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28 February 2022

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# Response matrix for Ecosystems & Ecosystem services Sectoral Guide

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## Summary

The accompanying sector guide was released for consultation in March 2021 and the consultation was open until the end of July 2021 to provide sufficient time for stakeholder to provide inputs. Consultation was open to the Board, advisers, observers, NDAs, Direct and International Access Entities, Civil society, Private sector representatives, Partner institutions and sector experts. The Secretariat received more than 600 specific comments and feedback on this draft. These and the responses by the Secretariat sector experts on how these comments were considered in the updated version of the sector guide is contained in this document.

This feedback and response matrix has been prepared for information purposes only to share the different comments received by the organizations that submitted feedback to the GCF in response to the public consultation of the "Ecosystems and Ecosystem services Sectoral Guide" draft for consultation version 1.

The information and content in this document do not imply any judgment on the part of GCF concerning the legal status of any territory or any endorsement or acceptance of such boundaries.

Responses to feedback noted here are those of sector experts and may not necessarily be those of the GCF.

The mention of specific entities, including companies, does not necessarily imply that these have been endorsed or recommended by GCF.

For further inquiries regarding this feedback and response matrix please contact us via:  
[sectoralguides@gcfund.org](mailto:sectoralguides@gcfund.org)

Sectoral Guide Section	Feedback (verbatim)	Organization	Response from GCF/DMA sector specialists
General	<p>While we can well understand that no formal references can be made here to documents which are still under discussion, in our view the analysis should not fall short of the given draft documents. In that sense, it would be particularly helpful to make statements to the effect that the GCF with this guideline aims to not only support the implementation of the UNFCCC but also to contribute to the implementation of an ambitious new GBF of the CBD.</p> <p>One point that is particularly striking from this perspective is the fact that the report only very briefly touches the role of agriculture as the most important driver for the loss terrestrial ecosystems (line 330), but then hardly provides any orientation on how to transform agricultural ecosystems to avoid any further loss of biodiversity. In that line the suggested actions for paradigm shifting pathways (line 209 and 642) could and should be more ambitious by not only focusing on the management of EES themselves but by also addressing unsustainable consumption and production patterns and by supporting enabling conditions for the much-needed societal change.</p>	Germany	The reference to draft document referred to unpublished sectoral guides. Agriculture is covered extensively in the Agriculture and Food Security Sector Guide; Forest ecosystems are covered extensively in the Forest And Land Use Sector Guide - there is some overlap with ecosystem services guide as they are in effect cross cutting across all sector guides from energy to cities.
General	<p>The executive summary unfortunately falls short of the actual report on one critical point: It merely identifies a global climate crisis (line 27) while the report itself much more appropriately highlights the biodiversity crisis and the climate crisis as two equally important and mutually dependent and reinforcing crises (line 290ff).</p>	Germany	Adjusted to emphasize urgency of biodiversity and ecosystem loss.
General	<p>We highly welcome this truly relevant document and support further development and changes for improvement. First, the importance of environmental and social impacts assessments should be a priority task before planning projects and implementing any program and projects. During the assessment period, local communities and beneficiaries should be included to incorporate their experiences and indigenous knowledge of their environment.</p> <p>When selecting project areas, proper data collection and relevant mechanism should be used to analyse the data, make the results public, then utilize the data in Finlandg policies and plans by the government to better promote transparency.</p>	Transparency International	Thank you for your suggestion. However, we see that there is no need to add sector-specific risks given that there is an entire set of risk sections in the FP template, which is common to all result areas. Also, SAP guidelines per result areas are available, which can provide further detail on possible risks per sector or result area.
General	<p>I am not sure if this is part of goal for the sectoral guides, but some information on other key considerations and resources for proponents working on EES could help, such as: the need for strong and tailored monitoring for ecosystem-based approaches, with links to resources like the EbA M&amp;E Guidebook (GIZ, FEBA, UNEP-WCMC); and the need to use robust EES data, including resources like IPBES assessments, country-level National Ecosystem Assessments, NBSAPs, etc.</p>	UNEP-WCMC	Reference added.
General	<p>The definitions in the glossary are highly problematic, and mostly inconsistent with existing UNFCCC decisions and IPCC guidance, which can complicate any integration in GHG inventories and NDCs. It might be a useful approach to use existing IPCC definitions to the extent possible, avoiding the drafting of definitions which may be confusing.</p>	UNFCCC secretariat	Definitions have been clarified, aligning primarily with UNFCCC bit also CBD. Will not use nature-based solutions. Instead, use ecosystem-based management.
General	<p>The separation of FLU and EES into two different guides appears highly artificial. There are certainly good reasons behind this choice, but it's almost certain that this will run into practical difficulties, and in many overlapping projects that require using a combination of the two sectoral guides. This is clearly visible when referring to high-impact areas being "those with high carbon density" in section 6.1. The idea of 'stacking' multiple benefits and ecosystem services also suggests that a combination of the two guides would be useful, and instructions and/or examples on how to do so.</p>	UNFCCC secretariat	There is an explanation in both guides regarding the differences and focus of each one. Overlap is unavoidable but the guides provide the focus for the projects. Separation is now sufficiently explained.

<p>General</p>	<p>The International Emissions Trading Association (IETA) appreciates this opportunity to share input on the Green Climate Fund (GCF) Draft Sectoral Guides (“the Draft”). IETA is encouraged to see more activity to support and formalise investment in forests, land use and ecosystems. It is clear that natural climate solutions (NCS) will play a critical role in meeting Paris Agreement targets to “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”. Our comments provide high level input on the GCF draft sectoral guides on Forests &amp; land use (FLU) and Ecosystems &amp; ecosystem services (EES), and detailed comments on specific sections of the guides. IETA represents a broad and diverse group of stakeholders, with over 160 members worldwide – including many multi-national companies in a variety of sectors, offsets developers and standards, banks, assuranceproviders, and law firms. Our members collectively have vast and broad experience in the carbon and climate space, including in climate finance and natural climate solutions. We thank the GCF and contributors for their hard work on establishing these draft sectoral guides. In the same way that the GCF drafted these two (FLU &amp; EES) guides jointly, we have prepared our response to these guides jointly, recognising the synergies and overlap in these two result areas. Our comments are presented in two sections, see a brief overview of both sections below:</p> <ol style="list-style-type: none"> <li>1. IETA’s High-Level Comments: The Role of Markets in Accelerating Natural Climate Solutions (NCS)</li> <li>2. IETA’s Comments on Specific Sections of the Draft Sectoral Guides <ol style="list-style-type: none"> <li>a. Paradigm Shifting Pathways</li> <li>b. Barriers and Enablers to Achieving Paradigm Shifting Pathways</li> <li>c. Role of GCF in Paradigm Shifting Pathways</li> <li>d. GCF Investment Criteria &amp; Figure ES-1</li> <li>e. FLU: Three Paradigm Shifting Pathways in the FLU Sector</li> <li>f. EES: Two Paradigm Shifting Pathways in the EES Sector</li> <li>g. GCF Portfolio and Financing Structures</li> </ol> </li> </ol> <p><b>1. HIGH-LEVEL COMMENTS: ROLE OF MARKETS IN ACCELERATING NCS</b>  A fundamental driver of large-scale deforestation is the lack of economic incentives to provide positive economic value for standing forests and other natural carbon sinks. The value of ecosystem services offered by forests is often not fully realised, but instead externalised and dispersed. Deforestation can therefore be accelerated by a small number of actors who can immediately realise gains from commodity-driven activities, such as lumber, agriculture and mining.</p> <p>Carbon finance can support efforts to reduce deforestation by involving local communities, governments, companies, and other stakeholders. For example, finance can go to private and public landowners who agree to forgo activities that degrade forests, i.e., farmers who shift to deforestation-free production; government agencies to enforce laws that safeguard forests; or up-front investments in new tools and techniques that allow third parties to monitor and verify ongoing forest system health. In this type of multi-stakeholder initiative, with all stakeholders working in concert, farmers and other actors are provided with the resources, incentives, and policies they need to increase productivity while reducing deforestation. Proponents may also focus on site-specific activities, working with actors who rely on forests for their livelihoods in a way that serves to incentivize activities that reduce deforestation in a targeted and smaller-scale manner. To access market-based finance for reducing deforestation, these projects or programs can be developed by governments or a range of other stakeholders on the ground, including private entities. We urge the GCF to recognise the critical role of markets in achieving the goals outlined in the draft sectoral guides on Forests &amp; land use and Ecosystems &amp; ecosystem services. IETA encourages the GCF to review some of the recent relevant materials produce by IETA that describe the role of the private sector, through carbon markets, to invest in natural landscapes</p>	<p>IETA</p>	<p>Indeed market incentives could be one of the most powerful tools for EES. This has been properly addressed in the paradigm-shifting pathways and throughout the updated guide. No need to include as these observations Specificities of the IETA publication were not explicitly included in the guide.</p>
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	and ecosystems: 1) a factsheet, Natural Climate Solutions: Harnessing Nature to Mitigate Climate Change that describes the role of private sector climate finance and carbon markets in leveraging the role of nature to mitigate climate change; and 2) a paper, Investing in Natural Climate Solutions: The Importance of Reducing Deforestation, that describes the urgent need to prevent deforestation through climate finance and investments, in addition to funding projects that “remove” carbon through reforestation and forest management		
General	Once again, we appreciate this opportunity to record our comments on the GCF Draft Sectoral Guides. IETA looks forward to continued engagement with the GCF, as further action related to natural climate solutions, climate finance, and further investment criteria decisions are made and taken. As an accredited private sector observer of the GCF, IETA welcomes further opportunities to support the GCF in engaging with the private sector on natural climate solutions (NCS), among other areas within IETA’s expertise.	IETA	Thank you for the suggestion.
General	Considering that Nature Based Solutions is an umbrella concept that includes all different approaches (e.g. EBA, Climate Nature Solutions), we suggest to be coherent all over the text. This definition also encompasses ecosystem-based adaptation as “the use of ecosystem management activities to increase the resilience and reduce the vulnerability of people and ecosystems to climate change”.	Ministry of Economy and Finance (MEF) Italy	Definitions have been clarified, aligning primarily with UNFCCC but also CBD. The guide does not make reference to nature-based solutions. Instead, use ecosystem-based management. Up to date, there is no comprehensive analysis or summary of country positions on Nature-based Solutions (NBS) in UNFCCC and UNCBD.
General	Consider IDB Natural Capital Lab ( <a href="https://www.iadb.org/en/environment/natural-capital-lab">https://www.iadb.org/en/environment/natural-capital-lab</a> ) as an example of comprehensive tool to drive innovation in the conservation, landscape, regenerative agriculture, biodiversity, and marine ecosystem finance spaces.	IDB	Very interesting platform, thank you very much for the recommendation.

<p>General</p>	<p>The EES sectoral guide is comprehensive and well structured. In general, it seems to focus on the promotion of monetary/economic valuation of EES as a way to address barriers and mobilise actions. Considering that EES valuations methods do not accurately represent all values attached to ecosystems and the final impact of their application on the state of ecosystems and communities are yet to be assessed, we recommend more prudence in suggesting this an ideal approach. In the end, the best strategy should correspond to the specific challenges and needs of each ecosystem and community.</p> <p>Carbon finance can support efforts to reduce deforestation by involving local communities, governments, companies, and other stakeholders. For example, finance can go to private and public landowners who agree to forgo activities that degrade forests, i.e., farmers who shift to deforestation-free production; government agencies to enforce laws that safeguard forests; or up-front investments in new tools and techniques that allow third parties to monitor and verify ongoing forest system health. In this type of multi-stakeholder initiative, with all stakeholders working in concert, farmers and other actors are provided with the resources, incentives, and policies they need to increase productivity while reducing deforestation. Proponents may also focus on site-specific activities, working with actors who rely on forests for their livelihoods in a way that serves to incentivize activities that reduce deforestation in a targeted and smaller-scale manner. To access market-based finance for reducing deforestation, these projects or programs can be developed by governments or a range of other stakeholders on the ground, including private entities. We urge the GCF to recognise the critical role of markets in achieving the goals outlined in the draft sectoral guides on Forests &amp; land use and Ecosystems &amp; ecosystem services. IETA encourages the GCF to review some of the recent relevant materials produce by IETA that describe the role of the private sector, through carbon markets, to invest in natural landscapes and ecosystems: 1) a factsheet, Natural Climate Solutions: Harnessing Nature to Mitigate Climate Change that describes the role of private sector climate finance and carbon markets in leveraging the role of nature to mitigate climate change; and 2) a paper, Investing in Natural Climate Solutions: The Importance of Reducing Deforestation, that describes the urgent need to prevent deforestation through climate finance and investments, in addition to funding projects that “remove” carbon through reforestation and forest management.</p>	<p>Germany</p>	<p>Indeed, valuation methodologies are not yet universal, therefore, the guide encourages the development of new and improved methodologies. Also agree with the use of market incentives, and this is fully developed in the guide. No need to include as these observations are already included in the guide.</p>
<p>General</p>	<p>Humans are part of nature and the environment – throughout the document, the narrative of dichotomy and exclusivity of ‘humans’ and ‘nature’ is pervasive. GCF-funded projects should ensure that projects do not violate the rights and displace the stewards who have ensure that the ecosystem in question is still thriving. Biodiversity is degrading less rapidly in indigenous territories according to IPBES 2019. It can be assumed that these also means that ecosystem services are also degrading less rapidly.</p> <p>RRI study has shown that investing in the protection of indigenous peoples territories (and therefore indigenous peoples plans to protect their territories)</p> <p>Not only do humans benefit from ecosystem services (or nature’s contributions to people) but humans also contribute to nature, including ecosystems (people’s contributions to nature)</p> <p>We are concerned how the guidance is referring to nature based solutions every now and then in the guidance, in particular to provide solutions for grey and green infrastructure. May we caution that the GCF nor the UNFCCC has official definition of what NBS and thus, should not be used in the sectoral guidance at all. Using NBS as a term could create convoluted definitions and would not serve a clear purpose for the sectoral guidance.</p>	<p>Tebtebba Foundation</p>	<p>Definitions have been clarified, aligning primarily with UNFCCC but also CBD. The guide does not make reference to nature-based solutions. Instead, use ecosystem-based management. Up to date, there is no comprehensive analysis or summary of country positions on Nature-based Solutions (NBS) in UNFCCC and UNCBD. Please refer to other GCF policies on Indigenous Peoples.</p>

<p>General</p>	<p>"Thank you for accepting comments on the draft sectoral guides, as well as for hosting the webinars. While there is slightly more mention of ESS risks and safeguard issues in these guides as compared to the previous, the IRM finds that information regarding sectoral-specific risks is insufficient. Providing guidance on the typical safeguard issues of the sector is critical to fulfilling due diligence requirements.</p> <p>There is precedent for adding this detailed guidance in the sector guides of other institutions (linked here as well as below). In the IFC's Good Practice Handbook on Assessing and Managing Environmental and Social Risks in an Agro-Commodity Supply Chain (<a href="https://bit.ly/2T9BfGX">https://bit.ly/2T9BfGX</a>), there is quite an extensive section (about 10 pages) of information on both environmental and social risks beginning on p. 15. The following section, on p. 25, discusses methods of managing and mitigating these risks specific to the sector.</p> <p>Another example can be found in the ADB's Waste to Energy in Age of the Circular Economy: Best Practice Handbook (<a href="https://bit.ly/3f4eeh2">https://bit.ly/3f4eeh2</a>). The information on safeguards is less than a page (p. 59), but this particular guide makes use of a table format (p. 58) detailing business risks that could prove to be a useful method of inserting information on ESS risks into existing guides without adding too much extra length.</p> <p>While adding sufficient safeguard information to the existing guide would likely add only about 4-5 pages, we would also like to suggest a companion guide as an alternative. Lalanath has previously spoken to Gerry about this. A companion guide would allow for detailed information and guidance on sectoral risks.</p> <p>The EBRD has a set of companion guides (<a href="https://bit.ly/3ysBAVm">https://bit.ly/3ysBAVm</a>) that are excellent examples of the level of detailed guidance that we feel is necessary. They identify various sectoral-specific risks and give information on best practices and management actions for a number of sub-sectors. You may find the Sub-sectoral guidelines: Timber and wood products (<a href="https://bit.ly/3woaUU0">https://bit.ly/3woaUU0</a>) to be especially pertinent to the current set of sector guides.</p> <p>Please let us know if you would like to discuss this further, and we look forward to seeing the finalized guides."</p> <p>IFC Good Practice Handbook on Assessing and Managing Environmental and Social Risks in an Agro-Commodity Supply Chain Link:  <a href="https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_agrosupplychains">https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_agrosupplychains</a>  ADB Waste to Energy in Age of the Circular Economy: Best Practice Handbook:  <a href="https://www.google.com/url?q=https://www.adb.org/publications/waste-to-energy-age-circular-economy-handbook&amp;sa=D&amp;source=editors&amp;ust=1627870141828000&amp;usq=AOvVaw1Q3AehDpQto0Vx8wG_Alty">https://www.google.com/url?q=https://www.adb.org/publications/waste-to-energy-age-circular-economy-handbook&amp;sa=D&amp;source=editors&amp;ust=1627870141828000&amp;usq=AOvVaw1Q3AehDpQto0Vx8wG_Alty</a>  EBRD Environmental and Social Risk Management Companion Guides  <a href="https://www.google.com/url?q=https://www.ebrd.com/who-we-are/our-values/environmental-emanual-toolkit.html&amp;sa=D&amp;source=editors&amp;ust=1627870157776000&amp;usq=AOvVaw1c2FSc08Yvzj-gNsvj8RJL">https://www.google.com/url?q=https://www.ebrd.com/who-we-are/our-values/environmental-emanual-toolkit.html&amp;sa=D&amp;source=editors&amp;ust=1627870157776000&amp;usq=AOvVaw1c2FSc08Yvzj-gNsvj8RJL</a>  EBRD Sub-sectoral guidelines: Timber and wood products <a href="https://www.ebrd.com/who-we-are/our-values/environmental-and-social-policy/tools-for-financial-intermediaries/timber.html">https://www.ebrd.com/who-we-are/our-values/environmental-and-social-policy/tools-for-financial-intermediaries/timber.html</a></p>	<p>Independent Redress Mechanism (IRM) Green Climate Fund (GCF)</p>	<p>No need to add sector-specific risks given that there is an entire set of risk sections, common to all sectors, in the project (funding proposal) risk section. In addition, specific reference could be given to policies and guidelines on environmental and social standards.</p>
<p>General</p>	<p>Regarding terminology, should the guide consider using the Nature-based Solutions and Ecosystem-based Adaptation terms, along with the others noted below like "integrated coastal zone management" to remain consistent with other UNFCCC and CBD documents. (EbA noted on line 321)</p>	<p>Rare</p>	<p>Definitions have been clarified, aligning primarily with UNFCCC but also CBD. Will not use nature-based solutions. Instead, use ecosystem-based management.</p>

General	Ensure consistent formatting of Gt CO2e throughout	Rare	Changes have been made to ensure consistency in the use of Gt CO2e throughout.
General	The definitions in the glossary are highly problematic, and mostly inconsistent with existing UNFCCC decisions and IPCC guidance, which can complicate any integration in GHG inventories and NDCs. It might be a useful approach to use existing IPCC definitions to the extent possible, avoiding the drafting of definitions which may be confusing.	UNFCCC secretariat	Definitions have been clarified, aligning primarily with UNFCCC but also guide does not make reference to nature-based solutions. Instead, use ecosystem-based management. Up to date, there is no comprehensive analysis or summary of country positions on Nature-based Solutions (NBS) in UNFCCC and UNCBD.
General	The separation of FLU and EES into two different guides appears highly artificial. There are certainly good reasons behind this choice, but it's almost certain that this will run into practical difficulties, and in many overlapping projects that require using a combination of the two sectoral guides. This is clearly visible when referring to high-impact areas being "those with high carbon density" in section 6.1. The idea of 'stacking' multiple benefits and ecosystem services also suggests that a combination of the two guides would be useful, and instructions and/or examples on how to do so.	UNFCCC secretariat	There is an explanation in both guides regarding the differences and focus of each one. Overlap is unavoidable, especially with ecosystem services which to some extent link to all thematic areas, but the guides provide some general guidance for project formulation in each of the result areas.
General	<p>I will humbly share with you my views on the sector guide on ecosystems and ecosystem services. Overall, the document is voluminous and well written, congratulations for the hard work in drafting it. However, the content of the document is somewhat fleshed out as key terms and a coordinated structuring of information are missing.</p> <p>Some examples in terrestrial or continental ecosystems:  A structuring of ecosystems to introduce  -Forest ecosystems (temperate forests, rain forests and tropical forests)  -Agroecosystems (grasslands, steppes, savannas, deserts and mountains, peatlands and swamps)  -Oceanic ecosystems (seas and oceans)  -Lotic ecosystems (rivers, lakes, streams)  - Lentic ecosystems (mangroves, etc)</p> <p>This classification is important and essential because it allows a better understanding of the ecosystem services of each sub-ecosystem, especially for those who are not experts in understanding this sub-theme.</p> <p>Note: Each country has its own policies concerning the management of ecosystems. It would be wiser to include the development of proposed amendments to integrate ecosystems into the revisions of the Nationally Determined Contributions (NDCs) of the countries proposing projects in these components so that the climate change adaptation plan is more effective.</p> <p>Note: Emphasise the scientific research component as research provides data on the biodiversity of these environments and subsequently informs the services they have to offer in reducing greenhouse gas emissions.</p>	Project Assistant YVE- Cameroon	We appreciate your comments. After careful review, we are of the opinion that there is no need to add detailed definitions of ecosystem types, as it would make the document too rigid. On NDCs, text added under country ownership. The GCF Secretariat is developing a taxonomy on ecosystems, and it will intend to identify different types of Ecosystems targeted with GCF projects.

