key parts of the decision-making typology.	The comment has been forwarded to the authors working on the decision-making typology
2713	Edward Gregr	Canada	University of British Columbia	No	Ch. 5	25	753			I would like to see this section summarized by the values reflected in each of the declarations (thereby yielding the types of 'Codified Values' - a thing necessary for the typology, especially given the complexity of the context as described in Chapter 2).	We have not yet decided if this section relates strongly enough to the key questions to retain it. We have not made the suggested changes but will revisit the comment in the TOD.
2788	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	9	252	9	254	The three analytical levels of the Multi-Level Perspective must be clearly mentioned here: niches, socio-technical regimes and a socio-technical landscape. However, here are also a number of criticisms connected to this approach. These include bias towards bottom-up change models, lack of agency etc. Would it be helpful to include these for the sake of transparency?	This is not the place to go into details about the strengths and deficiencies of these different approaches- though all have their critiques. BUT we agree that we need to be clear where elements are problematic and that we have good reason for not reproducing some aspects within our own framing. The text has been adjusted in line with this.
2789	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	14	399	14	399	It is important to include what kind of management/governance style is being adopted for that particular pathway.	We have fully updated section 5.3.4 cases as well as 5.3.5 on governance modes. We still need to do some harmonising to ensure the cases are aligned in terms of governance concepts/language
2790	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	19	580	19	580	It is interesting to note this point: Different values of different people collide. In situations such as this, how do we weigh out which value is more important while conducting the decision-making process?	We have clarified the text throughout, in highlighting it is not our role here to provide guidance on which values are more important but to recognise where and how more values can be incorporated into the future.
2791	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	43	998	43	1000	This following line is a bit confusing and seems in contradiction with Chapter 1. "[The majority of] futures do not explicitly address nature, NCPs and good quality of life in parallel, but rather addresses them separately or in combinations, such as nature and NCPs without a direct link to good quality of life." Please revisit.	The text has been adjusted for clarity. See the review executive summary, and section 5.2.
2792	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	48	1126	49	1126	This table requires a legend for better clarity. Currently, there are just a number of colours, which are a bit confusing. Please revise.	This figure has been replaced. See section 5.2 archetypal futures.
2793	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 5	50	1164	50	1164	The Snowballing Exercise has been mentioned a couple of times in this chapter. However, there is no detail on how exactly it will be conducted. Please add to this section.	The meaning of the term snowballing has now been elaborated on see VA_5.2_Ch5

2821	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5					The chapter focuses on the issues of change, transformations and use of the future. It explicitly contemplates the construction of scenarios, prospective or forward-looking and futures visions. Within this context, the chapter makes a very good and abundant reference of literature on transformational change. However, as far as it goes, it is basically descriptive and referential (bibliographic), either on general frameworks or on the specific approach on visions and work on futures (lines 862 and following), or with regard to the relationship between values and transformation (lines 1364 and following).	We have reworked sections 5.1, 5.2, 5.3 in going beyond the bibliographic, and the text now reflects a greater degree of interegration of the literature.
2822	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5					The text contemplates an interesting statement of certain questions (lines 1014-1024, 1038-1040, 1157-1161). However, the entire section that includes them (5.3.1.4, Analytical Approach, lines 951 and following) is only a description that seeks to sort and classify, but cannot account for what it finds in its survey. It does not propose a theoretical-conceptual framework that makes it possible to make sense of the relationship of values, imaginary futures and change.	We have now clarified that we have used an archetypal framework to explore the links between different imaginary futures and values.
2823	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5					In the analysis of the relationships among values, individual behavior and social change (lines 1317 and following), a focus is clearly privileged from a behavioral framework (Behavioral Theory), stimulus-response type mechanistic. This election implies in our understanding an instrumental choice, very biased, linear and reactive, which, although it can be applied for certain specific changes that you want to achieve (direct), it does not give an account of the underlying theme or the purpose that other chapters seem have (especially in chapter 1 and 2). This reflection refers to a holistic, inclusive, profound approach to values. This path does not seem functional if it seeks to strengthen the capacities of freedom (Theory of Capabilities, Amartya Sen) and reflective processes of transformation.	It is not clear what action the reviewer would like take nor where in the chapter. No action take.
2824	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5					By way of extension and exemplification. The values, as indicated in lines 18 and following, are part of both results and processes of the dynamics of change. And as it is pointed out on lines 26 and following, they are part of the cultural, socially constructed, which shapes our practices and prospects of alternative visions / paths (50 and following). The paragraph that begins in 56 and following, recognizes the central role that values have in institutional change and transformation. As well as the need to better understand their relationship with visions of the future (lines 68 and following) "How visions of futures integrate and / or balance multiple values of nature and Nature's Contributions to People (NCP) need to be better understood " At this point, the reader encounters an issue of the problem that goes to the very center of the problem. Recognize that in order to achieve a more desirable, fairer and more sustainable future (84-85), recognition, revision and change of certain values that model unfair and unsustainable practices (foundation and purpose of this Value Assessment work) are required, and we need to know it better.	Section 5.2, engages with values related to sustainable and just futures at the archetype level. Values that underpin these futures are now made clearer.
2825	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5					Several suggestions. The text should take into account that the values are part of the 'habitus', structuring structures (Bourdieu) of recursive character, and that they are anchored at deep levels that are very difficult to grasp. Taking the words of Bourdieu (2007: 99), the habitus tends to reproduce the objective structures determined by the past production conditions of its production principle. This means that, if we do not generate a distancing, an epistemological break with the way we have been producing and reproducing the configurations of reality, if we do not re-frame (exploration and experimentation) within an expanded sense that includes the new, the different, the not-known, to generate 'new' meaning, we repeat the known, more of the same. This requires reflective processes, with methodologies capable of facilitating them, and with theoretical-conceptual bases to do so.	We have tried to incorporate reflexive thinking more generally throughout the chapter. TSU - please refer this comment to Ch2, Ch3 and Ch6