General	The System of Environmental-Economic-Accounts (SEEA) and specifically the SEEA Ecosystem Accounting should explicitly be referred to as the only internationally acknowledged Standard for National Capital Accounting already in line 836ff (and again in line 1544ff).	Germany	SEEA added in the glossary, as it is already referred to in the main text.
General	We see a significant overlap of the actions proposed for the pathways of terrestrial and freshwater ecosystems and coastal and marine ecosystems (tables 4 and 6) and then again for financing them (table 8).	Germany	Explanation regarding the choice of pathways strengthened in executive summary and main text.
General	At the same time, we would like to emphasize the need to jointly conceptualize the interlinkages of different ecosystems including terrestrial and marine environments.	Germany	Paragraph included.
General	On the other hand, the description of potential actions could provide more details on when and who to apply those instruments, especially under "Mobilization of finance at scale" (line 709 ff).	Germany	There are a number of examples already in the annex and throughout the guide. These examples have been enhanced and updated.
General	We can generally not follow the line of thought that acknowledges only the adaptation potential of coastal and marine environments and pays no attention to their significant mitigation potential (line 32 and 69).	Germany	This is shown in figure 2. But phrase added to avoid minimizing the mitigation potential of coastal and marine ecosystems.
General	Besides the points made above we generally agree with the feedback provided by Frankfurt School. This especially includes the following points: The differentiated assessment of methods for the valuation of ecosystems that may have their limitations but are nevertheless important tools to measure and communicate the contributions of ESS to human wellbeing and consequently to mainstream EES into overall development policies. The necessity to broaden the rather narrow understanding of barriers (lines 640ff). The need to better clarify a number of terms and figures or to at least provide indications of where to find their origins to better understand their full context. This especially applies to the term of NbS.	Germany	Definitions have been clarified, aligning primarily with UNFCCC but also CBD. The guides do not use nature-based solutions. Instead, use ecosystem-based management (CBD) and ecosystem-based solutions. Barriers have been narrowed down to make them manageable.
General	The sectoral guide gives a long introduction of what ecosystems and ecosystem services are etc. Those who implement projects already have this general knowledge but the topical information which will be especially crucial after UNFCCC COP 26 and CBD COP15 would help everyone put their project in context, e.g. the new framework to be laid out at COP15.	Finland	Definitions have been clarified, aligning primarily with UNFCCC but also CBD. The guide does not make reference to nature-based solutions. Instead, use ecosystem-based management. Up to date, there is no comprehensive analysis or summary of country positions on Nature-based Solutions (NBS) in UNFCCC and UNCBD.
General	In general, more concrete examples would be useful. Thinking about the person who writes project proposals, for example the case studies are on a rather general level. More concrete examples might be useful.	Finland	There are examples already in the annex and throughout the guide. These examples have been enhanced and updated.
General	Many sectoral guides are being produced in parallel. While this is understandable from a practical point of view, it may make it more difficult from the projects' point of view to decide, which guide(s) to follow. Nexus-thinking would be helpful.	Finland	The guide includes a section that explains potential overlaps and focus of each one.



General	This submission represents the consolidated input from a number of individuals and organizations from the GCF Network of Civil Society Organization, Indigenous Peoples and local communities, which was coordinated by the CSO Active Observer Team following a small working group process with outcomes shared with the broader listserv for comments, edits/additions and sign-on.	GCF Observer Network	Thank you for the comments this is very useful.
General	<p><b>Keep the focus on prioritizing integrity of natural ecosystems and on adaptation first:</b> It is vitally important that in further development of the EES sector guidance the core focus on maintaining and enhancing ecosystems is maintained, by prioritizing the integrity of natural ecosystems, especially large scale “high carbon ecosystems” such as forests, ecosystems on peat soils, - and grasslands. Their primary value lies in being undisturbed so that (f.ex. grasslands’ soil carbon capture capacity, which lies largely underground in their root system) is maintained. Thus, the highest, long-term (century scale) capacity for removal of CO2 is in leaving them undisturbed and protected. We therefore applaud the statement of “protection of all remaining high-carbon ecosystems must be prioritised” (lines 90-93; 458/459).</p> <p>However, it should be made much clearer, that prioritizing the integrity of the natural ecosystem is a moral imperative and not just a utility-driven one and that carbon capture and removal is just one of the multiple benefits and services that natural ecosystems provide. Focusing only on their carbon storage potential could for example prioritize that value of the ecosystem, over the importance of the ecosystem services to local communities, indigenous and traditional knowledge, and ways of life. The guidance has to strengthen its adaptation first approach, for example also by acknowledging the need for approaches that take the local drivers of conflict into account.</p>	GCF Observer Network	Thank you for the comments. We believe that the text presents both the importance of maintaining and enhancing ecosystems from the perspective of mitigation, but also for ecosystem services and the local and global role in adaptation, for instance, preventing/reducing storm damage for coastal communities.
General	<p><b>Maintain focus on participation, engagement and consultation of local communities, Indigenous Peoples and other often marginalized groups as rightholders:</b> We appreciate that this EES draft sector guide (similarly to the FLU draft sector) correctly highlights the very prominent role given to the participation, engagement and consultation of local communities and Indigenous Peoples as rightholders, in order for GCF investments in the EES sector to be successful, sustainable and equitable. Effective approaches to participation increase the legitimacy of GCF projects and planning processes. This is clearly a great way to approach projects, and should be further mainstreamed in GCF processes, and not just remain as guidance. If the GCF recognizes the importance of bottom-up processes and meaningful engagement, it should push for more of it as a matter of course in the design and monitoring of projects.</p>	GCF Observer Network	Thank you for these comments. The GCF recognizes the importance of community participation and meaningful engagement in project design and implementation, and this is integrated into GCF policies.
General	<p><b>Correct focus on further strengthening procedural rights:</b> We appreciate that in this EES draft sector guide (similarly to the FLU draft sector guide) there is a broad focus on procedural rights to ensure the effective participation and the recognition of the needs, contributions and capabilities (such as traditional, indigenous and local knowledge) of multi-stakeholder groups, with a particular emphasis on local communities, Indigenous Peoples, and other vulnerable and marginalized groups, including women dependent on ecosystem services as rightholders. We further appreciate the explicit mention and acknowledgment of free, prior and informed consent (FPIC), the need to secure gender-responsive land tenure and community-centered action, and finally the importance of participatory monitoring for successful outcomes. This guidance should absolutely be maintained.</p>	GCF Observer Network	We appreciate the comment that recognition of rights and effective participation are integral to supporting ecosystems. This is also reflected by the GCF policies and procedures and this will be maintained throughout project implementation.

<p>General</p>	<p><b>Anchor references and linkages with agroforestry and agroecology prominently in the text:</b> Overall the text includes just three references to “agroforestry” (two of which are in Table ES-1 and Table 1, and an additional one in line 464) and mentions agroecology not at all. The draft EES overall should highlight the connections of EES with community-governed agroecology approaches throughout. Especially community-governed agroecological approaches should be consistently and prominently cited in the text as core approaches to manage what is in many developing countries central to “the interface between human communities and natural ecosystems” (lines 124/125). In particular, the document should more clearly promote agroecology as a necessary, evidence-based solution, necessary for climate resilience, that best addresses the trade offs and tensions between keeping ecosystems intact/virgin and the demand for food production and agricultural activities (similarly applicable to the discussion of the FLU draft sector guide). The evidence for agroecology and diversified agroecological systems being more resilient is plentiful. F.ex. see this recent FAO publication (<a href="http://www.fao.org/documents/card/en/c/cb0438en">http://www.fao.org/documents/card/en/c/cb0438en</a>). The FAO High-Level Panel of Experts report on agroecology also provides an important evidence base: <a href="http://www.fao.org/cfs/cfs-hlpe/en/">http://www.fao.org/cfs/cfs-hlpe/en/</a>. Additionally, the Climate, Land, Ambition and Rights Alliance’s (CLARA’s) report, “Missing Pathways to 1.5C: The Role of the Land Sector in Ambitious Climate Action” focuses on three areas including strengthening indigenous and community land rights, restoring forests and other ecosystems, and transforming agriculture. The report can be found here: <a href="https://www.climatelandambitionrightsalliance.org/report">https://www.climatelandambitionrightsalliance.org/report</a></p>	<p>GCF Observer Network</p>	<p>Thanks for the comments, due to the length of the guide we feel its not feasible to add more here. In addition, sustainable resilient agriculture is covered as Pathway 1 in the Agriculture and Food Security Sector Guide. There is recognised overlap between the guides, and ecosystem services are cross-cutting, having a role in all sector guides.</p>
<p>General</p>	<p><b>Include right-of-nature references and approaches:</b> While the draft FLU sector guidance mentions rights-of-nature approaches (FLU at line 193, ES-1), the draft EES sector guide currently does not. This is a significant omission and should be remedied. Instead, the draft EES sector guide focuses a lot on payment-for-ecosystem services (PES) as a way of ensuring the protection of ecosystems, but at the same time acknowledges the difficulties in quantifying the values of ecosystems in many cases. Maybe it is worth recognizing that some of the value of ecosystems cannot be quantified and that they have inherent value, independently of what they can produce for people, in line with the idea of rights of nature. We appreciate the focus on PES while registering a concern that an overemphasis on ‘transactional’ approaches reflects the market-creation bias found elsewhere in the guidance, as noted in our general comment above.</p>	<p>GCF Observer Network</p>	<p>Thanks for the comment. Some of the text recognizes the socio-cultural values of ecosystems and recognizes the difficulty in the assessment of these values. Ecosystem valuation doesn’t necessarily need to be a market-based approach but could reflect the need that government and policy makers should reflect their value in terms of design and planning for adaptation and mitigation.</p>
<p>General</p>	<p><b>Further strengthen explicit reference to human rights in general and gender/women’s rights specifically:</b> Similarly to the case of the FLU draft sector guide, the EES draft sector guide would benefit from explicit references to human rights framing and human rights instruments. For example, while FPIC is acknowledged, there is no reference in the text to the UN Declaration of the Rights of Indigenous Peoples (UNDRIP). Also, while for example the term “rights-based approach” is included in the glossary, it is never referenced or spelled out in the text (it could, for example, be explicitly mentioned in lines 97/98).</p> <p>Similarly, “gender” is often referred to in the context of “gender issues” rather than in acknowledging and highlighting the importance of gender equality and the protection and promotion of women’s rights. While it seems implied, it should be highlighted in more explicit terms throughout.</p>	<p>GCF Observer Network</p>	<p>Thank you for your comment. The reference to rights-based approach is now included in the body of the document.</p>

<p>General</p>	<p>Eliminate all references to “nature-based solutions”: The repeated sprinkling in of references to “nature-based solutions” should be entirely eliminated, especially in light of the Executive Director’s commitment at B.29 to stop using the term in connection with ecosystem-based activities. As was repeatedly pointed out, the term “nature-based solutions” lacks a clear definition, and is not uniformly accepted and is in fact contentiously disputed in the UNFCCC context, most recently during Standing Committee on Finance discussions. The draft guide makes very clear a prioritization of activities – protect, restore, manage ecosystems sustainably – that is in fact both more precise and more immediately actionable than the vague notion of ‘nature based solutions’. The EES draft guide should speak consistently ONLY of ecosystem based adaptation (EbA) and community-based adaptation (CbA) throughout, especially since EbA approaches have been agreed and are defined within the Convention on Biological Diversity. We note that the term NBS as currently used or implied in the EES draft guide is often used to ‘provide cover’ for activities that fail a stand-alone test of integrity and investability, such as “integrated solutions for grey and green infrastructure” (see lines 71/72, table 8) in which a bit of nature-based window dressing seems to be used to justify the continued building of “grey infrastructure.” In this context, we find the recently approved FP151/152 a bad example of such a misguided, window-dressing approach (and any references or inclusion as a case study example is entirely unsuitable for the draft EES guidance).</p> <p>See further below for additional references and mentions, such as those related to the Executive Summary and to Table 8.</p>	<p>GCF Observer Network</p>	<p>Nature-based solutions is not used in the document.</p>
<p>General</p>	<p><b>Valuing ecosystem services must not be equated with market-driven approaches and proposals for new asset classes:</b> We object to wording in the EES draft guide that attempts to directly link references to “properly valuing ecosystem services” to “developing and transforming new markets that recognize and value ecosystem services as a natural capital asset” [lines 147-149]. The former is not dependent on the latter. Acknowledging the value of ecosystem services – or indeed the strongly non-economic value of such services -- does not and should not equate to market-based approaches or provide a pretext for market-based approaches. As currently presented, the draft guide places too big a focus on “natural capital” accounting and/or valuation, assuming very broadly that protection will be easier when the (economic) value is established (and particularly for attracting private sector interest through “nature capital disclosure”). Instead of uncritically focusing on such economic/market-based approaches, the draft guide should be much more explicit in also articulating the limits to and pitfalls of quantification (such as it seems happens in lines 565/66 indicating the value embedded in the irreversibility of loss of carbon-rich and biodiverse ecosystems).</p> <p>See further below for additional references and mentions, such as related to the Executive Summary.</p>	<p>GCF Observer Network</p>	<p>Thanks for the comment, valuation of ecosystem services and natural capital can be used in planning and valuation of ecosystems for management purposes, as well as ensuring governments properly assign resources (human and financial) to ensure they are maintained and enhanced as a function of maintaining GDP, and building climate resilience.</p>

<p>General</p>	<p><b>Some missing key terms in structuring ecosystem descriptions and categorizations:</b> While the EES guide is overall well structured, some key terms and a coordinated structuring of information are missing, for example when referring to the terrestrial or continental ecosystems more broadly. There should be a clearer structuring of ecosystems to introduce:  Forest ecosystems (temperate forests, rain forests and tropical forests)  Agroecosystems (grasslands, steppes, savannas, deserts and mountains, peatlands and swamps)  Oceanic ecosystems (seas and oceans)  Lotic ecosystems (rivers, lakes, streams)  Lentic ecosystems (mangroves, etc)  This classification is important and essential because it allows a better understanding of the ecosystem services of each sub-ecosystem, especially for those who are not experts in understanding this sub-theme. It should also be acknowledged that as each country has its own policies concerning the management of ecosystems, it could be useful to integrate the protection and safeguarding of ecosystems into the revisions of the Nationally Determined Contributions (NDCs) of the countries proposing projects in these components so that the climate change adaptation plan is both more prominent and more effective.</p>	<p>GCF Observer Network</p>	<p>Thank you very much. The Secretariat is currently working on a taxonomy for Ecosystems, that is expected to be used to enhance our understanding on the baseline conditions of the ecosystems to be intervened. This taxonomy is considering globally accepted classification systems such as IUCN and IPBES. The taxonomy will also consider the services each ecosystem provide, and the relevance of maintaining and enhancing services provision for climate resilience increase.</p>
<p>General</p>	<p>Overall, the document is very well done and includes language for major issues that have been identified in the forest and water domain but lacked attention. It also includes language that covers many of the issues raised during the meetings of the sub-task force on monitoring of aquatic and transitional ecosystems under the task force on monitoring for the UN Decade on Ecosystem Restoration. Specifically, it makes reference to the lack of indicators for monitoring/evaluation and the lack of knowledge on the state of ecosystems and inventories. It would be suggested to include that these gaps are larger when it comes to freshwater and transitional ecosystems.  In addition, it consistently uses passive words such as – could, would, should, offers, supports, encourages, and so on. There is no 'guidance' as to the how, definition, good practices and so on. It might be more accurate to term it a 'framing up of ...' and then look to create a 'guide' that relates to how actions might be taken.</p>	<p>FAO</p>	<p>We appreciate your comments and recommendations. Issue of indicators for freshwater is included in table 3. On the use of passive words, this allows flexibility.</p>
<p>General</p>	<p>It would be nice if GCF could reference the FAO study on the forests in the indigenous and tribal territories in Latin America in relation to the points on 568-575, 636, 638, 669, as this is by far the most exhaustive review of the issue, with regards to Latin America: FAO and FILAC. 2021. Forest Governance by Indigenous and Tribal People. An Opportunity for Climate Action in Latin America and the Caribbean. Santiago. <a href="https://doi.org/10.4060/cb2953en">https://doi.org/10.4060/cb2953en</a> It is suggested to add "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests" as a reference</p>	<p>FAO</p>	<p>Reference added in text and reference section.</p>
<p>General</p>	<p>Overall, the document is very well done and includes language for major issues that have been identified in the forest and water domain but lacked attention. It also includes language that covers many of the issues raised during the meetings of the sub-task force on monitoring of aquatic and transitional ecosystems under the task force on monitoring for the UN Decade on Ecosystem Restoration. Specifically, it makes reference to the lack of indicators for monitoring/evaluation and the lack of knowledge on the state of ecosystems and inventories. It would be suggested to include that these gaps are larger when it comes to freshwater and transitional ecosystems.  In addition, it consistently uses passive words such as – could, would, should, offers, supports, encourages, and so on. There is no 'guidance' as to the how, definition, good practices and so on. It might be more accurate to term it a 'framing up of ...' and then look to create a 'guide' that relates to how actions might be taken.</p>	<p>FAO</p>	<p>We appreciate your comments and recommendations. Issue of indicators for freshwater is included in table 3. On the use of passive words, this allows flexibility.</p>

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General	The landscape approach is only mentioned in the references, even if it would help addressing many issues related to water-dependent ecosystems in particular.	FAO	Added in definition, references, and in Glossary sections.
General	It is suggested to consider mountain ecosystems separately for their important water provisioning services to urban areas	FAO	Already included in line 1092.
General	1. The document achieves to reflect a correct diagnosis and laying out the key principles for future investments, identifying barriers and possible actions for transformational potential, but is lacking explanation of how the GCF might take up these issues from a practical perspective. 2. Given the strong complementary of Ecosystem and Ecosystem Services (EES) and Forest and Land Use (FLU) there would be useful to add an overarching document showing the links/synergies/complementarities between them. The split of the two may introduce some unhelpful segregation for countries who should be advancing integrated strategies.	FAO	Synergies and overlaps are explained throughout the guide (example Table ES-1). Please note that the guidance should not be rigid and thus it should not dictate practical perspectives, although examples are provided
General	The landscape approach is only mentioned in the references, even if it would help addressing many issues related to water-dependent ecosystems in particular.	FAO	Added in definition, references, and in Glossary sections.
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<p>Executive Summary</p>	<p>Comment (56) In summary, the guidance note correctly mentions the need to taking an integrate ecosystem approach that looks into “stacking” the various ecosystem services and interconnection as a best practice. This is welcome as it allows projects and approaches to be increasingly innovative in measuring and harnessing these connection and identifying various entry points for stakeholder engagement and governance. The guidance note also provide a very helpful section in terms of what they consider to be best practices on ESS management. We think this clarifies the type of innovation the GCF is looking to in a way that is more understandable. On the constructive side, the note could be better structured. For example, at various points it is repetitive and circles around issues without providing the level of depth or discussion that is necessary thus overlooking various aspects for innovation that are available on the ESS side. This includes EBA itself (which is mentioned only in a table and is not completely defined nor linked and in fact is missing from Section 3) as solution that leverages the capacity of natural systems to provide resilience based services and on the various approaches for restoration and ecosystem management that allow for innovation. The note mentions innovation in ESS only as far as it is related to economic models and regulatory instruments thus misses the opportunity to promote innovation through restoration action and nature based solutions and the knowledge that may be gained by collecting results from various approaches (something the GCF is well positioned to allow through its vast portfolio and is a key barrier for promoting nature based solutions). Hence there is a greater opportunity to provide more depth in its approach particularly when it comes to adaptation. It would also be important to clarify the approach to “restoration” of ecosystems as often times projects sent to GCF that focus on restoration action from past anthropogenic impacts receive increased pushback. In these cases the restoration is the adaptation solution being prized, however when these are analysed by GCF there seems to be an endless discussion on the “climate additionality” of the intervention (focusing more on the driver and less on the results for adaptation services that will result from the restoration itself). Having a clear guidance on this logic would be helpful in framing projects that prize restoration as a nature based solution to climate impacts. Finally, the section regarding analyzing the cost efficiency of effectiveness of the project could provide greater guidance at the type of analysis that can be included (for example the “do nothing” scenario analysis that is being encouraged). Guidance on what this and what it entails would allow for greater comprehension when developing the financial analysis for these type of projects. Also, we would like to express that we hope that the day-to-day application of the guide will be governed by the vision expressed in the document. Based on our experiences and numerous conversations with the Secretariat and ITAP about proposals that deal with ecosystems, we find that conclusions have often been contradictory to the vision presented here. For example, the equal emphasis placed on “protection”, “restoration”, and “management” as means to effect transformational change is welcome, but we have often faced push back on projects that focus on “management” of ecosystems as establishing a stronger climate rationale is more difficult. Similarly, the guide seems to place equal emphasis on actions within the four pillars of “transformational planning and programming”, “catalyzing climate innovation”, “mobilization of finance” and coalitions and knowledge to scale up success”. In our experience of working with the GCF, there appears to be a preference within GCF to favor tangible investments.</p>	<p>UNDP</p>	<p>Definitions clarified. Innovations beyond finance have been included in Table 9. Positive comments on stacking ESs, needs to define EBA (note: it is defined on a footnote), need to emphasize innovation related not only to economics but also to restoration and NBS.</p>
<p>Executive Summary</p>	<p>Suggest positioning this differently. The GCF has an opportunity to position its funding as pandemic prevention AND climate mitigation/ adaptation. It’s not ‘in spite of’, it’s ‘because of’.</p> <p>Lots of recent work documenting the connection between deforestation and sources of zoonotic disease, and the role of avoided deforestation in preventing the next pandemic.</p>	<p>Conservation International</p>	<p>Thank you for the suggestion. This has been included, see line 246 for example. More details on Covid-19 and links to ecosystem and biodiversity health have been included.</p>

Executive Summary	Why AFLOU (Agriculture, Forestry and Other LandUse) not included when the table on cross sectoral issues mentioned about Agriculture and Food Security? Alternatively all the mitigation and adaptation measures in GCF should have been pooled in AFLOU itself rather than separate areas	Dr. Prachi Ugle Pimpalkhute	Clarification added.
Executive Summary	The separation of freshwater, coastal, and marine ecosystems (including peatlands) from forests does not make ecological sense. Many peatlands are tree-covered. Mangroves are coastal forests.	Conservation International	Thank you very much for this comment. This is true, but for the purposes of the guide this needs to be simplified, even though it will not alter how projects are developed in practice as the guides are not expected to be a fixed template, but to offer a broad set of opportunities and alternatives, including projects, programmes and approaches implemented outside GCF.
Executive Summary	Sustainable forest management also has significant adaptation benefits. These should be considered in the sectoral guidelines, given that there is an opportunity for cross-cutting adaptation and mitigation projects funded by GCF in the forestry sector.	UNDP	Thank you. This has been strengthened in the Forest and Land Use guide.
Executive Summary	In the description of ecosystems, please separate terrestrial ecosystems from aquatic ecosystems (fresh, brackish, and saltwater). Please include wetlands in agro-ecosystems because in developing countries these wetlands, which play important roles in carbon storage, are often destroyed through expansion of agriculture – particularly to deal with disruptions in the agricultural calendar that result from climate change. There is also a difference between peat soils and swamp ecosystems that is not sufficiently made clear.	GCF Observer Network	Thanks for the comment. There are numerous ways to classify ecosystems, often dependent on the objective. In this case we think that wetlands should be classified for their ecosystem function, whereas agro-ecosystems is a land use classification. It should be noted that Wetland Day includes mangroves, saltmarsh, peatlands, and coral reef as 'wetland'.
Executive Summary	It is important to name brackish ecotones (aquatic ecosystems) as an integral part of the fishery as they are the areas of greatest aquatic biodiversity (and as nursery grounds for many species) in developing country communities; likewise, water management for flood and drought control needs to be acknowledged.	GCF Observer Network	Thanks for the note. Due to the size limitations for the sector guide, we have to follow a simplified ecosystem classification and thus cannot utilize all classifications and sub-classes of ecosystems.
Executive Summary	'climate emergency'	GCF Observer Network	Thanks for the comment, not clear what it refers to.
Executive Summary	Wetlands as important carbon storage ecosystems, which are under considerable anthropogenic pressure, should be mentioned and acknowledged here.	GCF Observer Network	Thanks for the comment. The text mentions the scale of anthropogenic pressure on ecosystems, which occurs for most ecosystems; including climate change which is also anthropogenic.

Executive Summary	<p>The description here needs to include other natural areas that are often overlooked. One key example is seabeds which are being dredged and mined for sand, especially for land reclamation to address sea level rise. (This was a case of concern with the recently approved FP165 – dredging which disturbs the seabed ecosystem and productivity, increases suspended sediments, and noise pollution that can harm marine mammals and their feeding routines. See <a href="https://academic.oup.com/icesjms/article/72/2/328/676320">https://academic.oup.com/icesjms/article/72/2/328/676320</a>.) While this concern is alluded to on lines 86-88 (marine ecosystem management), an explicit mention in the report of seabed destruction warrants inclusion.</p>	GCF Observer Network	This is a good point, anthropogenic disturbance has a large impact on all ecosystems. However, it is not possible to cover all drivers of ecosystem degradation.
Executive Summary	<p>The statement here: “at scales sufficiently large to be sustainable and facilitate evolutionary potential to adapt to climate change” seems to be open for interpretation on what constitutes ‘scales sufficiently large’ given the different geographical and social contexts in which these ecosystem functions are located. While lines 80-85 seem to contextualize the issue of scale, the risk of misunderstanding the statement above remains present. For example, if the ecosystem is serving a local community’s livelihood and wellbeing, but it is small in scale in comparison with the growing scale of productivity (perhaps measured in GDP) of the country, then it might be devalued and it might be given up instead for development (i.e. for construction, infrastructure, industrial park, etc). Sustainability in particular cannot just be measured or estimated in economic terms, but need to take into account non-economic (culture, tradition, biodiversity etc.) values.</p>	GCF Observer Network	This is a guideline and difficult to specify exact scales as is dependent on ecosystem, location, and country-specific cases.
Executive Summary	<p>Conceptually unclear: there are also forested wetlands. To correct into: "Peatland ecosystems (whether covered by forests or other wetland species)...". In the current form, the text would assume that forested peatlands, which are not wetlands would still be sequestering carbon, which is not true in the tropics.</p>	FAO	Thanks for the comment. We see that there are many ways to explain ecosystems; within the size possible for this text, it may not be possible to go into detail. However, we see that peatland ecosystems can also be covered by forests (e.g., tropical peatland forest) - depending on classification, these can be wetlands or in some woods. Peatlands still sequester carbon and have the potential as a significant source of emissions.
Executive Summary	<p>Some clarification is needed on what is meant by “integration of both green and grey infrastructure.” It needs to be clarified that an “integration approach” cannot mean and should not mean window-dressing continued grey infrastructure development by adding some “green component” (à la an ill-advised discussion about “nature-based solutions”) See reference line in table 8 which makes this link. Secondly, it might be useful to include reference to the aquatic environment (‘blue infrastructure’) here as well.</p> <p>This is different from the tone and connotation of a “building with nature” planning/process indicated for example in line 642/Table 4; or lines 655/Table 6 and line 689 which make those references to what seems overall a more comprehensive, and less utilitarian approach. This inconsistency in the text should be resolved with a clarification to exclude ‘nature-based window-dressing’ of fundamentally unchanged grey infrastructure approaches.</p>	GCF Observer Network	Thanks for the comment. We believe that given the scope of the sector guide - the concept is sufficiently explained. Given the GCF’s policies and procedures, we believe that projects will not ‘window dress’.



Executive Summary	The reference to protection as short-term or near scale action is misguided. Protection is a continuous activity and should be reflected in long-term planning efforts.	GCF Observer Network	Thanks, we believe that protection is part of a mixed heterogenous process for protection landscapes. Here protection, means activities to arrest immediate threats to an ecosystems degradation, the long term strategy for protection may comprise a number of management interventions including protection, restoration and sustainable use.
Executive Summary	A better definition and differentiation of private sector actors and their respective contributions is needed, as not all are contributing equally and equally well in maintaining ecosystem services. This is needed throughout this guide. Though the integration of micro and small enterprises at the local level can certainly benefit ecosystems and the communities that depend on them while expanding local livelihood opportunities the benefits are less clear when introducing non-local or foreign or multinational companies. Many of the large-scale private sector actions are maladaptive at best and EES destructive at worst. Related, the blunt presentation of the creation of markets as a strategy that promotes the protection, management and restoration of ecosystems is unhelpful and poorly supported by evidence. The scope, scale, and transactional environment associated with different approaches to 'market creation' needs better clarification and differentiation, especially when international markets for goods (commodities) and services are considered.	GCF Observer Network	Thanks for the comment. However, we feel it is beyond the scope of the guide here to go into further detail regards private sector definitions. It should also be noted that GCF is developing a Private Sector Strategy.
Executive Summary	<p>We want to commend the GCF Secretariat and Board on publishing this very useful document. Overall, well thought out and informative. An easy read and numbering each line made for easy commenting. Our general comments to enhance this document are as follows:</p> <p>Nature based-solutions as an umbrella concept under which ecosystem based approaches rest. This needs to be more explicit in the sectoral guidance.</p> <p>The degradation of ecosystems are most often linked to unsustainable agriculture, land use, deforestation, overexploitation of marine resources. These underlying issues need to be addressed in country planning and what the Fund will be doing to address these underlying issues need to be made more explicit especially in relation to planning and valuing natural assets.</p> <p>Linkages to GCF sectoral guides on forestry, agriculture helpful to include in the document.</p> <p>Details on what the Fund would be doing to build capacity, awareness, project pipeline, readiness for ecosystem based and nature based projects would have been helpful to include.</p>	UK	Thanks for your comment, due to direction and guidance from the board we prefer to use the term ecosystem based management or ecosystem-based adaptation than nature based solutions. The sector is closely linked to Agriculture and Food Security, and Forest Land Use guides. Documents on current pipeline regards ecosystem-based projects and future strategic direction will be produced in due course.
Executive Summary	An explicit mention of a "rights-based approach" to EES should be included here. The term is in the glossary, but is never spelled out in the text and should be highlighted in both the Executive Summary and relevant text passages throughout the draft guide.	GCF Observer Network	Thanks for the comment, as above we have added text on this.

Executive Summary	<p>Ecosystem valuation and natural capital assets, presented as key climate solutions here, should be approached with care and proper safeguards put in place to avoid misappropriation of these terms. A market approach to conservation, which accords price tags on ecosystem services, and to some extent, individual components that make up the ecosystem, seems to convey that governments are no longer able to implement appropriate environmental regulations and therefore that the private sector (by way of financializing nature) should take over conservation. The evidence for the benefits of such a shift is very weak. On the same note, for governments to give a price tag on a particular ecosystem is to transform policy decisions into cost-benefit analyses that are often based on hedonistic valuation, i.e. governments or corporations are allowed to assess whether it is more profitable for them to curb environmental destruction or invest in restoration – or continue with environmentally harmful projects in which the extractive value far outweighs the local economic benefits of ecosystem services.</p> <p>In addition, there are ethical choices to be made that cost-benefit analyses cannot consider: the choice to be made on how the benefits and costs are distributed across affected parties or generations is not addressed by the simple adding up of individual benefits. Further reading: <a href="https://greenfinanceobservatory.org/wp-content/uploads/2019/05/50-shades-biodiversity-final.pdf">https://greenfinanceobservatory.org/wp-content/uploads/2019/05/50-shades-biodiversity-final.pdf</a></p>	GCF Observer Network	<p>Thanks for the comment. Given the scope and context of the sector guide, we are not in a position to go into depth to explain this in detail. However, we do think that global ecosystem services need to be valued correctly, in terms of solutions, planning, and recognizing their role in adaptation. It is only when policymakers reflect on their value will long-term solutions be fully integrated into public and private investments and planning.</p>
Executive Summary	<p>In thinking about green and blue infrastructure as emerging alternatives to grey engineering, the proposed focus on “cost-effectiveness” is way too narrow and misguided. A sole focus on cost-effectiveness could lead to continued support for grey infrastructure approaches, in the name of cost savings, while disregarding multiple other, often non-economic or financial factors. This is a particular concern in relation to adaptation finance. Better to speak here instead of the “overall effectiveness and sustainability of green and blue infrastructure.” As mentioned earlier, green-(blue)-grey approaches need to put nature first, not subjugating green (and blue) approaches as window-dressing/corporate greenwashing of continued grey practices.</p>	GCF Observer Network	<p>Thanks for the comment. The text has been changed.</p>
Executive Summary	<p>There is disagreement among CSO organisations on the use of Carbon Markets. Many of the colleagues active in the GCF Observer Network are very dubious of the role of carbon markets in EES, given the use of carbon sequestration (or avoided emissions) as the sole criterion by which projects are measured, as opposed to approaches which better integrate the multiple benefits that the variety of ecosystem services can provide. We question their inclusion here given the lack of environmental integrity, non-fungibility of different carbon stores, lack of consideration of biodiversity values, and other issues. We note the statement at lines 277-279 in the FLU draft guidance, expressing doubt about the use of carbon offsets: “There are limitations to land-based mitigation, however, as net carbon uptake rates are slow and amounts are low when compared to CO2 released by fossil fuel combustion (Baldocchi and 278 Penuelas 2019).” In the opinion of many of our colleagues, carbon markets are unsuitable for EES approaches and if the GCF was to pursue those, we fear it could end up promoting corporate greenwashing. Given limitations on the remaining carbon budget to enable us to keep warming below 2°C, we suggest that the true paradigm shift to be accomplished here is to move away from offsets and toward the conservation, restoration, and sustainable management of ecosystems.</p>	GCF Observer Network	<p>Thanks for the comment. Given the scope and context of the sector guide, we’re not in a position to go into depth to explain this in detail. However, we do think that all ecosystem services should be considered. If projects are designed properly so that communities are rewarded for their role in carbon ecosystem services, it should not be written off. GCF is also well-placed to test some of these ideas and strategies.</p>
Executive Summary	<p>Reference to nature-based solutions should be struck from this section and replaced with ‘ecosystem-based approaches’ or adaptation (EbA); likewise, financial viability should not be considered as the main criterion for the promotion of such approaches.</p>	GCF Observer Network	<p>Thanks. Agreed this has been consistent throughout the text.</p>
Executive Summary	<p>Why no mention of Land cover and built environment?</p>	Dr. Prachi Ugle Pimpalkhute	<p>This is in the main text, not in executive summary.</p>
Executive Summary	<p>Why no mention of disaster risk when it is an integral part of cross sectoral issue?</p>	Dr. Prachi Ugle Pimpalkhute	<p>Thank you for your question. Please note that climate risks are prioritized.</p>
Executive Summary	<p>Why no mention on climate risk (physical and transitional risks) when it is also an cross sectoral issue ?</p>	Dr. Prachi Ugle Pimpalkhute	<p>Climate risks have been better reflected.</p>

Executive Summary	<p>Conab, after approval of the MAPA and the necessary regulations, can direct its policies to prioritize family farmers, extractivists, traditional communities, indigenous peoples, quilombolas and women, encouraging sustainable practices, scoring on a scale for access. To do so, it would start with publicity campaigns, guidance, until, in the future, the application of the defined criteria and subsequent inspection and verification of indicators that can demonstrate the effectiveness and efficiency of the action against the policy. Actions can seek synergy with the performance of other bodies in each sphere of competence, such as the Brazilian Forest Service (SFB), when it comes to extractivism and forest management, with the respective MAPA secretariats, when defining access to other policies such as PGPMBio, PGPM, PAA and organic versus conventional agriculture. Interacting with ATER (technical assistance and rural extension), universities and IBAMA (Brazilian Institute of the Environment and Renewable Natural Resources) among others. The emphasis would be on socioeconomic and environmental sustainability, also working to enhance the traditional knowledge of indigenous peoples, quilombolas and the valorization of women in rural areas.</p>	CONAB	<p>Thank you for the suggestion, We remain available to discuss with CONAB on any potential project idea or concept note that could be shared with the GCF Secretariat. We suggest CONAB to identify the direct access entities in the country. Please find the complete list of accredited entities here:  <a href="https://www.greenclimate.fund/about/partners/ae">https://www.greenclimate.fund/about/partners/ae</a> and for Brazil:  <a href="https://www.greenclimate.fund/countries/brazil">https://www.greenclimate.fund/countries/brazil</a></p>
Executive Summary	Cross-sectoral issues are mentioned for 7 and not 8 GCF result areas	IDB	<p>GCF works under 8 results areas. However, for developing the sector guides, we realized that we needed to be more specific, and therefore, we needed to refer to “sectors” rather than to result areas. In this sense, we find “sectors” such as (i) agriculture and food security, (ii) Health and wellbeing and (iii) water security. Each of these “sectors” has its own sector guide.</p>
Executive Summary	The term “ecosystem-based coastal zone management” may be confusing as it is not a commonly used term. It could refer to both integrated coastal zone management (ICZM), or ecosystem-based management as it applies to coastal areas	Rare	Agreed, text edited throughout.
Executive Summary	<p>Ecosystem and ecosystem services (this guide)</p> <p>-it is important to name brackish ecotones (aquatic ecosystems) as an integral part of the fishery as they are the areas of greatest aquatic biodiversity in developing country communities</p>	Project Assistant YVE- Cameroon	<p>Thank you for the suggestion. Please note that given the scope of the sector guide, we could not reach this level of detail. We expect to develop a more detailed analysis based on our GCF portfolio for approved ecosystems projects, where we intend to reach a higher level of detail regarding the ecosystem types being targeted.</p>
Executive Summary	<p>Ecosystem and ecosystem services (this guide)</p> <p>-water</p> <p>Water management for flood and drought control as developing countries align their agriculture with the agricultural calendar (this is the mitigation and adaptation component)</p>	Project Assistant YVE- Cameroon	<p>Thank you very much for this suggestion. These elements have been incorporated in the water sector guide and the agriculture &amp; food security sector guide.</p>

Executive Summary	Under urban areas, green cities and smart cities are jargony without agreed upon definitions. We suggest not using these terms.	World Wildlife Fund (WWF)	Green cities is used in Urban Sector Guide, has been kept. Smart cities has been removed.
Executive Summary	"increase climate resilience IN Ecosytem and Ecosystem Services", not clear. This could be "climate resilience OF ecosystem and ecosystem and ecosystem services" or "climate resilience THROUGH Ecosystem and Ecosystem Services" (which is ecosytem-based adaptation), so not clear what IN means. And Ecosystem should be Ecosystems.	World Wildlife Fund (WWF)	Thank you, text has been adjusted accordingly.
Executive Summary	Suggestion: emphasise the importance of green recovery	IDB	Thank you for the suggestion. Please note that the GCF has developed a publication on this matter, available here: <a href="https://www.greenclimate.fund/event/gcf-support-climate-resilient-recovery">https://www.greenclimate.fund/event/gcf-support-climate-resilient-recovery</a>
Executive Summary	Not only climate emergency but also undergoing a sixth mass extinction – might be good to rephrase as “ Humanity is breaching planetary boundaries, and global ecosystems are experiencing both a biodiversity crises and a climate emergency”.	Tebtebba Foundation	Adjusted to emphasize urgency of biodiversity and ecosystem loss.
Executive Summary	The role of the GCF (four pillars) differs from other sectoral guides (i.e., energy generation & access). On the understanding that the role of the GCF might vary depending on the sector, the four pillars also share a common objective among the 8 result areas. As it is presented, it is not clear whether the section refers to the objective of each of the four pillars in general or if they are specific for the EES result area.	IDB	The four pillars are aligned with the two published guides (Agriculture and Cities) as well as with overall guidance on how to develop the sector guides.
Executive Summary	We suggest adding the reference: <a href="https://www.nature.com/articles/s41558-020-0738-8">https://www.nature.com/articles/s41558-020-0738-8</a> Also, CI can make a map of the distribution of irrecoverable carbon available for inclusion in the sectoral guidance. Map of Irrecoverable Carbon in Earth's ecosystems  Figure 1: Source: Irrecoverable Carbon map: Noon et al. (2021.) "Mapping the irrecoverable carbon in Earth's ecosystems." Under review.	Conservation International	Thank you for the offer to include the map, Reference has been included.
Executive Summary	Consider broadening the scope for other irrecoverable ecosystem services that are relevant for adaptation and sustainable living systems, going beyond carbon	GIZ	Thank for the comment, the concept of loss of ecosystem services is inherent to ecosystem degradation, therefore restoration is an option, as well as the "ecosystem-based" management. Restoration refers to that used by Decade of Ecosystem Restoration 'PREVENTING, HALTING AND REVERSING THE DEGRADATION OF ECOSYSTEMS WORLDWIDE'.
Executive Summary	GCF Strategic Plan 2020-2023	IDB	Correct reference of the GCF updated strategic plan added.
Executive Summary	Mangroves also provide important mitigation potential as well.	Rare	Text adjusted.

Executive Summary	Mangroves are second only to peatlands as the ecosystem with the highest density irrecoverable carbon (per area). They are incredibly important for mitigation, not just adaptation	Conservation International	Text adjusted.
Executive Summary	Add 'coastal' - provide the best opportunity for coastal adaptation. Although recognizing that mangroves per unit sequester more carbon than terrestrial forests. However terrestrial forests can potentially cover more land area (coastal areas where mangroves are often have many competing demands for uses), and may have more capacity for carbon sequestration	Climate Risk Analyst, NBS Expert	Text added that mitigation and adaptation are not mutually exclusive.
Executive Summary	This is not to say that grasslands, forests, and potentially peatlands don't have a role in adaptation. Secondly, wetlands, freshwater lakes, etc, play a role in adaptation (maintaining the hydrological cycle, providing critical ES including erosion and sedimentation control – objectives necessary for food and water security.	UNDP	This is correct and the ecosystems mentioned in the comment have inordinate adaptation potential, we believe that this is reflected in the text.
Executive Summary	Conservation efforts of tropical forests, peatlands and proper grassland management also have considerable adaptation benefits. We would suggest not to “silo” interventions on these ecosystems solely to mitigation.	UNDP	Text added that mitigation and adaptation are not mutually exclusive.
Executive Summary	Forests can also have substantial adaptation benefits in flood control for example. It seems subjective to indicate that these are the “best” opportunities for adaptation. Other very important opportunities of ecosystem based adaptation are: protection of natural springs, aquifers, and watershed vegetation, regenerative agriculture and livestock production, reforestation and land restoration. All of these have adaptation benefits such as: micro-climate regulation, water availability, soil ecosystems health, water retention for vegetation, etc.	UNDP	Text added that mitigation and adaptation are not mutually exclusive.
Executive Summary	The 'best' ? I would remove	GGGI	Text adjusted.
Executive Summary	Mitigation could also play an important role in marine ecosystems. Conserving coral reef sequesters considerable amount of CO2, on the other side terrestrial ecosystem are also very relevant for adaptation. Therefore, take into consideration both the terrestrial and marine 'as relevant to very relevant' for both mitigation and adaptation	GIZ	Text added that mitigation and adaptation are not mutually exclusive.
Executive Summary	Ecosystems also include human beings, although technically humans are animals. It's important to include people as part of, rather than separate from, nature.	World Wildlife Fund (WWF)	For operational purposes the distinction is necessary. In the corresponding paragraph this has been better explained.
Executive Summary	This include the variability within and between elements, structures and functions interacting as a functional unit. Functionality relies also on the existence of such variability and diversity of such interactions (Biodiversity underpins ecosystems and ecosystem services).	GIZ	We believe that functionality refers to ecosystem services which are integral components of the ecosystems ability to function. This should be expressed in the text, further academic discourse on this issue should be done in different forum. The role of complexity and stability in ecosystems has been debated for many years but is outside the scope of this paper since we only have limited size allowed.
Executive Summary	There are studies that a proportion of so called 'natural' or 'wilderness' areas are actually low human impact ecosystems. Suggested rewording: “They encompass natural environments with various levels of intensity of human intervention from negligible or low impact to intensive”?	Tebtebba Foundation	The wording is sufficiently clear to encompass this comment.

Executive Summary	It may be useful to clarify here which category protected areas fall under – managed or unmanaged.	Rare	Thank you very much for this comment. Unfortunately the guide is not expected to reach this level of detail given its scope. The GCF is currently developing a taxonomy and portfolio analysis, aiming to reach this level of specificity.
Executive Summary	It may also be useful to include “intact forest landscapes” as an example of ‘natural/unmanaged ecosystems.	Rare	Thank you for the suggestion. However given the scope of this guide, we do not expect to reach this level of detail.
Executive Summary	The term ecosystem services is superseded in IPBES with the phrase ‘nature’s contributions to people’, which captures the observation that services may fit to more than one category – it may be useful to add this as a footnote ( <a href="https://www.ipbes.net/glossary?search_api_fulltext=&amp;f%5B0%5D=glossary_title_initials%3AE">https://www.ipbes.net/glossary?search_api_fulltext=&amp;f%5B0%5D=glossary_title_initials%3AE</a> )	Tebtebba Foundation	Thank you. This has been added in the glossary.
Executive Summary	It is unclear what "healthy" ecosystem services is referred to	FAO	Adjustments made, replaced with ecosystem integrity.
Executive Summary	Another mechanism not mentioned here is the feedback and interactions between land degradation and cc. Land degradation is linked to, includes ecosystem degradation. Land degradation over large enough areas can reinforce climate change and its impacts. Climate change impacts, such as, increased frequency and intensity of rainfall, higher temperatures, droughts and stronger winds exacerbates several ongoing land degradation processes. If degradation is widespread enough, it will impact the climate system reinforcing trends and consequently affecting societies around the world. (ref: IPCC 2019. Climate Change and Land: A Special Report. Accessed: <a href="https://www.ipcc.ch/srccl/">https://www.ipcc.ch/srccl/</a> ) Thus, this introduction should reflect these connections within the climate-biophysical-natural systems.	UNDP	The reference has been included.
Executive Summary	We suggest replacing "tackle" with "promote" or a similar verb.	World Wildlife Fund (WWF)	Agreed, changed.
Executive Summary	Also marine (marine systems are huge carbon sinks) E.g. IMF study on whales. 2. Forests are mentioned above but not here as important carbon sinks,	UNDP	This is not necessary in the executive summary, it is in the main text.
Executive Summary	Consider starting the sentence with: "Coastal wetlands and peatlands play a key role in achieving..."	Submission on behalf of USAID	Agreed, edits made.
Executive Summary	After ‘inappropriate’, add ‘unsustainable’	Tebtebba Foundation	Agree, change made.
Executive Summary	This sentence does not fit well with the previous one. The first one focuses on coastal wetlands and peatlands only and then the idea shifts to ecosystem degradation as a source of viruses. We suggest the following revised text: "There is evidence of the key role played by coastal wetlands, peatlands, mangroves, coral reefs, seagrass beds and inland waterways in achieving resilient systems and enhancing biodiversity and natural habitats. This is important for human life to thrive, given that in the degradation of natural ecosystems and inappropriate exploitation of wildlife has been demonstrated to increase the risk of emerging novel viruses harmful to humans, such as the recent Covid-19 (Dobson et al. 2020). "	UNDP	These are different concepts and the paragraph has been slightly edited to make it clear.
Executive Summary	IETA generally supports the paradigm shifting pathways outlined in the draft sectoral guides on Ecosystems & ecosystem services.	IETA	Thank you for the comment and the agreement.