2826	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5				It is necessary to understand how the systems and anticipatory processes work in humans (Rosen, 1985, Anticipatory Systems: Philosophical, Mathematical, and Methodological Foundations; Miller et al, 2018, Transforming the Future. Anticipation in the 21st Century), 'open' and 'enter' into the processes of 'configuration' of reality (cognitive theories and epistemological approaches), using appropriate pedagogical approaches (linked to social learning theories with a focus on practice and creative stimulation), all this with systemic frameworks of complexity. That is to say, a coherent integration is needed from diverse knowledge slopes, a solid theoretical and methodological corpus, inter and transdisciplinary. Without accessing the core of the problem, it is staying on the surface, statements of intent, expression of desires, and turns on the same.	Line numbers were not provided and it is not possible understand were in the chapter the reviewer is refering this comment to.
2827	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5				One way to begin in the work in processes of change and social (and individual) transformation, from the level of values and beliefs, is to address the performative and generative process that occurs in the decision-making process, linked to the anticipatory components involved (systems, processes and anticipatory assumptions). Within this framework, one can find how values and beliefs intervene and operate in the configuration of 'reality' (anticipatory assumptions) within cognitive decision-making processes. This framework is interesting because it promotes a space of conjunction of reflection and passage to action, and because it has operational "translations" at the concrete level, for example, which is reflected as alternatives that we see in the present. It is sought through experimental and reflective processes, review how the options menus are generated, what alternatives appear, expand the options, see different to make different. There is a direct relationship of behavioral change, but through learning and reflective decision.	Thank you for this comment, we heavily restructured this section in the SOD and hope to make these connections even clearer.
2828	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5				The 'use of the future' becomes a foothold to transform the present by expanding the space of possibilities, and therefore, recursively, changing the future from the anticipation to the present. That is, we are 'turning' the circle of projections and repetitions of one more of the same to the possibility of entering discontinuities that allow change and transformation, now entering new values for more just and sustainable futures.	We have integrated this concept of creating alternative future naratives for the future more clearly into section 5.1 were we justify the need to examine the future.
2829	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5				UNESCO through its global / local Anticipation and Futures Literacy Project (Riel Miller, UNESCO https://en.unesco.org/themes/futures-literacy) and the Chairs as nodes for the articulation of theory-methodology and practice carried Forward by an international team of researchers about the territory, have been making significant advances, both at the research level and in applied practices to strengthen anticipatory and transformational skills and competencies. These contributions are linked to the theoretical framework, as an inter and transdisciplinary space, or with regard to methodological approaches (with robust methodology proven in hundreds of cases applied) for co-creation and transformation processes based on collective intelligence (Future Laboratories).	This is included within the enablers of transformative governance.
2830	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5				From the operational point of view, Futures Literacy (as a theoretical framework and as a methodology) allows to address values, working collectively from deep levels (generally not consciously or directly visible) to identify and relate values in beliefs, worldviews, myths and metaphors, both in the configuration of reality as in the futures they imagine and in the associated practices. The approach allows experimenting in the transformation, recognizing and expanding alternatives in the present that open up other possibilities for futures. Not only is it a co-creation methodology, a research approach and input generation for decision-making, but a powerful heuristic for social transformation processes, which contributes significantly to expanding the capacities of freedom in the Senian sense by strengthening the anticipatory capabilities	We have integrated these comments on futures Literacy into section 5.1 were we interegate the importance of examining futures works.

2831	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5						<p>This chapter and the next talk about adaptation and answers. The adaptation has a reactive and an anticipatory component, but the approach is from a reactive paradigm. Here is an interesting opportunity to complement and strengthen the whole issue of change and transformation supported by a paradigmatic change, which does not deny the reactive aspect of adaptation, but resignifies and opens up more effective transformative possibilities, strengthening systemic and individual anticipatory capacities.</p>	<p>We recognize the value of transformative change, and discern governance elements that can be enablers to such a change.</p>
2832	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 5						<p>There is talk of "fair and sustainable futures" in this chapter. The concept of responsible anticipation (Fuller and Saarikoski, 2017, Responsible Anticipation In Complex Worlds) is proposed.</p>	<p>We stick to Just and Sustainable Futures in line with discussions in the whole assessment.</p>