Executive Summary	Excellent sentence. With this statement, in line 21 suggest replacing IN with OF, as per comment above.	World Wildlife Fund (WWF)	Agree, edit made.
Executive Summary	Important to mention the mobilisation of finance at local levels	IDB	Mobilization of finance (public and private) has been strengthened throughout the guide.
Executive Summary	Paradigm shift should also be centered around transformation and innovation that allows for long-term climate resilience development beyond one-off unsustainable approaches that do not last. We recommend to make this a lot more ambitious: the "paradigm shift" in ecosystems is to change our economic systems and development pathways so that they support the regeneration of ecosystems and secure the resilience of ecosystem services to climate change and other external shocks. The shift is that societies and communities can find livelihoods, jobs and lifestyles which support thriving ecosystems and the services that these societies and communities depend on, as opposed to simply "ensuring functionality".	UNDP	Indeed, these points are very good. The commenter should also look at the other sector guides which include transformational pathways, such as in the food value chain. GCF encourages innovation in proposals, a recent GCF briefing document on innovation was prepared by the GCF Director. Changing the 'economic systems' in the context of increased valuation of natural capital and integration not national strategies is implied in the guide.
Executive Summary	Regarding the statement: "facilitate evolutionary potential to adapt to climate change", the velocity of climate change is too fast for evolutionary potential to make sense in the near-term.	World Wildlife Fund (WWF)	Thank you for the suggestion. The text has been edited.
Executive Summary	Perhaps re-phrase as co management and/or collective management? Further explanation of the principle of "joint management" may be necessary – usually, answers to 'by whom and how the ecosystem is managed' are rather relevant when supporting paradigm shift. This is related to elements of institutional economics and the importance of understanding and defining the existing formal, customary and informal property rights	GIZ	Thanks for the comment. We have left the text as it is, recognising the complexity of the issue and many different contextual definitions which would not be appropriate for the length of this sectoral guide. We agree that customary rights are important, and this is also reflected in GCF's IP policies.
Executive Summary	Confirm that peatlands have particularly high sequestration. It's mostly storage – the irrecoverable stocks that have built up over centuries and millennia of sequestration.	Conservation International	Agree, text adjusted.
Executive Summary	Again, protecting, improving management of and restoring these ecosystems is a necessary adaptation option as well as mitigation of cc. This linkage should be reflected throughout.	UNDP	Text added that mitigation and adaptation are not mutually exclusive.
Executive Summary	Unclear what "joint management" refers to.	UNDP	Refers of the human-environment interface. The edits made in the text intend to clarify.
Executive Summary	Sustainable seems low in ambition. At this point, we should be aiming for approaches which will result in ecosystem regeneration. "Sustaining" the status quo in a vast majority of ecosystems will not result in resilient ecosystem services in the near future.	UNDP	Reference is made to "maintaining or enhancing."
Executive Summary	How can "protecting ecosystems require healthy ecosystems"? This needs to be rephrased.	UNDP	It has been reworded.

Executive Summary	<p>We would have liked to see a more holistic view of landscape management. The separation of the “pathways” is not clear. One pathway refers to the actual enhancement of ecosystems action (not clear why it’s being limited to terrestrial and freshwater) and the other refers to planning. If so, then both pathways could potentially work for all ecosystems. Why divide terrestrial from marine and coastal? From an ecosystem perspective it makes sense to look at the landscape as a whole instead of artificially dividing it up. We suggest to instead say that 1st pathway is “ecosystem services enhancement and regeneration practices applied on the ground” and the 2nd pathway is “Ecosystem protection, restoration and regeneration integrated into planning”. Also, we find the second pathway not very ambitious. It’s been decades of “integrating X into planning” and yet, ecosystems and biodiversity only continue to get degraded.</p>	UNDP	<p>Whilst we agree that the pathways could have been defined differently, the rationale for selecting the current ones is presented in the text. It was largely undertaken, as terrestrial and oceanic/marine ecosystems are two broad categories that require different approaches. But we recognize that the pathways could have been divided differently, for example, such as the forest and land use sector guide, that has a different classification: Protection, Restoration and Sustainable Use. We also depend upon AE such as UNDP to develop transformational and innovative project proposals, as these can not all arise from a short sectoral guide. We encourage UNDP to present proposals that include highly innovative mechanisms to arrest, reverse and restore ecosystem degradation.</p>
Executive Summary	<p>Same comment as from line 18 regarding the potential conflation between the terms “ecosystem-based management” and “integrated coastal zone management”</p>	Rare	Text has been adjusted.
Executive Summary	<p>Should this be “planning”? Otherwise, it is hard to distinguish from the above pathway.</p>	UNDP	<p>Planning is in the previous text line.</p>
Executive Summary	<p>Can we talk about green, grey and blue infrastructure (for aquatic environments)?</p>	Project Assistant YVE- Cameroon	Text adjusted.
Executive Summary	<p>Suggestion: include technology transfer within this pillar</p>	IDB	<p>The comment is not clearly understood. Also note that there is a separate GCF document on innovation, and GCF are doing a review of digital transformation in some targeted thematic areas.  <a href="https://www.greenclimate.fund/sites/default/files/document/accelerating-and-scaling-climate-innovation_0.pdf">https://www.greenclimate.fund/sites/default/files/document/accelerating-and-scaling-climate-innovation_0.pdf</a></p>



Executive Summary	<p>The particularities of each of the pathways are not clear. In both cases ecosystems and their services should be maintained, restored and sustainably used at different scales. In both cases we could achieve their maintenance and restoration by integrating ecosystem services into planning and development processes. Both pathways provide similar approaches only in different ecosystems. Many of the approaches and policy tools are similar. Perhaps, in the table of different pathways, start with approaches that are common for both pathways and then differentiate pathway-specific ones. Apart from this suggestion, consider clearly outlining ways to reduce impacts on and dependencies of ES through different options, recognizing the importance.</p>	GIZ	<p>Thanks for the comment. Whilst we agree that the pathways could have been defined differently, the rationale for selecting the current ones is presented in the text. It was largely undertaken, as terrestrial and oceanic/marine ecosystems are two broad categories that require different approaches. But we recognize that the pathways could have been divided differently, for example, such as the forest and land use sector guide, that has a different classification: Protection, Restoration and Sustainable Use. We also depend upon AE such as GIZ to develop transformational and innovative project proposals, as these can not all arise from a short sectoral guide. We encourage GIZ to present proposals that include highly innovative mechanisms to arrest, reverse and restore ecosystem degradation and look forward to receiving these too.</p>
Executive Summary	<p>It is suggested to use immediate-term rather than short-term. Current framing is confusing.</p>	FAO	<p>Thank you for the suggestion. 'Immediate' is used instead of short-term</p>
Executive Summary	<p>What does "to provide alternatives to their use" mean here? The use of resources? In the context of local communities, why alternatives and not sustainable management/use of those resources? I recommend deleting the second part of this sentence as it is confusing.</p>	Submission on behalf of USAID	<p>Agreed, second part deleted.</p>
Executive Summary	<p>Suggest to replace with the following: "Regeneration refers to restoring to a better state, which in this case involves bringing back natural biodiversity and ecological connectivity, which will in turn, revive thriving ecosystem services for the communities that depend on them, yielding increased adaptive capacity to ecosystems and communities, as well as carbon sequestration opportunities. "</p>	UNDP	<p>The current wording is simpler. It has been incorporated.</p>
Executive Summary	<p>The clarification of the role of GCF investments in restoration needs to be clarified as how it relates to this definition. Restoration of ecosystem based services for adaptation needs to consider that degradation is often a result of anthropogenic drivers however this is not contradictory to the climate rationale (additionality logic) as managing these drivers and restoring ecosystem functions is in line with climate adaptation best practices in which restoration must be seen as an adaptation solution. Hence degradation drivers of these ecosystems despite these being anthropogenic should not exclude projects from being considered for funding when the restoration results will result in an enhanced capacity to manage climate impacts. Also, another key point in this sentence is the century-scale. In the economic analysis, considering standard discount rates, benefits over 20-30 years are discounted to zero, so will they be able to consider lower discount rates for these projects?</p>	UNDP	<p>Agreed, text has been edited to better reflect this comment.</p>

Executive Summary	Sustainable management or simply “management” will not create a paradigm shift. GCF needs to promote more ambitious approaches to ecosystem interventions, such as restoration and regeneration.	UNDP	Management can be a paradigm shift when compared with the alternative scenario or business as usual.
Executive Summary	Add “while allowing the SUSTAINABLE use of its products and services by human society.”	Rare	If services are maintained, they are by their nature sustainable.
Executive Summary	On emphasis for mitigation in certain ecosystems, and adaptation in others. Not sure that prioritising these particular ecosystems is helpful and did not see much evidence presented as to why these were selected. Also noting that each country has a particular ecosystem and climate change context, and therefore its own priorities in terms of which EES would deliver the best potential for mitigation or adaptation.	UNEP-WCMC	It has been explained in the main text of the guide that certain ecosystems provide more mitigation benefits, while other more adaptation benefits.
Executive Summary	It would be more helpful to have examples of what GCF views to be “appropriate” as interventions; this statement does not offer practical guidance or insight into GCF’s vision as a climate fund.	UNDP	Please note the substantive guidance provided in the tables, including the possible actions.
Executive Summary	Again, suggest to replace “management” with regeneration.	UNDP	Thanks for your suggestion. Management maintains what we don’t want to be lost; regeneration is covered under restoration. We should recognize restoration, such as IUCN Landscape Restoration encompasses a suite of actions from productive, protection and restoration.
Executive Summary	GCF Strategic Plan 2020-2023	IDB	Proper reference to the updated strategic plan included.
Executive Summary	Coastal (mangroves, seagrasses, tidal marshes) – definitely. Marine has less relevance for direct mitigation & not included in the paragraph except at the top.	Conservation International	Changes not necessary in the executive summary because these issues are developed in the main body of the document.,
Executive Summary	The sentence is unclear. What does “sharing or lessons” mean? Consider emphasizing concepts such as knowledge management, knowledge generation and co-production to support transformational change, promoting social learning, innovation & development of solutions.	GIZ	Typo corrected.
Executive Summary	Same stakeholders should be mentioned through the document. They differ in some sections.	IDB	Stakeholders vary depending on the context, the response strategy, the type of financial mechanism or structure considered, etc.
Executive Summary	Would be useful to also add inter-generational equity	Convention on Biological Diversity (CBD) UNEP	Inter-generational equity is implicit in “sustainable outcomes.”
Executive Summary	Integrating inter-generational equity	Convention on Biological Diversity (CBD) UNEP	Inter-generational equity is implicit in “sustainable outcomes.”
Executive Summary	Carbon storage?	UNDP	Carbon storage is mentioned in several places of the guide.

Executive Summary	In terms of what? This could be a subjective statement- please provide evidence and references.	UNDP	Evidence and references provided in the main body of the guide, not necessarily in the executive summary of the guide.
Executive Summary	IETA generally agrees with the barriers to achieving paradigm shifting pathways outlined in the draft sectoral guides (lines 95-99 in FLU, lines 101-115 in EES), including the economic, political, scientific, and regulatory barriers.	IETA	Thank you for the comment and the agreement.
Executive Summary	This section does not mention the challenges in managing ecosystems and thus maintaining their services in a changing climate. There are significant barriers due to lack of scientific knowledge on how ecosystems will respond to changes in climate and what the best management responses should be.	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, text has been adjusted.
Executive Summary	... budget planning? There are some initiatives that are directed at changing this trend such as Green Accounting, Natural Capital and Integrated approaches for Natural Capital Accounting that address positive and negative externalities in budget planning and allocation as well as national accounting. The basic idea is to incorporate environmental and ecological values in economic systems. However, many values of ecosystem services can't always be captured in monetary way, some of them are incommensurable to quantify. However, there are different possibilities. Rather than the valuation methodologies, focus can be placed on the way(s) they are used, co-produced and communicated. Mostly it is not a matter of methodology but of different political priorities	GIZ	Thank you very much for the comment. Recent discussions related to the development of the SEEA have evidenced the gaps and need of the valuation methods and approaches. Stocktaking reports allow to better understand the opportunities and limitations of different methods. GCF does not request partners to use specific methods but to respond to countries needs and differentiated capacities and realities. We also think that these are important issues that can be addressed; perhaps GCF Readiness (either country or multi-country) could be used to look at 'Green GDP/Natural Capital' in some focus countries.
Executive Summary	This is the KEY barrier and it is not only them not being measured in terms of economic value but also not being necessarily measured is their capacity to provide protective benefits (how much mangrove needs to be planted to protect from a Cat 5 storm). Information provided to this end is paradigm shifting on its own and hence projects that provide this knowledge should be encouraged even if this information (other than modeling) is not available during the project formulation process but may be a result of project implementation.	UNDP	Thank you for the comment, agreed.
Executive Summary	There aren't any ecosystem services evaluation methodologies out there which incorporate climate models. So, this is also a significant gap in analysis. Because the climate is changing, typical climatic conditions at the beginning of a project design may not serve as a realistic baseline by the end of the project, and climate scenario models help to bridge this gap. Such modeling may identify additional benefits of investing in ecosystem protection or restoration under future conditions. It may also identify limits of ecosystem interventions under future conditions, allowing for realistic expectations of the benefits and costs.	UNDP	This is a complex issue and beyond the scope of the sectoral guide.
Executive Summary	This is also key, as well as the economic and financial analyses used to justify these interventions which end up not showing enough benefit.	UNDP	Thank you, agreed.
Executive Summary	This applies to marine ecosystems as well. MPAs have to address these barriers.	UNDP	Thank you for the comment. Agreed.

Executive Summary	Why are these together? Either have a specific analysis for each ecosystem or bundle them all together.	UNDP	Barriers are discussed together in the executive summary but discussed separately and in detail in the main body of the guide.
Executive Summary	Excellent point, but worth clarifying that the carbon sink reference is to the coastal areas and wetlands part of the sentence, not coral reefs (which refers only to the coastal protection, disaster resilience and adaptation functions part	Rare	It also includes "provision of coastal protection and disaster resilience, and adaptation functions is crucial."
Executive Summary	Consider adding the word "rights" (i.e. as well as the rights, interests, needs ...)	UNFCCC secretariat	Agreed, word added.
Executive Summary	Change to 'contribution of indigenous peoples, women, youth and relevant stakeholders'	Tebtebba Foundation	The current list has been retained and is representative..
Executive Summary	Add "local communities"	Rare	Please note that the list is not exhaustive.
Executive Summary	Consider adding coastal ecosystem specific stakeholder groups like "small-scale fishers"	Rare	Please note that the list is not exhaustive.
Executive Summary	<p>Add additional language on how behavior change is critical for a successful paradigm shift, such as "It is well established that human behavior is responsible for driving global environmental change. Intensified pressure on natural resources (via consumption, population growth and other human activities) has led to accelerated global change. These actions have resulted in local, regional and Earth system changes, such as increasing temperatures, changes in precipitation, and ocean acidification." – Or- "Understanding human behavior, and its consequences across scales, both temporal and spatial, is therefore paramount in dealing with change and in planning for a more resilient future."</p> <p>Metternicht, G., Carr, E., Stafford Smith, M. 2020. Why behavior change matters to the GEF and what to do about it. A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C.</p>	Rare	Adaptation projects and programs should demonstrate how the project/program activities would help to reduce vulnerabilities to the impacts of climate change and should clearly distinguish between climatic and non-climatic drivers of stressors to humans and ecosystems and their vulnerabilities. This is particularly true for the Ecosystems and Ecosystem Services GCF result area, where modelling nature-based complex systems requires a robust understanding of the dynamics, composition and functionality of the ecosystems, but also of the interactions of the climate and non-climate stressors over those ecosystems.
Executive Summary	Consider changing the word "managing" to "reorienting" or "transFinlandg", to achieve paradigm shift, we need to move beyond managing status quo	UNFCCC secretariat	thank you for the comment. The word 'management' will be kept in the sector guide.

Executive Summary	Creation of a program using GCF resources that encourages the use of sustainable practices, through environmental education, investment in technology and use of evaluation methodologies, with follow-up and monitoring, using Conab technicians in the field. Conab can carry out the entire program, from the preparation of notices, publication, selection, decentralization of resources, monitoring of the execution and rendering of accounts of beneficiaries, inspection of the execution, collection of data that make up indicators and evaluation. This last part would be carried out by another entity, preferably specialized in impact assessment so that the results would be measured by another body, such as IPEA (Institute of Applied Economic Research), or a contracted company in order to maintain the independent execution of the assessment.	CONAB	Thank you for suggesting project ideas. Please see previous comment on suggestion for further Concept Note development.
Executive Summary	I believe there is one pillar that is missing, which should focus on increasing technical understanding and application of on-the-ground ecosystem restoration and regeneration measures, based on climate data and biodiversity and ecosystem science. In short: the actual work on the ground pillar is missing here.	UNDP	This is covered in the fourth pillar, while the ground actions are implemented through the projects themselves.
Executive Summary	Or including? Often times ecosystem services are not included into planning frameworks.	UNDP	"internalizes" means "including" in this context.
Executive Summary	There seems to be no ambition here. We would recommend to use words like "restoration" or "regeneration". Managing could fall under BAU management which would perpetuate the status quo.	UNDP	Restoration is also included.
Executive Summary	What is meant by "programming" here?	UNDP	Programming means building a strategic and coherent pipeline of projects.
Executive Summary	Recommend adding some specificity with examples to illustrate how this works in reality.	UNDP	Examples are provided in the main body of the sector guide.
Executive Summary	The GCF Secretariat has previously emphasized that it does not finance pilot approaches, and instead focuses on scaling up successful pilots. Are pilot programs or approaches now acceptable to the GCF, or must interventions be proven to be successful prior to inclusion in a GCF Project or Programme?	Conservation International	SAPs are explicitly for upscaling and replication, with a maximum GCF funding requested of USD 10 million and low ESS risk. GCF welcomes pilot approaches as long as these are innovative and transformational.
Executive Summary	Consider changing the wording "natural capital asset", to bring about paradigm shift, it may be important to recognize and value ecosystems for both market and non-economic values.  The Warsaw International Mechanism for Loss and Damage associated with the adverse impacts of climate change has five strategic workstreams. The workstream on non-economic losses covers loss and damage that are not easily quantifiable in economic terms, such as loss or degradation of ecosystem services.	UNFCCC secretariat	There is a lot of discussion on valuation, and this is not restricted to firm economic valuation, since there is also a lot of recognition of function, adaptation value, etc., without the need necessarily to properly value these services. Further elaboration of the complexity of the issues are beyond the scope of this sectoral guide.

Executive Summary	How would this (removal of Government subsidies) be done by the GCF?	Conservation International	This is an important issue that is been looked at globally by some agencies. It is beyond the scope of the sectoral guide to detail how governments deal with this complex issue; we welcome proposals from accredited entities, such as CI, that include solution for this., or links to other programs that look at subsidies.
Executive Summary	Next to (expensive) technology options, there is the opportunity of peer-to-peer certification scemes like Participatory Guarantee Systems that guarantee and certify authenticity within a value chain. Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange [See: <a href="https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems">https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems</a> ]	Both Ends	There are numerous examples of participatory monitoring and planning, the suggestion for a PGS is quite specific for the purposes of this sectoral guide.
Executive Summary	Testing and establishing cost effectiveness would need to be done at the FP development stage to be approved by the GCF.	Conservation International	While detailed cost-effectiveness analysis is expected at Funding Proposal stage, an early indication of expected impacts needs to be included at CN stage (estimated impact potential, co-financing, leverage potential).
Executive Summary	Indeed but this is not a simple issue- removing government subsidies that communities heavily rely on means we would need to substitute with a solution that is not only more effective, efficient and ofcourse offers climate resilient results- but also needs to be in place over the long term. Otherwise there is the inherent risk that removal of long-term government support without a substitute long-term CR solution would be detrimental for communities. Instead of “remove” it would be better to recommend several options, including for government subsidy programs to be climate-proofed and adjusted, through training/policy mainstreaming etc. so that the subsidy programs are set up to promote climate resilient ecosystems over the long term. Also, is this an activity under a project which GCF can fund under grants? Indeed reducing subsidies is important, but normally removing policy barriers are picked up by the Secretariat as activities which need to be co-financed. Subsidies that encourage, continue to facilitate and in fact, disincentivize clearly including so call environmental externality within business models is in fact in need of a discontinuation. While it cannot be overnight, unless this happens the fundamental drivers of climate change (and all the interlinked and reinforcing mechanisms between the climate – social- biophysical systems) will continue. So, this is part of the shift in economic systems that is long overdue.	UNDP	Through policy development that may be a part of a project, or informed by it. Also, subsidies rarely benefit communities, most often they encourage unsustainable large-scale agriculture.
Executive Summary	The combination of current or future government policies with the proposals previously presented in lines 1 and 2 of this worksheet, which use resources from the GCF, enhance the use of resources and also have the counterpart of the State with regard to the synergy of policies/programs and the use of human and logistical resources of the government apparatus.	CONAB	Thank you for the comment, though we think given the mandate and scope of the sector guide this can not be elaborated further.

Executive Summary	The on-sale of carbon credits resulting from GCF investment is not allowed under many AE AMAs.	Conservation International	Currently at the Secretariat level, a working group has been set up under the leadership of the Office of Portfolio Management to develop a consistent approach to carbon credits for GCF projects and Programmes. Some options are being discussed and assessed as the basis for GCF management of carbon credits issuance under funded activities.
Executive Summary	How feasible are these options?	GIZ	Thanks for the suggestion, these are examples of innovation that show openness to risk taking and innovation. It is beyond the scope of this short paper to undertake a feasibility analysis or more detailed assessment..
Executive Summary	Would it be possible to include within the document a link or citation of projects/ models that exemplify some of these schemes? We see this as the main challenge. There are a lot “unknowns” that are dissuading investment in NbS, so examples and or/references pointing to examples would be good.	UNDP	The case studies provide numerous examples of innovation and illustrate some of the proposed approaches.
Executive Summary	Conab, through its technicians and its decentralized units, as an agent for disseminating practices chosen by the GCF as sustainable from a socioeconomic and environmental point of view, in line with the GCF Sectoral Guide on Ecosystems and Ecosystem Services, aims to increase climate resilience in ecosystems and ecosystem services (EES).	CONAB	Thank you for sharing information related to CONAB.
Executive Summary	Consider adding “values” (i.e. by sharing lessons, traditional knowledge, and values such as indigenous peoples relational approach to nature, intergenerational consideration of natural resource management)	UNFCCC secretariat	The use of indigenous peoples knowledge, transitional ecological knowledge is a key component of ecosystem management.
Executive Summary	Consider adding the wording “doing so in a manner that uphold the principles of the Free Prior and Informed Consent of knowledge holders”	UNFCCC secretariat	FPIC is covered in the main text. In addition, GCF policies will require FPIC when appropriate.
Executive Summary	Add example after “... and share knowledge regarding ecosystem and ecosystem services for climate benefit (e.g, investing in programs that focus on behavior change for long term sustainable change)	Rare	Thank you for the suggestion. Text slightly edited.
Executive Summary	Diagram of actions: suggest that safeguards and FPIC (under transformational planning) are standard for all actions under GCF, not just EES related actions. Also, why are FPIC and safeguards described differently for terrestrial vs coastal environments? And why social safeguards but not environmental safeguards? (Though noting FPIC not mentioned in Table 4 below, but it is in Table 6)	UNEP-WCMC	Safeguards and FPIC are indeed applicable to all GCF activities.

<p>Executive Summary</p>	<p>(ES-1 table) Similar to what was stated above, the wording of some actions may point to significant differences in the scope of both paradigm-shifting pathways. Are there conceptual differences? Is there a reason to name things differently here? For example:          Terrestrial and freshwater ecosystem:          Participatory multi-stakeholder and FPIC          Data centers for ecosystems</p> <p>Correspondingly, in coastal and marine ecosystems:          Social safeguards and FPIC          Data centers for biodiversity</p> <p>In case it is preferred to mention more overarching examples, the reference to insurance premiums can be linked to general natural disasters or environmental changes instead of particular events (fires, coral reef loss).</p> <p>Bio-businesses, incubation and acceleration of ventures, microfinance, community-based finance are relevant and very much appropriate for both paradigm-shifting pathways.          Is ice-melting an area of interest? If yes, can this be included in the guide?</p>	<p>Germany</p>	<p>Thank you for the comment. The text has been strengthened to explain the two pathways.</p>
<p>Executive Summary</p>	<p>Under the “transformational planning and programming” both rows should include considering supporting already existing indigenous peoples’ plans for their territories,          Under “coalitions and knowledge to scale up success”, add take into account indigenous and local knowledge, innovations, practices and technologies subject to FPIC of indigenous peoples”</p>	<p>Tebtebba Foundation</p>	<p>Thank you. Please refer to other GCF policies on Indigenous Peoples. GCF recognises the importance of local people in managing resources.</p>
<p>Executive Summary</p>	<p>Many of the actions described below such as: pilot, test and evaluate new methods for valuing ecosystem services, testing incentives for seaweed farming, pilot and testing new schemes of EBA, participatory learning sound more like readiness activities or piloting actions, which normally GCF does not finance under full FPs.</p>	<p>UNDP</p>	<p>As long as these activities are accompanied with investment related activities, then they can be part of a Funded Activity (project or programme). These activities can also be supported through Readiness funding if prioritized by the relevant countries through their NDAs.</p>
<p>Executive Summary</p>	<p>It remains unclear why some of the activities aim to be included in NDCs and others don't. Suggest to use a consistent approach, or explain why the GCF considers some activities more suitable for inclusion in NDCs than others.</p>	<p>UNFCCC secretariat</p>	<p>Thank you for the comment. Please note that one of GCF's investment criteria is Country Ownership. Under Country Ownership, countries are expected to prioritize climate finance support from the GCF based on their country climate targets and ambitions, commonly reflected in their NDCs. This is also part of the strategic pipeline development that needs to take place for each result area and at portfolio level.</p>



Executive Summary	We do not see a need for there to be a distinction between terrestrial/freshwater and marine ecosystems. Most of the recommendations are applicable to both, so there is redundancy. The yellow knowledge section would be a great place to add "monitoring ecosystem responses to changes in climate and developing adaptive management options", also recognizing the need to share this information for global learning purposes.	World Wildlife Fund (WWF)	Text has been strengthened to explain the two pathways. The second suggestion (monitoring changing ecosystems) is not excluded from the possible activities given that monitoring is included.
Executive Summary	In terrestrial transformational planning, what is "building with nature planning." Consider deleting as may be repetitive to the natural/green infrastructure point earlier	Rare	Thank you. This has been further explained in the Glossary section.
Executive Summary	If NDCs are noted in the terrestrial and freshwater ecosystems, it should also be referenced in the coastal section	Rare	Commonly NDCs are sectoral. Up to the countries to decide on priorities.
Executive Summary	The first bullet in the coastal section of the mobilized finance column could add "Enhanced national AND LOCAL financing through..."	Rare	Thank you for the suggestion.
Executive Summary	Under coalitions and knowledge column, GHG accounting and nested jurisdictional approaches also should be included in the coastal section	Rare	Please note that the list is not exhaustive.
Executive Summary	Under coalitions and knowledge column in the coastal section, add bullet for "Exchange platforms or other knowledge exchanges for coastal communities, fishers (including small-scale and artisanal fishers) and the importance of this work for food security"	Rare	Please note that the list is not exhaustive.
Executive Summary	Consider adding the wording "and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels".	UNFCCC secretariat	Thank you for the suggestion.
Executive Summary	Peatland ecosystems are praised for their carbon sequestration and storage functions. The science on this is mixed, however, and at least in the Northern hemisphere there is a lot of debate over peatland restoration's climate benefits.	Finland	For the most part the science recognizes their importance, tropical peatlands have significant mitigation and adaptation value.
Executive Summary	Peat ecosystems are humic and not terrestrial (to be checked)	Project Assistant YVE- Cameroon	Thank you very much for indicating this precision.
Executive Summary	Unlike in the previous paragraph on terrestrial/aquatic systems, the paragraph describing coastal and marine systems does not contain any discussion of the importance of supporting livelihoods and socio-economic development, despite the potential of blue carbon industries to help mitigate climate change and support coastal livelihoods.	Submission on behalf of USAID	It is implied in the text and this is the Executive Summary which can not contain all details.
Executive Summary	Environmental integrity should also be incorporated as a value for this pathway as well as clarifying that coastal ecosystems also have significant carbon mitigation potential in addition to its adaptation and resilience value.	Rare	This has been explained better with adjustments to the text.
Executive Summary	Does this link to IUCN Global Standard for NBS? FAO is currently adapting this standard to the agriculture sector.	FAO	Included in the references section.
Executive Summary	Include internationale agreed text on response hierarchy to ecosystem degradation: avoid, reduce, reverse Lack of action to address land degradation will increase emissions and reduce carbon sinks and is inconsistent with the emissions reductions required to limit global warming to 1.5°C or 2°C. [Reference: section TS.4 in: IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes interrestrial ecosystems]	Both Ends	The hierarchy is implicit, but the guide goes beyond: conserve, restore, and manage. These are all positive actions, not reactive one.

Executive Summary	Coordination of policy instruments across scales, levels, and sectors advances co-benefits, manages land and climate risks, advances food security, and addresses equity concerns [Reference: section TS.7, in: IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes terrestrial ecosystems]	Both Ends	Thank you for your comment, it is not clear what the suggestion refers to. Please note that the guide refers to land and climate risks, food security, and ecosystems.
Executive Summary	Include reference to response the Land Degradation Neutrality response hierarchy that was adopted by the international community through the UNCCD and it would be preferable to use similar wording (avoid, reduce and reverse). The Land Degradation Neutrality response hierarchy is the set of prioritized actions/interventions that may be planned and then implemented in response to past or anticipated future land degradation. The hierarchy encourages broad adoption of measures to avoid and reduce land degradation, combined with localised action to reverse degradation. The LDN response hierarchy is an overarching principle that guides decision-makers in planning measures to achieve LDN. The response hierarchy of Avoid > Reduce > Reverse land degradation is based on the recognition that "prevention is (much) better than cure" i.e., avoiding or reducing further land degradation will maximize long-term benefits and is generally more cost-effective than efforts to reverse past degradation. [Reference: Orr, B.J., A.L. Cowie, V.M. Castillo Sanchez, P. Chasek, N.D. Crossman, A. Erlewein, G. Louwagie, M. Maron, G.I. Metternicht, S. Minelli, A.E. Tengberg, S. Walter, and S. Welton. 2017. Scientific Conceptual Framework for Land Degradation Neutrality. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.]	Both Ends	Thanks for your comment, we agree that protection is more effective and achievable than regeneration. GCF encourages a multiple approach and landscape approach that utilizes multiple land / marine use strategies. Reference should also be made to Agriculture and Forest and Land Use Sector Guides.
Executive Summary	The definitions provided for actions implies that protection is only a short-term solution, while restoration is only long-term. However, some ecosystems can be restored more quickly than others. And some protection measures can stay in place for decades/forever.	UNEP-WCMC	Thanks for the suggestion. Please note the complexity of these issues cannot be elaborated extensively and we feel that it has already been explained, within the concept of this sectoral guide.
Executive Summary	In line with point immediately above, this is a missed opportunity to talk about managing differently in light of changes in climate and their impacts on ecosystems. The same applies for restoration.	World Wildlife Fund (WWF)	It is understood that various levels of management will need to be designed appropriately and in relation to climate change impacts.
Executive Summary	Implementation of Land Degradation Neutrality (LDN) policies allows populations to avoid, reduce and reverse desertification, thus contributing to climate change adaptation with mitigation co-benefits. [Reference: section TS.3, in: IPCC, 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes terrestrial ecosystems]	Both Ends	The reference has been included in the sector guide.
Executive Summary	Executive summary is very lengthy. Should have been concise as introduction part is a;so having same texts at many places, it should have been avoided	Dr. Prachi Ugle Pimpalkhute	A two-pager has been developed, which summarizes the main elements of the sector guide.
Executive Summary	A brief overview of threatened ecosystems should be incorporated in the executive summary to make a case for action.	Germany	There is no need to include this in the Executive Summary beyond what is there already (lines 46 - 49).

Executive Summary	The executive summary unfortunately falls short of the actual report on one critical point: It merely identifies a global climate crisis (line 27) while the report itself much more appropriately highlights the biodiversity crisis and the climate crisis as two equally important and mutually dependent and reinforcing crises (line 290ff).	Germany	Thank you for the comment. The text has been adjusted to reflect the suggestion.
Executive Summary	-Separate terrestrial ecosystems from aquatic ecosystems (fresh, brackish and salt water), Include wetlands in agro-ecosystems because in developing countries these are the wetlands that play the most important roles in carbon storage as they are destroyed for agriculture to counteract the agricultural calendar that is being disrupted by climate change. -There is also a difference between peat and swamp	Project Assistant YVE- Cameroon	This is true, but for the purposes of the guide this needs to be simplified, even though it will not alter how projects are developed in practice as the guides are not straightjackets.
Executive Summary	The first paragraph implies that all the key barriers are financial. The second implies that coastal/marine ecosystems are not affected by insufficient legal protection, which is unlikely the case. The discussion on inclusion of different groups, such as women, lps, should also mention differential use of ES and differential vulnerability. I.e. inclusion is good for participatory decision-making and support, but is also needed to design interventions that address differential vulnerability and different priorities/experiences of societal groups.	UNEP-WCMC	These issues have been reflected and discussed throughout the guide. Given the scope of this document, details on specific barriers could not be addressed. We expect these issues to be addressed in the taxonomy analysis of the GCF approved projects for ecosystems.
Executive Summary	IETA strongly agrees with the enablers to paradigm shifting pathways outlined in the draft sectoral guides, specifically lines 100-110 in the FLU guide that describe the financial instruments to address barriers, innovative instruments such as blending and de-risking, capacity building/access to funding, and establishing legitimacy and transparency.	IETA	Thank you for these comments, there is agreement.
Executive Summary	EES result area emphasises maintaining ecosystem services through both adaptation and mitigation approaches: why not enhancing EES? Would that not be a goal under these approaches? Especially for NbS, which often seek to enhance climate relevant EES.	UNEP-WCMC	The result area will maintain and enhance ecosystem services. Restoration includes the approaches adopted by Forest Landscape Restoration and Decade of Restoration for 'Preventing, halting and reversing the degradation of ecosystems worldwide'.
Executive Summary	IETA recognises the important role that the Green Climate Fund (GCF) plays in "transformational planning and programming", "catalysing climate innovation", "mobilisation of finance at scale", "coalitions and knowledge to scale up success", and strongly supports this four-pronged approach to drive implementation of the paradigm shifting pathways as outlined in the draft sectoral guides. Specifically, in the EES guide, IETA supports lines 134-142, encompassing the entire paragraph on transformational planning and programming.	IETA	Agreed.

Executive Summary	It would be helpful to indicate how AEs should utilise the guides, including for projects that address cross-cutting issues. For instance, should AEs that formulate forest protection projects refer to both ESS and forest guides?	Germany	Thanks for the question. It is a good point given that EES actually are cross-cutting and cover most of GCF's thematic areas. EES guide should be an overarching one, many projects need to refer to EES, Agriculture, Water and Forests as landscape and cross-sectoral approaches are desired to ensure complementarity and avoid trade-offs among supported initiatives.
Executive Summary	IETA strongly supports lines 147-149 that recognise the role of markets in recognising and valuing ecosystem services as a natural capital asset.	IETA	Agreed
Executive Summary	IETA supports lines 158-172, encompassing the entire section on mobilisation of finance at scale, and is particularly encouraged to see the inclusion of de-risking instruments, and opportunities to engage the private sector. As an accredited private sector observer of the GCF, and private sector observer to other significant green and climate funds, including the World Bank's Forest Carbon Partnership Facility (FCPF), IETA would welcome further opportunities to support the GCF in engaging with the private sector on natural climate solutions (NCS) among other areas, within IETA's expertise.	IETA	Agreed
Executive Summary	Another idea could be promoting research to develop innovative use of nature, e.g. Bioeconomy solutions and the application of ancient and traditional practices through, for instance, venture capital or impact investment. If wanted, these ideas can be incorporated into the colourful table (ES-1)	Germany	Thank you, these types of approaches are now covered in the main body of the sector guide. R&D+ innovation is welcome in GCF ecosystems projects. Through SAP, pilots could be upscaled.
Executive Summary	Agriculture and Food Security: Consider adding management of grazing areas.  Energy: Add solar, wind, geothermal and biogas energy from waste.  Water: Add better water conservation management in the face of desertification and drought in both rural and urban areas.  Urban areas: Add better integrated management of urban waste (collection, transport, deposit, recycling, reuse, valorization, and elimination of waste), which is a growing source of gas emissions given the rapid and uncontrolled growth of urbanization in developing countries.	Submission on behalf of USAID	Thank you for the suggestion. This level of detail is expected to be included in each of the sector guide, e.g. water includes Enhance water conservation, water efficiency and water re-use, and also Strengthen integrated water resources management and water management (including ecosystem-based management
Executive Summary	IETA generally supports the GCF investment criteria, and the possible actions for each FLU and EES pathway following the four pillars of the GCF strategic plan, as outlined in the sectoral guides (lines 178- 191 in FLU Guide, lines 195-205 in EES Guide).	IETA	Agreed

Executive Summary	Creation of a program using GCF resources that encourages the use of sustainable practices, through environmental education, investment in technology and use of evaluation methodologies, with follow-up and monitoring, using Conab technicians in the field. Conab can carry out the entire program, from the preparation of notices, publication, selection, decentralization of resources, monitoring of the execution and rendering of accounts of beneficiaries, inspection of the execution, collection of data that make up indicators and evaluation. This last part would be carried out by another entity, preferably specialized in impact assessment so that the results would be measured by another body, such as IPEA (Institute of Applied Economic Research), or a contracted company in order to maintain the independent execution of the assessment.	CONAB	Thank you for the suggestion, We remain available to discuss with CONAB on any potential project idea or concept note that could be shared with the GCF Secretariat. We suggest CONAB to identify the direct access entities in the country. Please find the complete list of accredited entities here: <a href="https://www.greenclimate.fund/about/partners/ae">https://www.greenclimate.fund/about/partners/ae</a> and for Brazil: <a href="https://www.greenclimate.fund/countries/brazil">https://www.greenclimate.fund/countries/brazil</a>
Executive Summary	It is suggested to include also peatland fires as huge contributors to GHG emissions	FAO	Thanks for the comment, we don't think this needs to be included in the Executive Summary.
Executive Summary	It is possible to include wetlands as important carbon storage ecosystems, which are under considerable anthropogenic pressure.	Project Assistant YVE- Cameroon	This has been described in the main text, not in the executive section.
Executive Summary	Change 'human encroachment' to "land/water/area change or conversion". There indigenous territories overlapping with protected areas, whose contributions in protecting these areas are not recognized and whose human rights are violated because of the fortress type model of conservation.	Tebtebba Foundation	Thanks for the question. We consider that human encroachment reflects the issue; particularly relating to new or recent encroachment compared to those groups that are already residing or using the natural resources. The rights and roles of indigenous people are respected and are key components of ecosystem management; the GCF policy on IP also covers these aspects. We agree 'fortress' conservation should not be promoted.
Executive Summary	We highly welcome the paradigm shift as described on this paragraph and section. In particular, the 'large scale protection' (line 58) although a laudable concept and plan, should be taken seriously with proper in-depth study and plan as such as large-scale activity in a popular space/area wherein human rights abuses, violations, integrity, transparency, and corruption issues thrive. Therefore, international standards, such as FPIC, human rights, IP (Indigenous People) policy, anti-corruption policy, fiduciary stands, among others, should be clearly set and implemented before, during, and after the project period. The indigenous knowledge and wisdom of local people and indigenous people should be incorporated in the project, which entails that civil society participation and consultation is necessary during the funding proposal creation.	Transparency International	Agree, but this is part of the broader GCF policies to which all sectors need to adhere.
Executive Summary	The key is adaptive management. Conservation groups often ignore this aspect and focus on (business as usual) protection and restoration. Suggest stressing the need for adaptively managing ecosystems to account for observed and anticipated changes in climate. This needs to be explicit.	World Wildlife Fund (WWF)	Adaptive management is explicit, no need to emphasize more.

Executive Summary	Environmental integrity should be integrated in this description to ensure actions to protect ecosystems for its ecosystem services and functions are not managed in a way that negatively shapes the landscape but is instead incorporating the value of the integrity of the overall ecosystem	Rare	This is explicit throughout the guide. Services and their provision depend on the degree of integrity.
Executive Summary	It is suggested to also differentiate transitional ecosystems (such as peatlands). This might be important to highlight the particularities of ecosystems that are 'partly' terrestrial, and 'partly' aquatic. The strategies to address ES from these transitional ecosystems vary from the ones designed for terrestrial and aquatic as human interactions with these ecosystems vary greatly	FAO	Thank you for the suggestion. This level of detail is not necessary in the text, given the limited scope of the sectoral guides.
Executive Summary	Some approaches are valid for both investment pathways. For instance, green and grey infrastructure can also play a key role in risk disaster management in terrestrial ecosystems (e.g. landslides and droughts control). Also, carbon sequestration can play a vital role in coastal and marine ecosystems. We encourage reviewing the scope of both pathways and the extent to which they should share common thematic approaches.	Germany	This has been better explained with edits to the text; the other sectoral guides should also be consulted which also mention links to grey-green infrastructure.
Executive Summary	Another term that could be used for human -environmental system is socio-ecological systems	Tebtebba Foundation	Thank you for the suggestion. Indeed what ecosystems projects intend to better understand and address is the socio-ecological interaction. This is also reflected in the recently approved GCF's IRM.
1. Introduction	Conab, after approval of the MAPA and the necessary regulations, can direct the policies it executes, using criteria that prioritize family farmers, extractivists, traditional communities, indigenous peoples, quilombolas and women, encouraging sustainable practices, scoring on a scale for access. To do so, it would start with publicity campaigns, guidance, until, in the future, the application of the defined criteria and subsequent inspection and verification of indicators that can demonstrate the effectiveness and efficiency of the action against the policy. Actions can seek synergy with the performance of other bodies in each sphere of competence, such as the Brazilian Forest Service (SFB), when it comes to extractivism and forest management, with the respective MAPA secretariats, when defining access to others policies such as PGPMBio, PGPM, PAA and organic versus conventional agriculture. Interacting with ATER, universities, ICMBio and IBAMA, among others. The emphasis would be on socioeconomic and environmental sustainability, also working to enhance the traditional knowledge of indigenous peoples, quilombolas and the valorization of women in rural areas.	CONAB	Thank you for the comments and information on CONAB, this is well received.
1.1	Same comment regarding terminology as noted for line 18	Rare	Please note that definitions have been carefully adjusted.
1.1	We think the challenges mentioned should be analysed by region rather than by country	China	The text mentioned is not in the document.

1.1	The GCF should support international conventions and actions that prevent illegal wildlife business, through collaboration and working with international wildlife organizations (Link: <a href="https://www.goodnet.org/articles/512">https://www.goodnet.org/articles/512</a> ) relevant United Nations agencies, and such relevant international and local organizations and institutions (Link: <a href="https://www.wildlifeday.org/taxonomy/term/12">https://www.wildlifeday.org/taxonomy/term/12</a> ) that monitor and promote wildlife protection programs and activities.	Transparency International	Thanks for the recommendation, there is nothing preventing GCF supporting such international conventions as long as projects support the GCF climate finance goals. For example, a project could not be supported that looked at illegal wildlife trade unless a strong climate rationale for preventing the wildlife trade was developed; for example, increasing food security of local populations to prevent illegal hunting of wildlife. However, a lot of wildlife trade is for markets outside local areas where animals are sourced, e.g. tiger hunting.
1.1	We suggest to change it to: more wind and solar integrated with energy storage	China	The text mentioned is not in the document.
1.2	Ecosystem services are benefits to humans ?	GGGI	Agreed, text adjusted.
1. Introduction	Suggestion: show data to 2030-50 to be consistent with other sectoral guides. Although there is important to show figures to 2100, it does not allow to understand the urgency either the impact of this result area.	IDB	Thank you for the comment. The sector guide indicates the following: "The highest mitigation opportunities are in carbon-rich ecosystems (tropical forests, peatlands, coastal and marine ecosystems). Protection and restoration of degraded forests, grasslands and peatlands offers a mitigation potential of 6-7 Gt CO <sub>2</sub> e per year in 2030 and 11-14 Gt CO <sub>2</sub> e per year in 2050. Coastal and marine ecosystems offer a mitigation potential of 0.3-0.9 Gt CO <sub>2</sub> e per year by 2030 and 0.5-1.4 Gt CO <sub>2</sub> e per year by 2050, over much smaller areas (Hoegh-Guldberg et al. 2019)." Also line 641 mentions the need of speed: Speed indicates how quickly transformations can be achieved; the urgency of the climate crisis prioritises early outcomes achievable in 5-10 years (the 2030 goal) over those achievable in 30 years (the 2050 goal), because each 'missed year' increases the size of the task ahead.

1.2	Consider adding “cultural heritage, knowledge systems” (i.e. food and economic security, health, cultural heritage, knowledge systems”	UNFCCC secretariat	These issues are mentioned throughout the document. These have also been included in the Agri and food security sector guide, as well as in the FLU sector guide.
1.2	Why no mention on land valuation and wide cost value as they are an equal contributor to co-benefits in ecosystem services?	Dr. Prachi Ugle Pimpalkhute	Land valuation is implicit in the overall valuation of ecosystem services, however, given the limited scope and mandate of the guide it is not possible to elaborate further on these concepts.
1.2	Managing and safeguarding expansive and complex ecosystem is always being challenged by corruption between business, local authorities, and officials. There are huge track of forest areas (such as in Indonesia and the Amazon) where forest areas were changed with mono-species plantation (example, palm trees in Indonesia). To prevent such cases from happening to future GCF projects/programs, transparent environmental impact assessments, consultations with locals and local experts on environment, anti-corruption system, human rights standards, indigenous people's policy, gender-sensitive structure, and relevant integrity systems shall be part of the project proposal.	Transparency International	Transparency and participation of wide variety of stakeholders is mentioned in the guide. Furthermore, these are policy requirements of the GCF, including the GCF policy on indigenous peoples.
1.2	This is another missed opportunity to talk about the impacts of climate change on ecosystems and ecosystem services. Everything in this section implies the use of business as usual approaches to ecosystem conservation, which are no longer valid under rapid climate change. Without explicit mention of the need for climate-informed adaptive management, the expressed vision for the paradigm shift "to secure their resilience, functionality, and the maintenance of ecosystem services under conditions of climate change" is invalidated. So far there is nothing in this guidance that shows what is needed to achieve this vision. Business as usual approaches to ecosystem protection, restoration and management do not secure their resilience in a changing climate.	World Wildlife Fund (WWF)	Thank you for the comment and suggestion. Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
1.2	A reference to 'traditional heritage' should be included in Figure 1 in the column on cultural benefits as there is a difference between culture and tradition; additionally, a reference to 'nutrition' should be included in the column on provisioning benefits.	GCF Observer Network	Thanks for the comment.
1. Introduction	Add: and exploiting the environment can have irreversible consequences, e.g. cutting down native forests, the forests will never be first growth again (consider Costa Rica where there are only tiny pockets of native forests and now their economy is high eco-tourism based – native forested areas have higher tourism appeal).	Climate Risk Analyst, NBS Expert	This is probably true but too detailed for the scope and mandate of the sectoral guide; and needs to be defined on a project by project basis.
1. Introduction	Why no mention on biomes ?	Dr. Prachi Ugle Pimpalkhute	The guide indicates that Enabling actions across both pathways aim to protect, enhance, and ensure connectivity of the major ecosystem types and biomes.
1. Introduction	Why no mention on carbon cycle ? When its linkage and interdependencies in terrestrial ecosystems has a direct bearing on resources, productivity and overall ecosystem services, development and management	Dr. Prachi Ugle Pimpalkhute	Carbon cycles have been added in the text and in the Glossary.
1. Introduction	As mention above (comment on the table ES-1. Line 209), some areas might be of equal relevance for both types of ecosystems. Hence, the wording can be unified to avoid confusions.	Germany	Thank you for the comment. The text has been strengthened to explain the two pathways.



1. Introduction	It would be important to link sustainability here with concepts such as circular or blue economy to later explain how the GCF EES result area will consider these kinds of interventions.	IDB	Thanks for the recommendation, whilst we agree that economic approaches such as circular economy are important as determining solutions, should also note that these are included in agriculture, water and energy guides too. Implicit in circular economy is reduction of waste, keep products in cycle and regenerate nature. In the third principle it encompasses the whole sector guide. CE has not been included in the guide specifically since it is a poorly defined term with over 114 different published definitions. <a href="https://www.sciencedirect.com/science/article/pii/S0921344917302835">https://www.sciencedirect.com/science/article/pii/S0921344917302835</a>
1. Introduction	Possibly add drivers of land exploitation and fires?	Climate Risk Analyst, NBS Expert	thank you. This is covered using different language and concepts throughout the FLU sector guide.
1.2	We would appreciate some reference to latest IPCC publications, particularly the "Global Warming of 1.5°C. An IPCC Special Report". The IPCC Special Report highlights that "On land, impacts on biodiversity and ecosystems, including species loss and extinction, are projected to be lower at 1.5°C of global warming compared to 2°C. Limiting global warming to 1.5°C compared to 2°C is projected to lower the impacts on terrestrial, freshwater and coastal ecosystems and to retain more of their services to humans (high confidence)". Also, "Limiting global warming to 1.5°C compared to 2°C is projected to reduce increases in ocean temperature as well as associated increases in ocean acidity and decreases in ocean oxygen levels (high confidence). Consequently, limiting global warming to 1.5°C is projected to reduce risks to marine biodiversity, fisheries, and ecosystems, and their functions and services to humans, as illustrated by recent changes to Arctic sea ice and warm-water coral reef ecosystems (high confidence)". Further useful data and information can be found therein. This would in general also reinforce narrative and consistency of chapters, particularly as regards ensuing chapter 2.1 "Scientific basis: why are ecosystems and ecosystem services relevant to climate action?". Please also make reference to the other two Special Reports of the IPCC that also tackle ecosystem impacts (climate change and land 2019; ocean and the cryosphere, 2019).	Ministry of Economy and Finance (MEF) Italy	Reference to the sixth IPCC report has been added.
2.1	Add "For example, COASTAL wetland restoration will not only promote carbon storage....."	Rare	Thanks for the comment, unfortunately we feel that this will not add to the context or information of the sectoral guide.

2. Global Context	We suggest not to take IPBES as reference citations, since this report has many problems, like lacking solidified resources, taking suppositional opinions and resources.	China	We explicitly tried to rely on IPCC and IPBES as intergovernmental reports, followed by peer-reviewed academic articles and only minimally used grey literature. IPCC and IPBES also released a joint report recently which very much echoes the priorities for restoration that we outlined in the sector guide.
2. Global Context	Analog forestry is a permanent carbon storage, forest gardening model that can decrease the time for forest succession to take place, and thus accelerate the rate at which carbon is sequestered, as opposed to natural regeneration processes which may take substantially more time. This model emphasizes restoration of forest structure and function, and thereby addresses GCF concerns to provide for functional, biodiverse ecosystems [lines 297 & 298].	Proyecto Ayurveda, Puerto Rico	Thank you, restoration does not rule out accelerated restoration methods. Given the scope and mandate of the sector guide we cannot go into details on specific methodologies.
2. Global Context	this issue is visible and important under all circumstances	China	Yes, but because of the pandemic they have become even more evident.
2. Global Context	With mentioning of IPCC and climate change relation to ecosystem services, why inputs on working group related to biodiversity and ecosystem is not planned and prepared as only entities and country commitments are mentioned most often	Dr. Prachi Ugle Pimpalkhute	Thank you for your comment, unfortunately this is not clear. Please note that given the context and scope of the sector guide we are unable to fully expand on all areas of ecosystems and ecosystem services.
2.1	This statement (Seddon) is true under historic climate conditions. However, it doesn't mean that ecosystems will remain resilient under anticipated changes in climate. Statements like this without context encourage business as usual approaches to ecosystem conservation.	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
2. Global Context	In global context section with the figure mentioning four Categories of ecosystem services governance aspect also should be included, as it has a direct bearing (negating, looking upto, reporting illegal tradeoffs, human rights and reduced reach of services to vulnerable and marginalized groups)	Dr. Prachi Ugle Pimpalkhute	Governance is discussed as an important element in the responses.
2.1	in the figure with the section supporting category - there should be inclusion of carbon cycle as mere hydrological and nutrient cycle does not rhyme the ecosystem services and its benefits at large. Carbon cycle rhymes the entire ecosystem services in the biome if considered in totality	Dr. Prachi Ugle Pimpalkhute	Carbon cycles have been added in the text and in the Glossary.
2. Global context	What is the source of figure 1? More ecosystem services can be identified, such as: Provisioning: non-timber forest products  Regulation: Air purification decomposition carbon storage (urban) cooling	Germany	Thank you for the suggestions. The reference has been inserted. Please note this is not a comprehensive list. In 2022, the Secretariat will conduct an Ecosystems portfolio analysis based on a taxonomy; which should put in evidence the different ecosystem services being targeted by the approved GCF projects.

2.1	Include (Traditional heritage) in cultural benefits as there is a difference between culture and tradition	Project Assistant YVE- Cameroon	Thanks for the comment, we feel that this is already implied within the text.
2.1	Include Nutrition in the provisioning component	Project Assistant YVE- Cameroon	Thank you for the comment. Nutrition issues are covered under the agriculture and food security sector guide.
2.1	Consider adding “reflects intergenerational considerations”	UNFCCC secretariat	The concept of sustainability encompasses intergenerational elements.
2.1	<p>Line 312 correctly notes that the two crises are often handled separately, creating redundancies, missed opportunities, and negative outcomes. But then the guideline hardly provides any references to the CBD and its existing approaches, instruments and terminology and thus to our understanding reinforces the risks addressed.</p> <p>We therefore see a need for clarification of the following points:  The relation of the “ecosystem-based approach” referenced in the guideline and the “ecosystem approach” as proclaimed and formally adopted by the CBD. We especially could not yet clearly identify the paradigm shifting potential that comes with the “ecosystem-based approach” in comparison to the CBD-approach that was already adopted in 2008.  The relation and intended interactions of NDC and NBSAP when planning for EES in national agendas.  The relation of the intended paradigm shift of the guideline to the, in our view, much more far-reaching analysis on direct and indirect drivers of biodiversity loss from the IPBES Report 2019 and the ambitious zero draft of the proposed global biodiversity framework 2021-2030 (GBF) based on it.  The relation of the intended paradigm shift by promoting “ecosystem-based management of terrestrial and freshwater ecosystems” to proposed targets and instruments from the CBD context such as the much discussed target to protect and conserve at least 30 per cent of the area on land and water with the focus on areas particularly important for biodiversity by 2030 and the proposed instruments (OECM).</p>	Germany	Thanks for your comments, definitions have been carefully adjusted within the text.
2. Global Context	Adding references from the EbA technical guide 93. These approaches emphasize the importance of biodiversity and ecosystems in reducing risk, and build on other practices such as conservation and ecosystem restoration which seek to increase the resilience of ecosystems for the benefit of people	Convention on Biological Diversity (CBD) UNEP	Reference has been added.
2.1	EbA benefits: table is a little simplistic as it mixes core adaptation impacts with co-benefits.	UNEP-WCMC	Thank you. Please note that the table provides examples only and it is not exhaustive.
2. Global Context	Propose a national plan in which agriculture and livestock development policies prioritize investments in degraded areas, aiming at the formation of ecological corridors. The policies implemented by Conab would catalyze efforts in this direction. It depends on inter-ministerial articulation.	CONAB	This is a nice example. Thank you for sharing. Some of these elements have been included in the Forest and land use and agriculture & food security sector guides.
2. Global Context	The reference to traditional knowledge and practices in this section is important and should be strengthened; in particular references to agroecology should be integrated here as well.	GCF Observer Network	We feel that this is reflected in the text already.

2. Global Context	In the text, limits to and pitfalls of quantification should be highlighted more (such as it seems to happen in lines 565/66 indicating the value embedded in the irreversibility of loss of carbon-rich and biodiverse ecosystems).	GCF Observer Network	Thanks for the comment, we only have limited space available within the sector guide and feel that this is already explained sufficiently.
2.1	Perhaps mangroves could be added to the table (Considering that mentioned in lines 32-33 highlighting their adaptation potential)	UNDP	Please note that the tables are not comprehensive and illustrative only.
2.1	Inclusive of all coastal ecosystems (ie mangroves, seagrass beds, marshes, etc).	UNDP	Thank you for the comment. While specifications on the types of ecosystems is desirable, the scope of the guide does not allow to go into details of ecosystems types.
2. Global Context	Provide shade, temperature and dissolved oxygen control because oxygen levels in water are influenced by temperature and impact on the aerobic organisms of these environments), wildlife refugia, and secure water flows to protect sensitive populations of flora and fauna, especially in arid regions	Project Assistant YVE- Cameroon	This is true but it is too specific for the scope of the sector guide.
2. Global Context	Enhance habitats for migratory species and endemic species	Project Assistant YVE- Cameroon	Thank you for the specification, well noted.
2.1	Reagarding Table 2, we discovered long ago that labeling conservation practices as EbA practices does not lead to good adaptation. EbA practices needed to be coupled with climate hazards and human climate vulnerabilities. In this sense the table of benefits are a mix of adaptation and other benefits. It would be better to seperate out adaptation benefits from other co-benefits. We suggest modeling the table after Table 1 at <a href="https://en.wikipedia.org/wiki/Ecosystem-based_adaptation">https://en.wikipedia.org/wiki/Ecosystem-based_adaptation</a> (produced by FEBA).	World Wildlife Fund (WWF)	Definitions have been carefully adjusted.
2. Global Context	It would be good to mention EbA approaches related to NbS measures	GIZ	Definitions have been carefully adjusted. Please also note that the guide does not make explicit reference to NbS.
2. Global Context	"terrestrial ecosystems" may be degraded but the concept that they are "lost" may create some confusion; also the drivers of this change or degradation may be complex and it is suggested to indicate that agriculture is one of the important drivers rather than singling it out (and provide references)	FAO	Text adjusted.
2. Global Context	Add overfishing to text: "coastal ecosystems are lost to pollution, OVERFISHING, coastal development, mangrove clearance, and unsustainable aquaculture."	Rare	Reference to overfishing added.
2. Global Context	Can elaborate regarding chronic and acute events, e.g. 'both incremental changes such as changing temperature and precipitation regimes and extreme events such as ....'	Climate Risk Analyst, NBS Expert	Thank you for the suggestion, this is well noted.
2. Global Context	Consider adding "reverse" (i.e. to halt and reverse)	UNFCCC secretariat	This is covered with the next phrase mentioning "restore."
2. Global Context	Suggest to draw out an example in addition to listing all of them - e.g. Aral sea: how water diversions for agriculture have reduced the water body by x% over x number of years and this has significantly impacted livelihoods of local peoples/ local fauna and flora...	Climate Risk Analyst, NBS Expert	Thank you for the specific example suggestion. We have included additional examples in the sector guide.
2. Global Context	It is unclear what "these drivers" refers to.	FAO	Please note that drivers are covered in the preceding paragraphs.
2. Global Context	Instead of speaking of "global fish consumption" the reference here should be of "fishery products", which also include fish, crabs, seafood etc.	GCF Observer Network	Thanks, text has been changed.

2. Global Context	<p>We appreciate the focus on maintaining and enhancing ecosystems (= prioritizing integrity of natural ecosystems), especially large scale “high carbon ecosystems” such as peat, tropical forests, and grasslands by indicating that their primary values lie in being undisturbed (f.ex. “protection of all remaining high-carbon ecosystems must be prioritised”), but again feel that their multiple benefits and services beyond carbon (such as biodiversity protection) need to be highlighted equally.</p> <p>See also related lines 528-534, which point out the need to pursue projects in EES in an integrated fashion. Our concern is that a sole focus on mitigation risks creating perverse outcomes. We would highlight the inherent uncertainties in determining carbon emission reduction values of preventing/reversing ecosystem loss and degradation. We seek to limit ‘gaming the system’ through the use of avoided emission measures that become more likely when the value of carbon supersedes the broader benefits and services provided through maintaining and enhancing ecosystems.</p>	GCF Observer Network	Thanks. We agree that ecosystems are valuable for ecosystem services and adaptation, as well as mitigation.
2. Global Context	These are the proximate drivers of loss, but what is missing in this characterization are the economic model, trade policies, etc, that lead to this degradation and loss.	UNDP	This is covered in the pathways, which address the ultimate root causes.
2. Global Context	These in themselves are acknowledged as adaptation solutions.	UNDP	Well noted.
2. Global Context	<p>Could we suggest adding text here (or somewhere)?</p> <p>“New research (Goldstein et al. 2020 &amp; Noon et al. In review) has found that ecosystems such as peatlands, mangroves, and old-growth forests contain irrecoverable carbon that is within human purview to manage and, if lost, could not be recovered by mid-century, the timeframe relevant to staving off the climate emergency. At least 4 billion tonnes of irrecoverable carbon have been lost to land conversion since 2010, equivalent to about 5% of annual emissions from burning fossil fuels. Irrecoverable carbon is also threatened by climate change impacts such as drought, fire, storms, and species shifts. Ecosystems will high irrecoverable carbon must be protected and proactively managed for ecological and human resilience.”</p>	Conservation International	Thank you for the suggestion. Agree that this text is very useful, text has been added.
2.2	Many of the issues seem to be from over exploitation /water diversion rather than climate. How much of this diversion is to feed increased productivity greater food farming? I am not seeing the management of water useage – maybe this is under the agricultural guide. The monitoring though would be useful for ecosystems	GGGI	Thanks for your recommendation Nathalie. There is no suggestion that these are from climate. The reader should also refer to Sector Guides for water, agriculture & food security.
2.2	<p>Examples under EbA practices to protect and restore riparian ecosystems should read: “Provide shade, temperature and dissolved oxygen control (because oxygen levels in water are influenced by temperature and impact on the aerobic organisms of these environments), wildlife refugia, and secure water flows to protect sensitive populations of flora and fauna, especially in arid regions.” [emphasis added]</p> <p>Examples under EbA practices to reconnect rivers to floodplains should read: ... “Enhance habitats for migratory species and endemic species.” [emphasis added]</p>	GCF Observer Network	Thanks for the suggestions.
2.2	Add text for clarity: “...across Sub-Saharan Africa ALONE.”	Rare	Agreed, the word "alone" added.
2.2	Change to: “Globally, one third of the world’s population currently lives in water-scarce regions (UNCCD and FAO, 2019), a figure that will only increase as ecosystems degrade.”	Rare	Thank you for the precision.
2. Global Context	2020?	FAO	It is FAO 2020 both in text and in references
2. Global Context	We estimate that of this, at least 5% is irrecoverable carbon. (The ecosystems cannot re-sequester that carbon within 30 years – it’s functionally a permanent impact.)	Conservation International	It has been added.
2. Global Context	Would be useful to elaborate how Amazon is shifting from carbon sink to carbo emitter	Convention on Biological Diversity (CBD) UNEP	Thank you, the Hubau reference covers this concern.

2.2	peatlands: suggest a reference to Global Peatlands Initiative and upcoming Global Peatlands Assessment, and potentially CongoPeat project. Lack of documentation is likely changing.	UNEP-WCMC	No reference added as the assessment has not yet been concluded or published.
2. Global Context	I would not say peatlands in the Amazon remain nearly intact. Peatland maps in the Amazon are not very accurate at the moment and I think large areas of peat might have been burnt recently.	FAO	The paragraph mentions lack of accurate information.
2. Global Context	This is only true for mangroves. Coral reefs release a small amount of CO2 as they form and are therefore relevant ONLY for climate adaptation, not mitigation. Mangroves are powerhouses for both.	Conservation International	Thank you, reworded with the suggestion.
2. Global Context	The presence of two percentages here is confusing to the reader, perhaps adjust text to "... they only represent 1.5% of the TOTAL forest area GLOBALLY."	Rare	Thank you for the suggestion, well noted.
2. Global Context	Add seagrass	Rare	Seagrass are highlighted throughout and mentioned more than 15 times throughout the sector guide.
2.2 Global baseline	Are 375-376 global statistics? If yes, state: "Globally, sea levels..."	Rare	It is implicit that sea level rise is global.
2.2 Global baseline	Suggestion: show data to 2030-50 to be consistent with other sectoral guides. Although there is important to show figures to 2100, it does not allow to understand the urgency either the impact of this result area.	IDB	The guide indicates that Three dimensions commonly define transformational change: depth, scale, and speed. Speed indicates how quickly transformations can be achieved; the urgency of the climate crisis prioritises early outcomes achievable in 5-10 years (the 2030 goal) over those achievable in 30 years (the 2050 goal), because each 'missed year' increases the size of the task ahead.
2.2 Global baseline	Add: "Aquaculture AND SUSTAINABLE SMALL-SCALE FISHING holds tremendous promise..."	Rare	"Sustainable" has been added to qualify sustainability of small-scale fishing.
2.2 Global baseline	with global fish consumption "Speak rather of fishery products which also include fish, crabs, seafood etc."	Project Assistant YVE- Cameroon	This refers to fish specifically.
2. Global Context	This paragraph seems disjointed with little linkages (shift from seagrass meadows to aquaculture and then livelihood impact). Also it seems like solutions are superficial (i.e business as usual aquaculture if not managed right can create tremendous negative impact to coastal ecosystems). Perhaps this paragraph needs to be better organized around a central idea. (Ecosystems role in the protection of coastal systems and climate impacts and then the impact of climate and ecosystem degradation on coastal livelihoods)	UNDP	Thank you for the suggestion. The text has been slightly edited to ensure coherence.
2.2	If base line emissions with figure is placed a section on scenario and benchmarking or road map of commitments be included	Dr. Prachi Ugle Pimpalkhute	Not clear how to address this comment.
2. Global Context	Peatland and fire emissions: Are peatland fire emissions seem to be missing from this chart? That could be an important point to clarify somewhere.	FAO	Peatlands have been included.
2.3	the purpose/content of this is not very clear. Is it meant to provide mitigation & adaptation potential of the different ecosystems? Why are only peatlands and grasslands mentioned specifically? And then for peatlands, only mitigation is discussed. And then the section on protection only discusses it from a mitigation perspective. Suggest breaking down this section into a more balanced discussion of mitigation and adaptation opportunities.	UNEP-WCMC	Thank you for the suggestion. The coherence of the text has been improved.

2.3	Please make reference to Nature-based solutions here as well.	Ministry of Economy and Finance (MEF) Italy	Thank you. Please note that the sector guide does not make reference to NBS. The term used in the guide is ecosystem-based management.
2.3	Add another innovative approach with Managed Access with Reserves as an innovative approach to preserving mangrove ecosystems and territorial waters while also balancing sustainable use for local coastal communities.  Source: "Catalyzing sustainable fisheries management through behavior change interventions" <a href="https://conbio.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/cobi.13475">https://conbio.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/cobi.13475</a>	Rare	Thank you for the recommendation. Given the limited mandate and scope of the sector guide we believe that this is too detailed to include in the text.
2.3	Would include mention of ridge to reef approach as well.	UNDP	Thank you for the suggestion. Ridge to reef approach has been included in the document. However, the differences with other terms such as integrated watershed management are not necessarily crisp in several publications.
2.3	Add grassland ecosystem has a huge amount of potential of terrestrial carbon sink and has also underexplored parts in grassland soil since via grassland ecological restoration projects	China	Thank you for the precision, well noted.
2. Global Context	Why only conservation planning? What about managed production systems - agro-/pastoralis or low-carbon livestock production?	FAO	Please note that text has been added.
2. Global Context	Yes but also linked with sustainable management in transition areas.	UNDP	Thank you for the remark, this is well noted.
2. Global Context	This could be framed in a stronger/ more specific way. Half of the Earth's irrecoverable carbon is found on 3.3% of its land area (some 4.9 M sq. km). This high concentration of irrecoverable carbon in peatlands, mangroves, and old-growth forests means that protection of these ecosystems should be prioritized.  Proactive protection and management are needed because of increasing climate impacts. Ecosystems previously considered low-risk or "secure" either already are or will experience impacts from climate change in the next 1-3 decades.  Irrecoverable carbon areas are limited to those ecosystems where direct human management will still make a difference (e.g., we excluded tundra, where the primary driver of loss is climate change itself). If climate change impacts worsen, more locations will fall into the "unmanageable" category. The manageability of irrecoverable carbon depends on global mitigation in all sectors, but includes the protection of these ecosystems themselves.	Conservation International	This is a very useful comment. Text has been adjusted in a way that it is clearer now.
2. Global Context	And: mining, and poaching	Climate Risk Analyst, NBS Expert	Thank you, please note that this list is not exhaustive.
2.3	For example, land management practices based on indigenous and local knowledge, and community-based natural resource management systems, have been effective in avoiding and reversing land degradation in many regions [Reference: IPBES 2018 Land Degradation and Restoration Assessment]. Good practices of community-based restoration are assisted natural regeneration, farmer-managed natural regeneration, permaculture, analog forestry, etc.	Both Ends	Sure, this is a nice example, but not all examples can be included, unless they represent a major approach proven to work or with high potential for innovation and impact.

2.3	Add beach nourishment or mangrove restoration to the example along with re-wetting peatlands	Rare	Indeed these are key strategies for both adaptation and mitigation. We expect these details to be included in the taxonomy analysis to be developed in 2022.
2.3	Add beach nourishment or mangrove restoration to the example along with re-wetting peatlands	Rare	Thanks for the recommendation, this is well noted.
2. Global Context	Absolutely and there is a wide room for innovation in this aspect, this should be highlighted.	UNDP	Agreed. We welcome innovation aspects in AE's proposals.
2. Global Context	This was a key argument within one of the recently approved UNDP proposals, however we got considerable pushback on this approach. Please consider consistency when analysing future projects, as restoration of coastal ecosystems relies on hydrologi	UNDP	Hydrological analyses are expected for this type of projects. This analysis should take place during FP formulation as part of the feasibility analysis. This is one way to ensure that maladaptation is avoided through an appropriate design of the interventions and measures.
2. Global Context	Consider adding the wording "The Conference of the Parties to the UNFCCC recognized the need to strengthen knowledge, technologies, practices and efforts of local communities and indigenous peoples related to addressing and responding to climate change, and established the Local Communities and Indigenous Peoples Platform (LCIPP).  LCIPP brings together people and diverse knowledge systems to address climate change in a holistic and integrated way.	UNFCCC secretariat	Text has been added.
2.3	Add "...sustainable ways to use ecosystems, LIKE FROM IPLCs."	Rare	Text has been added.
2. Global Context	Nuance: Coastal adaptation?	Climate Risk Analyst, NBS Expert	Thanks for your suggestion. We believe that this aspect has been elaborated in other sections.
2. Global Context	This is mentioned in the beginning however is not well detailed nor explained. A lot more could be said here based on latest research and modelling.	UNDP	Agreed.
2.4	although the title of this section is on financing, most of the discussion actually seems to be about selecting/prioritising actions, e.g. for maximum impact, based on continuum of ecosystem condition. Perhaps two separate sections would work better?	UNEP-WCMC	Please note that the section on financing has been enhanced.
2. Global Context	The cost of financing to achieve the objectives should be accompanied by timing estimation as well, which leads to saying that the financing plan 2020-2023 is not very realistic in this document, it would take at least 5 years (2020-2025 at least) to set up and carry out a strategy, a plan or a program, moreover if the dimension of sustainability need to be considered.	Submission on behalf of USAID	Thanks for your suggestion. Given the limited scope and mandate of the sectoral guide, it should be note that this is not a programming document, it is a guide, so no need to attach precise time estimates.



2. Global Context	Another question: How much will it cost to NOT meet them?	Conservation International	Thanks for your point, this is a very interesting point, but given sectoral guides it is not possible to go into detail to cover such details. We welcome studies or reports by entities such as CI to undertake detailed technical and financial assessments of this issuer portae this to proposals.
2. Global Context	As discussed in previous section, there are considerable potential benefits but "targets" as such are not established yet (or not to the extent passible and feasible). The section heading should therefore be revised to reflect this	FAO	Targets are used in the other sectoral guides; so to employ consistency across other guides been retained.
2.4	The term "natural disaster" is falling out of use. Natural hazards cause disasters, which always have an element of human vulnerability caused by human (unnatural) sources, especially true for wildfires. Suggest replacing with "climate-related disasters".	World Wildlife Fund (WWF)	Cannot attribute to climate.
2.4	Reefs, mangroves, and seagrasses are not similar ecosystems. Suggest changing this to marine ecosystems or coral reefs, mangroves and seagrasses...	World Wildlife Fund (WWF)	Agreed, reworded.
2. Global Context	Mangroves provide \$65 billion in flood mitigation benefits annually <a href="https://www.nature.com/articles/s41598-020-61136-6">https://www.nature.com/articles/s41598-020-61136-6</a>	Conservation International	No need to include, the last sentence covers this well, but thanks for the useful reference, we hope that CI Indonesia project fully include wetland ecosystem values into the proposal.
2. Global Context	Under socio-ecological synergies, consider reflecting IPCC finding "Agricultural practices that include indigenous and local knowledge can contribute to overcoming the combined challenges of climate change, food security, biodiversity conservation, and combating desertification and land degradation" (IPCC, 2019).	UNFCCC secretariat	Thanks for your comment. Given the limited scope and mandate for the sector guide, we are unable to add this specific example.
2.4	Add: "high opportunity costs for agricultural land AND COASTAL WATERS.	Rare	Agreed, text added.
2.4	The purpose of including the information in this paragraph is unclear and it will quickly become dated and does not really provide guidance. We suggest removing.	World Wildlife Fund (WWF)	It is ok because it is current information, it will become dated but any info on current portfolio will always become dated.
2.4	"will better realise potential synergies" ignores the very real possibilities of trade-offs between these objectives. Suggest softening the language to "can better realise potential synergies".	World Wildlife Fund (WWF)	Agreed, changed.
2. Global Context	What perverse outcomes is this referring to? The argument for NbS is often that they can create win-win solutions	Climate Risk Analyst, NBS Expert	It refers to destruction of ecosystems, it is implicit and it comes across clearly.

2.Global context	Could you provide directions on how to establish the baseline? Even if it is just general indications or reference to the corresponding guidelines or key steps that AEs should consider in this regard	Germany	This is context-specific and each project will have to establish one according to circumstances. It is not possible to identify a single method to establish baselines. Baselines are context specific and subject to the condition and integrity of the ecosystem / landscape. We cannot prescribe the methodology to be used by AEs and countries to assess the baseline.
2.4	As above, this is true for historic climate conditions but ignores the climate thresholds at which ecosystems cease to function or undergo transformation that traditional conservation approaches are not equipped to manage.	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
2.4	This needs to be exemplified further. Would recommend perhaps looking into what has been done in mangroves.	UNDP	Thank you, due to the mandate and context of the sector guide we feel it is not possible to explain further.
2.4	Figure 4: This does not seem to be about monitoring, rather about linking actions to ecosystem condition. Also, why are the climate benefits only related to mitigation? And some 'co-benefits' actually seem to be costs/trade-offs (e.g. low biodiversity). In addition, why are only biodiversity related co-benefits/trade-offs listed, when others could be highly relevant? e.g. food/water security, tourism/recreation, etc.	UNEP-WCMC	Agreed, title of the table has been adjusted, and text added regarding the simplified nature of the scheme.
2.4	Is this a continuum approach ? the table below seems more like a matrix without a necessary sequencing	GGGI	It is a continuum. Apologies for any misrepresentation
2. Global Context	Some irrecoverable carbon may be in 'frontier' landscapes (ones that are actively being threatened/ converted) and so would be relevant for avoided loss as well as (proactive) protection in the more primary/intact places.  Also, what does the 'modified' category mean?	Conservation International	The table is a generalization, and it is not intended to capture all issues comprehensively.
2. Global Context	This figure is good, however, it may be useful to have clear definitions for drivers and underlying causes of degradation. It would be good to have some tables and/or tools to promote a pragmatic way for ecosystem assessment and valuations, which should be the basis for action (see GIZ, Integrating Ecosystem Services into developing planning, first edition was in 2011, last one in 2018 or www.aboutvalues.net) - Understanding conditions and trends of ecosystems and ecosystem services is key to maintain or support sustainable use. However, it is also important to consider the underlying causes of such conditions and trends to change and/or reverse them. It would be important to consider this, while working on transformational change	GIZ	Reference added.
2. Global Context	We can now quantify loss of irrecoverable carbon (at least from deforestation) annually.  The "irreversibility" of biodiversity loss is baked into analyses such as hotspots, IUCN red list, endemic species maps, etc.	Conservation International	Reference added to Goldstein et al 2020.
2. Global Context	"is in collectively managed territories without secure land and resource rights."	Submission on behalf of USAID	The distinction is not necessary here.
2. Global Context	At least a third of Earth's irrecoverable carbon is on Indigenous and local communities' lands.  Source: Noon et al. 2021. "Mapping the irrecoverable carbon in Earth's ecosystems." In review at Nature Sustainability.	Conservation International	Reference not added as it is not yet published.

2.4	Since IPs have deep sense of understanding and knowledge about their natural world, they should play a key role in various respects. They should be given consultancy rights and act as major actors in monitoring the status of the ecosystem they are living. Their participation in decision-making must be ensured. Their free and prior informed consent must be sought before anything is implemented. More so, any project plan that involves the IP's environment should require the FPIC.	Transparency International	Agree, this is covered elsewhere and in the GCF policies, in particular the GCF Policy on Indigenous Peoples. <a href="https://www.greenclimate.fund/document/indigenous-peoples-policy">https://www.greenclimate.fund/document/indigenous-peoples-policy</a>
2. Global Context	And, other potential inequalities among groups (e.g. not only gender, there could also be class inequalities)	Climate Risk Analyst, NBS Expert	The GCF does not have the mandate to address class inequalities.
2. Global Context	With the possibility of declining actual or potential trade of food commodities, due to climate change, analog forestry is a valuable ecosystem-based adaptation [lines 315 & 316].	Proyecto Ayurvida, Puerto Rico	Thank you, analog forestry is indeed a valuable approach and possibly, an adaptation response in some cases.
2. Global Context	We suggest not to take IPBES as reference citations, since this report has many problems, like lacking solidified resources, taking suppositional opinions and resources.	China	We explicitly tried to rely on IPCC and IPBES as intergovernmental reports, followed by peer-reviewed academic articles and only minimally used grey literature. IPCC and IPBES also released a joint report recently which very much echoes the priorities for restoration that we outlined in the sector guide.
2.2	Climate change is an increasing driver of ecosystem degradation, but addressing climate change as a driver (mitigation) will not have near and medium benefits to ecosystems. Thus climate change cannot be treated as other drivers such as agricultural expansion, pollution, coastal development which would have immediate benefits for ecosystems. As such, this paragraph is misleading.	World Wildlife Fund (WWF)	Thanks, we believe the reference to the IPBES regarding climate as a driver of degradation is acceptable. There are many ecosystems that are impacted in short term and medium term by climate, factors, which are exacerbated but anthropogenic factors. GCF is a climate fund so these must be stressed, working to reduce human pressure also makes them more resilient to climate changes. We already see impacts of climate on ecosystems, for example, oceanic acidification on coral reefs, melting permafrost in boreal ecosystems, melting glaciers on mountain / alpine ecosystems; increased drying of forests leading to increased forest fires; changing migration patterns.

2. Global Context	Categorization: It is unclear why the separation into Terrestrial and freshwater, and then separately 'Peatlands' - and not e.g. "Wetlands" as peatlands are a type of wetland. Instead of these categorizations, maybe better to just have more complete lists of ecosystems, and then underline the landscape approach, where different ecosystems interact at the landscape level?	FAO	Thank you, there are various ways to organize the ecosystems. The pathways have been better explained.
2. Global Context	Would be useful to add reference on how Amazon is transitioning from carbon sinks to carbon emitters	Convention on Biological Diversity (CBD) UNEP	Thank you, the Hubau reference covers this concern.
2. Global Context	It is important to mention that peatlands can be found in almost all altitudes, and that up- and highland peatlands can be especially important for water security and flood control. Clarify that missing peatland maps and status assessments are a very common phenomena, and are the prerequisite for other activities. Also, instead of focusing only on tropical peatlands, it should be noted that also other climatic zones, e.g. Mongolia has important and largely unmapped peatland areas. Similarly, good to point out that peatlands can be generated by different types of vegetation, such as mangroves - and can also be found in coasts	FAO	Thank you. We strengthened the sections on peatlands throughout the text.
2. Global Context	The wording "coral reefs negatively impacted by sea level rise" may not adequately capture the severity of climate impact on coral reefs.  The IPCC's Special Report on global warming of 1.5°C highlighted that some impacts of climate change may be long-lasting or irreversible, such as the loss of some ecosystems. E.g. the majority (70-90%) of tropical coral reefs, sustaining 1/5 of all life on earth will disappear even if global warming is limited to 1.5°C.	UNFCCC secretariat	Thank you, current text conveys the severity of the threat.
2. Global Context	Aquaculture does hold tremendous promise, but also peril for biodiversity if not well-managed. The authors may wish to clarify that without careful management, aquaculture risks generating pollution that further threatens the viability of coastal systems.	Submission on behalf of USAID	"Sustainable" has been added to qualify aquaculture.
2. Global Context	Peatlands: Again, it would be important to give here the scope of different management opportunities to reduce emissions in peatlands and that this can be done in a large part of countries. Peatlands can be located in at least 160, potentially up to 180 countries in all climatic zones. It would be important to encourage also countries with less vast, but potentially intensely emitting peatlands to map, assess, and improve the management of their peatlands to preserve their carbon. It would be very welcome not to focus only on the hotspots, and forgetting many small countries which could be demonstrating leadership with peat, a bit in the same way as Costa Rica has done on many other sectors.	FAO	Thank you for the recommendation. Given the limited mandate and scope of the sector guide we believe that this is too detailed to include in the text.
2. Global Context	under protection, consider adding the wording "doing so in a manner that respects and promotes the rights of indigenous peoples and local communities", reflecting Paris Agreement preambular text.	UNFCCC secretariat	Thank you for this suggestion. Given the scope of the sector guide, some preambular wording could not be incorporated given the document extension.
2. Global Context	Grasslands are typically not high-carbon ecosystems	Conservation International	Thank you for this comment. However, other comments received are not necessarily in agreement with this statement. Text remains as it is.

2. Global Context	It would be important to include some sensitivity in the context of discussing grasslands, particularly as it pertains to production systems, namely pastoralism and agro-pastoralism, that are born out of a specific environment . There is a science to such production systems that is underpinned by grazing cycles intended to replenish areas throughout the year. How have land use policies affected this; particularly those that favored intensive agriculture? What is meant by improved governance systems? How does this take into consideration the traditional governance systems that were superimposed by modern governance systems?	FAO	Thank you, this is all true but can be developed and integrated in AE's proposals.
2.Global context	Depending on the measures taken restoration can be cost-effective like natural or assisted restoration or by tackling the drivers of degradation through regulations and law enforcement.	Germany	Thank you, agreed. This has been better explained in the restoration section of the document. Reference is also made in the FLU sector guide.
2. Global Context	Grasslands	FAO	Thanks for the suggestion, we believe that it is not needed in this section.
2.3	Much better sources available on this statement, including from the Convention, the IPCC and the Paris Agreement, including para 108 of decision 1/CP.21: "Recognizes the social, economic and environmental value of voluntary mitigation actions and their co-benefits for adaptation, health and sustainable development;"	UNFCCC secretariat	Text has been added.
2.Global context	Can this be elaborated? It would be helpful for the GCF to indicate (or exemplify) priorities.	Germany	Thanks for your suggestion. We believe that this aspect has been elaborated in other sections.
2.4	As for other thematic sectoral guidance, we are not generally in favour of providing aggregated cost estimates here given the limited sources available and different methodologies and approaches used, as reflected also in the text. This holds even more factual for EES. Therefore, we suggest deleting estimates in lines 511-513.	Ministry of Economy and Finance (MEF) Italy	Thank you, this comment contradicts others, we prefer to provide broad estimates to show the magnitude of the value of the service.
2.4	We share the complexities of evaluation of the multiple benefits of nature based solutions implementation, including the quantification of the climate mitigation benefits as well as the determination of the most appropriate management approach for ecosystem protection and restoration. Nevertheless, we wish to stress the importance of linking the sectoral guidance with the proposed relevant indicators within the Integrated Results Management Framework in order to make sure that qualitative and quantitative ex-post assessment of FPs can be coherently performed in the context of the overall GCF operation. Making sure, however, that this approach should be construed and applied within FP preparation in a way that can be meaningfully monitored through baseline datasets that can be easily collected and compared with the IRMF guidelines for ex-post FP performance reviews.	Ministry of Economy and Finance (MEF) Italy	IRMF text and reference added. Reference here: <a href="https://www.greenclimate.fund/document/gcf-b29-12">https://www.greenclimate.fund/document/gcf-b29-12</a>
2.4	Understanding the baseline is important, but it is just as important to understand anticipated changes in climate that will affect ecosystem health and performance to design the most appropriate approaches. This paragraph is promoting business as usual conservation.	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
2. Global Context	It would be useful to integrate more on biodiversity as a form risk management - <a href="http://www.fao.org/biodiversity/news/detail-events/en/c/1309803/">http://www.fao.org/biodiversity/news/detail-events/en/c/1309803/</a> It is useful to embed in the document more common language in the context of adaptation, mitigation, DRR, and ecosystem management	FAO	Thank you, due to the mandate and context of the sector guide we feel it is not possible to explain further.

2. Global Context	Conceptual error: both mangroves and peatlands are wetlands, and mangroves are also forests, and peatlands can be... The same error is repeated also elsewhere in the document. It could be e.g. "tropical forests, peatlands, mangroves, and other wetlands"	FAO	Thank you, given the limited scope and context of the sector guide it is not possible to into detailed ecology system classification. There is no need to force certain ecosystems within strict categories peatlands are wetlands but also forests and also tropical forests mangroves are wetlands but also forests.
2. Global Context	Adjust IPLC terminology to: "Indigenous PEOPLES and local communities"	Rare	Added throughout the sector guide
2. Global Context	Consider maintaining and enhance the integrity of ecosystems as the primary goal, which in turn helps boost the confidence of investors.	UNFCCC secretariat	Thank you, not sure why this would boost investor confidence? Comment is not clear, and given the limited scope of the sector guides we feel we are not able to expand on this issue.
2. Global Context	This sentence is a bit problematic because it assumes that supporting rights and livelihoods of local and Indigenous communities only benefits investors. Supporting rights and livelihoods should be part of all investment processes (integrated into the process) to reduce investment risk, but also to ensure that local communities have an active role in making land use decisions and ensure benefit flows-- thereby reducing conflict and ensuring equity.	Submission on behalf of USAID	Agreed, reworded as suggested.
2. Global Context	"while keeping in mind gender issues" is vague. Women have less access, control over and ownership of land rights and should be involved in clarifying and securing land rights. Consider saying this much more directly.	Submission on behalf of USAID	Agreed, text adjusted.
2.2	This section is good at pointing out climate threats to ecosystems. The rest of the document has to encourage practices that go beyond traditional restoration and protection to help facilitate change in ecosystems to maintain functionality rather than to simply manage for persistence.	World Wildlife Fund (WWF)	Agree, this is how the document is organized.
2.3	Similarly, the section starts off strong talking about impacts on ecosystems, but offers no guidance or encouragement of managing ecosystems for impacts. This is not where the sector needs to be. There is a lot of interesting work happening on climate-adaptive ecosystem management that GCF should be interested in exploring and promoting.	World Wildlife Fund (WWF)	The document incorporates several sections on innovation. We would welcome WWF's proposals incorporating the interesting work on climate-adaptive ecosystem management.
3.1	Despite the title, this section doesn't really discuss drivers of change specifically; seems to be more about the Theory of Change	UNEP-WCMC	A driver of change "drives" the theory of change. This is not about drivers of ecosystem loss or degradation.
3.1	Increasing the resilience of ecosystems to climate change does not happen solely with traditional approaches to protection and restoration.	World Wildlife Fund (WWF)	Thanks for the comment, it is not said in the document traditional approaches only increase ecosystem resilience.

3.1	We welcome this section, which(similar to FLU) focuses on depth over scale or speed as the desired focus for paradigm shifting/transformational activities. This should be maintained.	GCF Observer Network	Thank you.
3. Paradigm Shifting Pathways: EES Result Area	Suggest the following revised text to include the potential for EBA which seems to be missing: "(3) Increasing resilience of people, in particular vulnerable people, to the effects of climate change by harnessing ecosystem based services."	UNDP	It is implicit that these are achieved by harnessing ecosystem-based services.
3. Paradigm Shifting Pathways: EES Result Area	Consider changing the wording "empowering" to "respecting and promoting", which reflect PA language.	UNFCCC secretariat	"Empowering" has been adjusted to "enabling the respect and participation of"
3. Paradigm Shifting Pathways: EES Result Area	This is one of six topics singled out to be the basis of the necessary paradigm shift, but the instruments for GCF involvement in that process don't ever appear in the text.	FAO	Indigenous Peoples participation is mentioned throughout the guide.
3. Paradigm Shifting Pathways: EES Result Area	Adding reference to improved biodiversity and ecosystem health in the impact section. Currently there is no impact area on ecosystem and biodiversity	Convention on Biological Diversity (CBD) UNEP	These are not impact areas under the GCF. The IRMF uses protection, restoration, and management as inputs to reduce GHG emissions or enhance adaptation.
3. Paradigm Shifting Pathways: EES Result Area	Adding reference to improved biodiversity and ecosystem health in the impact section. Currently there is no impact area on ecosystem and biodiversity	Convention on Biological Diversity (CBD) UNEP	These are not impact areas under the GCF. The IRMF uses protection, restoration, and management as inputs to reduce GHG emissions or enhance adaptation. Number of hectares is an indicator that is included in the revised Results Management Framework.
3. Paradigm Shifting Pathways: EES Result Area	Under dimensions of transformational change, it may be helpful to consider "sustainability/reversibility" of such change. If changes are easily reverse, they may not constitute paradigm shift.	UNFCCC secretariat	Sustainability is implicitly required in the GCF.
3. Paradigm Shifting Pathways: EES Result Area	Why vulnerabilities, adaption and mitigation are not explained in detailin the context of ecosyem services. Also how physical risak shal have an impact on ecosyem services is not mentioned	Dr. Prachi Ugle Pimpalkhute	These are explained elsewhere. It is not possible to provide detailed explanation of these issues given the scope and size of the sector guide.
3. Paradigm Shifting Pathways: EES Result Area	Where does this figure (5) come from, who conceptualised it? Please mention it in the text	Germany	Source added as GCF own elaboration. It was elaborated by the GCF team and team of consultants who supported the conceptualization of this sector guide.
3. Paradigm Shifting Pathways: EES Result Area	In Fig 5, under the column, pathways for paradigm shifting interventions, consider a regenerative whole-systems approach to ecosystems which includes protect, restore and revitalising the whole ecosystem system.	UK	Thanks for the comment; we feel this is reflected in the text.

3. Paradigm Shifting Pathways: EES Result Area	Consider adding capacities such as bridging, negotiation, governance, social network, motivational and analytical capacity (Kuhlicke & Steinführer, 2015; Kuhlicke et al., 2011). This would also support the pillars in GCF Theory of Change. Perhaps also to think of leverage points (meadows?) • Expansion and replication of knowledge: the missing are knowledge co-production and co-generation... considering different sorts of knowledge systems which could be key for innovation.	GIZ	Thanks for your comment, though given the limited size/scope of the sector guide we think that going into detail on this issue is not possible.
3. Paradigm Shifting Pathways: EES Result Area	Figure 5 may benefit from an additional box in the rightmost column on improved well-being. In addition to strengthening livelihoods, improved environmental conditions are likely to improve health or cultural outcomes as well, which isn't really captured in the terms used in the rightmost boxes, but are outcomes often encapsulated by the term "well-being"	Submission on behalf of USAID	Well-being is the ultimate outcome but this is about mitigation and adaptation. For livelihoods it is reducing their vulnerability, please see the new Results Framework <a href="https://www.greenclimate.fund/document/gcf-b29-12">https://www.greenclimate.fund/document/gcf-b29-12</a>
3. Paradigm Shifting Pathways: EES Result Area	How is 'depth' measured. Scale and speed are measurable, but depth?	GGGI	Depth is defined in the text (lines 603-605): "Deep transformations cut across sectors, levels and generations, and are needed to change cultures, power dynamics, and structures (markets, laws, institutions)."
3. Paradigm Shifting Pathways: EES Result Area	Transformational change in the context of deeply addressing drivers. So far no deep discussion on 1) agriculture as a major driver of land degradation and loss of biodiversity and 2) consumption as a key factor shaping agri-food systems	FAO	Text has been added.
3. Paradigm Shifting Pathways: EES Result Area	Outcomes in terms of mitigation or both? It is of course valid to consider urgent responses, but we need to avoid missing opportunities that over the medium to longer term actually lead to more sustainable and resilient systems, so have to sequence different approaches that operate at different time scales together.	UNDP	Thank you for the comment.
3. Paradigm Shifting Pathways: EES Result Area	While it is true that the focus needs to be on depth, ambitious initiatives on speed and scale are also possible and should not be discarded	FAO	Thank you for the comment, these ambitious projects are not discarded.
3. Paradigm Shifting Pathways: EES Result Area	How does this related to paradigm shift in other related results' areas, e.g. agriculture (wherein loss of ecosystem services and ecosystems' degradation affects food security and climate resilience of food production system)?.	UNDP	No need to discuss it here, text added elsewhere.
3.1	Add "Behavior centered solutions are also vital to addressing norms, pressure, incentives and policy forces addressing and understanding motivations, barriers and biases, to generate targeted solutions to environmental challenges, are viewed as an expanded tool for conservation efforts, and aligned with ecosystem-based adaptation approaches. World Conservation Congress Resolution: <a href="https://www.iucncongress2020.org/motion/078">https://www.iucncongress2020.org/motion/078</a>	Rare	Thanks for the comment, due to the scope of the sectoral guide it doesn't not add significantly to add this comment to the text.
3.1	GCF Strategic Plan 2020-2023	IDB	Reference to GCF Updated Strategic Plan added.



3.1	Important qualifier/investment criterion for EES GCF investments, namely that in order for a project/program in this sector to be considered high impact and paradigm shifting, it needs to "achieve multiple objectives based on ecosystems and their services." Such multiple benefit requirements need to apply to all GCF investments in this sector, and in particular for private sector ones (which cannot be allowed to be reduced to the cost-effectiveness of carbon-related outcomes in EES investments) and need to ensure that differentiated needs and benefits of local communities, and in particular for women and youth, are delivered.	GCF Observer Network	Thanks for the comment. The GCF Results Framework covers eight thematic areas, including ecosystem services. Projects that conduct economic and financial assessments do not only relate to the cost-effectiveness of carbon-related outcomes.
3.2	Why reduction pathways are not explained as regard to land use?	Dr. Prachi Ugle Pimpalkhute	Thanks for the comment, unfortunately we cannot include every concept in the sector guides.
3.2	In "ecosystem management"	UNDP	No need to add.
3.2	To someone who is not so familiar with GCF lingo regarding 'paradigm shifting pathways', the guide reads as if there are two pathways at stake here: one pathway for terrestrial ecosystems and one pathway for freshwater ecosystems. This is hardly the intention. To someone who is not so familiar with what 'paradigm shifting pathways' could be, examples could be useful in order to illustrate that many different pathways can be found in many different types of ecosystem.	Finland	Language strengthened to explain the pathways and how they were selected.
3.2	This should include uncertainty and risks associated with ecosystem responses to and performance under novel climates as a barrier and add appropriate measures in Table 4.	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
3.2	Suggest both carbon gains and adaptation gains should not be achieved at the expense of other ecosystem functions; not sure why this sentence only mentions carbon gains.	UNEP-WCMC	Agree, add "and adaptation"
3. Paradigm Shifting Pathways: EES Result Area	Consider adding the following: For this reason, diminishing trade-offs within ecosystem services should be considered. Trade-offs among multiple ecosystem services occur when an improvement in one ecosystem service is achieved at the expense of a decrease in another; conversely, when an improvement in one ecosystem service leads to an increase in another, the relationship is a synergy (Wang et al, 2018) - Wei Yang, Yuwan Jin, Tao Sun, Zhifeng Yang, Yanpeng Cai, Yujun Yi, 2018: Trade-offs among ecosystem services in coastal wetlands under the effects of reclamation activities. Ecological Indicators. Volume 92, Elsevier --> Author links open overlay panel Wei Yang, Yuwan Jin, Tao Sun, Zhifeng Yang, Yanpeng Cai, Yujun Yi	GIZ	Thanks for your comment, unfortunately due to the scope and size of the sector guide it is not possible to include in-depth analysis on every topic related to ecosystem services, however, tanks for the interesting paper on trade-offs, this could be included in the scope of transformational planning.
3.2	Projects and programs must be aligned with the accepted universal norms and standards including the UN's Millennium Development Goals. Implementing projects with such standards and conventions will have no competing interests from stakeholders or less conflicts at socio-environmental and inter-community level.	Transparency International	This has been mentioned at the beginning, and is part of the broader GCF policies.
3. Paradigm Shifting Pathways: EES Result Area	Could also add: Risk - business as usual is tried, tested and true, innovative approaches are perceived as more risky because they are new and novel Governance - uncertain roles regarding implementation and long-term maintenance. Policy - policies may obstruct implementation of new approaches to ecosystem management, e.g. coastal areas that are designated as 'protected' and prohibit human intervention, even if it could be beneficial.	Climate Risk Analyst, NBS Expert	These concepts are already covered.
3. Paradigm Shifting Pathways: EES Result Area	Important to add reference to perverse subsidies leading to environmental degradation, loss of ecosystem function and biodiversity loss	Convention on Biological Diversity (CBD) UNEP	Removing subsidies is part of the actions within the paradigm shifts.

3.2	Important to add reference to perverse subsidies	Convention on Biological Diversity (CBD) UNEP	Removal of subsidies is included in the actions under the pathways.
3. Paradigm Shifting Pathways: EES Result Area	Adding "peoples" (i.e. indigenous peoples)	UNFCCC secretariat	Agree, "Peoples" added throughout.
3. Paradigm Shifting Pathways: EES Result Area	Table 3: perceived conflicts should include intersectoral/ministerial conflicts and power dynamics, i.e. it's not just community level conflicts.	UNEP-WCMC	Text added.
3.2	IETA generally supports the selected barriers to paradigm shift in terrestrial and freshwater ecosystems management, in particular the sections on "high upfront costs and elevated investment risk" and "weak or non-existent land tenure".	IETA	Agreed
3. Paradigm Shifting Pathways: EES Result Area	What about policy/regulatory-related barriers? There is a need to integrate EES actions into the National Adaptation Plans (NAPs)	IDB	This is in old line 909, new 951.
3. Paradigm Shifting Pathways: EES Result Area	The status quo prevents innovation box partly addresses the challenge, but it could be more explicit that there are many vested interests in maintaining the status quo. It's not simply that there's an absence of markets that properly value ecosystems goods and services, but that there are active efforts to prevent those markets from materializing, and without understanding these interests, the status quo is unlikely to change.	Submission on behalf of USAID	It may be possible that there are interests that prevent these markets from developing, although in all market transformation initiatives to date the barriers have been lack of knowledge, risk, etc., but not opposing interests.
3. Paradigm Shifting Pathways: EES Result Area	In the Weak or non-existent land tenure box, change the first sentence to "Local communities, including Indigenous communities, will have greater capacity to receive benefits from investments if land rights are recognized, and are ideally by enforceable legal means."	Submission on behalf of USAID	Agreed, text adjusted.
3. Paradigm Shifting Pathways: EES Result Area	In the Gender equality box, change the first sentence to "...often either exclude or discriminate against women."	Submission on behalf of USAID	Agreed, text adjusted.
3.2	The biggest barrier to paradigm shift is the fact that the values of ecosystem services continue to be externalized in decisions by both public and private sectors. There are institutional, regulatory and human resource weaknesses that contribute to creating and perpetuating such a condition. This applies to the coastal and marine ecosystems.	UNDP	It is there "Absence of markets and financial mechanisms to properly value nature, ecosystem services, cultural values, and other externalities."
3.2	Limited tangible direct return for investors ? Requires value allocated to natural assets	GGGI	Yes, externalities have been discussed in text and table.
3. Paradigm Shifting Pathways: EES Result Area	Preventing investment by government and private sector actors	Conservation International	This comment does not need to be added as it is implied within the general text.
3. Paradigm Shifting Pathways: EES Result Area	If the private sector was investing in ecosystems?	Conservation International	Interests did align, with the pandemic. as the example shows.

3. Paradigm Shifting Pathways: EES Result Area	Visibility or viability?	Conservation International	Visibility is ok as it refers to more obvious opportunities.
3. Paradigm Shifting Pathways: EES Result Area	Consider rephrasing 'Absence of markets, financial and policy mechanisms to properly value nature, ecosystem services, cultural values, and other externalities. Lack of recognition and consideration of multiple values, lack of knowledge co-creation that could permit innovation. Comment: Many values are difficult to measure in monetary terms and therefore could be captured through policies that recognise their importance and relevance for the system	GIZ	The sentence is important in itself and illustrates a specific problem.
3. Paradigm Shifting Pathways: EES Result Area	"Perceived conflicts" can also include institutional conflicts where policies and subsidies/incentives are in conflict, or institutional arrangements/responsibilities are not clear.	FAO	Text added.
3. Paradigm Shifting Pathways: EES Result Area	Regarding the barriers on Status Quo and overuse of expert driven processes, it should be mentioned, in the explanation, that the silos approach to ecosystem-based management of terrestrial and freshwater ecosystems is a major barrier. Terrestrial and freshwater ecosystems are often managed separately and rarely accounting for their interconnectedness. The silos approach also often happens when managing for a particular ecosystem service.	FAO	Not sure if the silo approach refers to this guide. If so, the guide does not advocate the silo approach, as projects can easily span both types and integrate responses.
3.2	Rephrase this barrier, considering the lack of recognition of traditional and customary laws by national governments. Most of the time this is related to the lack of consideration or the overlapping of formal and traditional property rights (where land tenure is only one of these rights)	GIZ	This may be true, but does not change the meaning of the current wording.
3.2	This is a strong statement with weak evidence. There are various valuation methods (an overview could be found at <a href="http://www.aboutvalues.net">www.aboutvalues.net</a> : inventor of methods or by IPBES Gateway). The problem is not necessarily the lack of methods but how they are used and the lack of uptake of the valuation results, which is more related to political willingness than the robustness of methods themselves. The valuation methods that exist could be enough to develop indicators for more climate sound decisions.	GIZ	Thanks for the comment. There are many methodologies, but none are universally accepted due to differences, and as you point it wider issues of market mechanisms political willingness, however, there is a slow a lot of differences in robustness from benefit transfer valuations to others. One of the most seminal papers on ecosystem accounting is still Constanza, published 25 years ago. It is not possible to extend this section in the sector guide as it would require considerable text to elaborate on the principles and methodologies. This would also be something that could be included in proposals, or tested for a country in a GCF readiness project (country or multicountry)
Paradigm Shift	(second bullet) and greater synergy between technical skill sets	Climate Risk Analyst, NBS Expert	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.

Paradigm Shift	EbA and Eco-DRR are recognized as instruments for promoting synergistic implementation of the Rio Conventions – the Convention on Biological Diversity (CBD), the UN Convention to Combat Desertification (UNCCD), and the UN Framework Convention on Climate Change (UNFCCC)	Convention on Biological Diversity (CBD) UNEP	Reference added in text and references.
3. Paradigm Shifting Pathways: EES Result Area	To take into account transboundary approaches at the regional level- To enhance synergies among different policies and implementation strategies; (CBD, COP 14 Decision 14/5)	Convention on Biological Diversity (CBD) UNEP	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	and recognition of individual and collective action	Convention on Biological Diversity (CBD) UNEP	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	To take into account transboundary approaches at the regional level- To enhance synergies among different policies and implementation strategies; (CBD, COP 14 Decision 14/5)	Convention on Biological Diversity (CBD) UNEP	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	Transformational planning and programming Would be useful to add the following points to this section: Securing land tenure, including recognition of individual and collective action <a href="https://www.cbd.int/gbo5/local-biodiversity-outlooks-2">https://www.cbd.int/gbo5/local-biodiversity-outlooks-2</a> Transboundary approaches at the regional level to enhance synergies among different policies and implementation strategies (CBD, COP 14 Decision) 14/5)	Convention on Biological Diversity (CBD) UNEP	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	Adding "peoples" (i.e. indigenous peoples)	UNFCCC secretariat	Agree, "Peoples" added throughout.
3. Paradigm Shifting Pathways: EES Result Area	Under catalysing climate innovation, it may be beneficial to take into account the knowledge and values of indigenous peoples, e.g. their relational approach to nature and intergenerational considerations for resource management. For example, the concept of kaitiakitanga in Māori culture.	UNFCCC secretariat	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	Under mobilization of finance, it may be beneficial to consider both the delivery of and access to such funds.	UNFCCC secretariat	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3.2	Analog forestry would satisfy GCF's intentions to pilot the development of these bio-businesses [Catalysing Climate Innovation, table 4: page 23].	Proyecto Ayurveda, Puerto Rico	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.
3.2	Forest Garden Product certification is an opportunity to mobilize finance at scale through a certification scheme [Mobilisation of Finance at Scale, table 4: page 24] ( <a href="https://www.analogforestry.org/our-work/accreditation/">https://www.analogforestry.org/our-work/accreditation/</a> ).	Proyecto Ayurveda, Puerto Rico	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.

3.2	The Voluntary Guidelines on Tenure (VGGTs) give concrete guidance for the implementation of responsible land tenure governance. The FAO and relevant stakeholders have developed Technical Guides on how the VGGTs can be used in specific sectors, for specific groups, under specific conditions. There are several relevant Technical guides being developed by FAO: Safeguarding land tenure rights in the context of agricultural investment (FAO Technical guide number 4) Improving governance of pastoral lands (FAO technical guide number 6), A technical guide for investors (FAO Technical guide number 7), Governing Tenure Rights to Commons (FAO Technical guide 8), Valuing Land Tenure Rights (FAO Technical guide 11), Strengthening civic spaces in spatial planning processes (FAO Technical guide 12). To give guidance to land tenure governance, please make reference to the VGGTs and the technical guides.	Both Ends	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.
3.2	Under: "Catalysing climate innovation", add: Support knowledge exchange between farmer communities and consumers communities on Participatory Guarantee Systems that guarantee and certify authenticity within a value chain. Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange [See: <a href="https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems">https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems</a> ]	Both Ends	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.
3.2	Add to Mobilisation of finance at scale: Revise and make better accessible financial mechanism towards the support of transformative land use practices of (communities of) land users groups in general and specifically to groups of small-scale female farmers, pastoralists and women. [Reference: Contribution of community-based initiatives to the sustainable development goal of Land Degradation Neutrality, 2018, <a href="https://doi.org/10.1016/j.envsci.2018.12.017">https://doi.org/10.1016/j.envsci.2018.12.017</a> ]. The Small Grants Program of GEF is a good example for accessible financial support for communities. Consider revising funding characteristics towards decision making, flexibility, long-term, grant size etc [See: Putting people first: the transformational impact of small grants funds: <a href="https://www.bothends.org/nl/Actueel/Publicaties/Putting-people-first-the-transformational-impact-of-small-grants-funds/">https://www.bothends.org/nl/Actueel/Publicaties/Putting-people-first-the-transformational-impact-of-small-grants-funds/</a> ]	Both Ends	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.
3.2	IETA strongly supports the possible actions to support paradigm shifts for ecosystem-based management of terrestrial and freshwater ecosystems. IETA supports many of the similar points that are identified in the FLU draft, outlined in the section above, including improving monitoring, piloting and testing new methods and schemes. IETA strongly supports the reference to various ways to incentivise investments from private sector, but encourages recognition that markets are one of the most efficient and effective ways to attract private sector investment.	IETA	Agreed
3. Paradigm Shifting Pathways: EES Result Area	In Transformational planning and programming, consider expanding land tenure to land and resource tenure or land and resource rights ("rights" and "tenure" can both be equally significant, but can mean different things).	Submission on behalf of USAID	Thanks for the comments, land rights and tenure are used interchange in the text.
3.2	The differentiation between terrestrial and freshwater and coastal and marine ecosystems makes sense. We appreciate the detailed elaboration of barriers and possible paradigm shifting outcomes for each (at Tables 3, 4, 5, 6).	GCF Observer Network	Thanks for the comment.
3.2	Great that "gender inequality" and "overuse of expert-driven processes", "weak or non-existent land tenure" are listed as barriers to a paradigm shift in terrestrial ecosystem management; not clear why this would not equally apply to Table 5 on coastal zone and marine ecosystems management.	GCF Observer Network	Thanks for the comment. Land tenure here applies to oceanic rights or terrestrial land rights related to coastal ecosystems. Integrated coastal zone management involves strengthening land tenure.

3.2	Some references here are unclear, inadequate or inappropriate, namely: -- "extractive industries aligned with ecosystem conservation" as a possible action with transformative potential. This seems completely misguided and this reference should be removed. Further, please ensure that references to "SMEs" are consistently rendered as "MSMEs"	GCF Observer Network	Extractive industries may be a possible action. The term SME covers MSME.
3.2	References to "gender inequality" and "overuse of expert-driven processes", "weak or non-existent land tenure" should be listed as barriers to a paradigm shift in coastal and marine ecosystem management similar to the considerations under terrestrial ecosystem management (in table 3).	GCF Observer Network	Thank you for the suggestions.
3.2	EbA has moved beyond the pilot phase – the most commonly used EbA approach involves mangroves' restoration, and there are clear carbon sequestration benefits. Similarly, restoring/improving the management of catchments, wetlands, etc., which are important for reduced soil erosion, flood risk reduction, etc., also have carbon and other GHG absorption potential. So, while this point is important, the word "piloting" perhaps undermines the important of this possible action area.	UNDP	The existence of good experiences does not preclude the need for additional pilots that test other approaches.
3.2	This is not untested, there is widespread understanding of the role of wetlands in flood risk reduction; this point is excellent	UNDP	There is no suggestions that these have not been tested before, but additional experiences and tests can be useful.
3.2	As mentioned elsewhere, for some of these, if the GCF already have examples and thoughts, it would be very helpful to see in the guide.	UNDP	There is a section with examples.
3.2	This is feasible in certain contexts but certainly difficult in cash-strapped, poorer economies where tariffs maybe barely sufficient to maintain operations. Nevertheless it is an important avenue to consider more thoroughly.	UNDP	Agreed
3. Paradigm Shifting Pathways: EES Result Area	<i>Mobilisation of finance at scale:</i> In addition, improving the current lack of access to financial services for rural households and micro/small businesses can help increase their options to obtain financing and help them become more financially resilient.	Rare	Thanks for your comment, due to this sector guide size and mandate we think this point is covered. Please also refer to Agriculture and Food Security sector Guide
3.2	The entry "Developing and transFinlandg new markets for protecting carbon stocks in ecosystems of reduced deforestation and ecosystem loss threats" is difficult to understand, especially in the given context. Please clarify.	UNFCCC secretariat	Thank you, the sentences was adjusted.
3.2	Many of the bullet points referred to as 'transformational' potential are, in fact, rather typical 'development actions'. It makes our experts wonder whether GCF activities truly are paradigm shifting and transformational or whether we are just listing "usual" activities under a different heading. For example, securing land tenure or multi-level and multi-sectoral governance and coordination are issues which have been discussed for decades. These are not wrong, the question is more about whether these need to be "packaged" as something new.	Finland	These can still be transformational if properly implemented. They do not pretend to be new, but can be implemented in a transformational manner and for man countries where land tenure des not exist, it is transformational to assign a farmer land rights, or the same as financial equity, where a farmer has no bank account access to microfinance or bank account is transformational. We also encourage AE's to submit transformational and innovative ideas.

3. Paradigm Shifting Pathways: EES Result Area	Language could be more consistent regarding ecosystem services bundling. For example, under Mobilization of finance at scale, they specifically mention stacking of ecosystem services under PES schemes. This is consistent with the rest of the document. But this is not as explicit under "Catalysing climate innovation" or "transformational planning and programming". It is implied but not explicit (i.e. multi-sectoral governance and coordination or Piloting ecosystem-based adaptation practices that identify synergies with mitigation to foster higher carbon and non-carbon benefits.).	FAO	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	Most of the time there is not uncertainty but a lack of recognition and overlapping property rights.	GIZ	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3. Paradigm Shifting Pathways: EES Result Area	It would be helpful if detailed explanation is provided.	GIZ	Glossary have been carefully adjusted.
3. Paradigm Shifting Pathways: EES Result Area	"Catalysing climate innovation" focuses primarily on financial and technical innovations. It could benefit from an additional action related to policies, which is referenced in the section starting on line 143.	FAO	Agreed, text adjusted.
3. Paradigm Shifting Pathways: EES Result Area	Why no mention of ways to improve livelihood via carbon finance, joint implementation not mentioned? Ideally it should have been included.	Dr. Prachi Ugle Pimpalkhute	Thanks for the comment, we feel that carbon is mentioned in the text, but the sector guide can not cover all aspects.
3. Paradigm Shifting Pathways: EES Result Area	IETA generally supports the vision for the pathway, ecosystem-based management of coastal and marine ecosystems, outlined in the draft sectoral guide.	IETA	Agreed
3. Paradigm Shifting Pathways: EES Result Area	Both barriers and opportunities should address more directly also the central role of agriculture and farmers (as indicated in the EE, agriculture is one of the primary drivers of terrestrial ecosystem degradation) - as such the barriers and entry points would benefit from a more direct consideration (i.e. on land tenure, private sector engagement, etc)	FAO	Links with Agriculture Sectoral Guide strengthened, and mention to AFOLU added.
3. Paradigm Shifting Pathways: EES Result Area	Add "It should be noted that blue infrastructure solutions can directly support seven of the ten targets under SDG 14."	Rare	Thanks for the comment., we don't think it is necessary given the limited size and scope of the sector guides to include within the text.
3.2	We highly recommend consulting the local experts and organizations in the area who have experiences, data, and knowledge of the area. They should be asked to collaborate with entities or authorities who are implementing projects and programs for their environment.	Transparency International	Agree, this is part of GCF's consultation and disclosure requirements and more importantly, of good project design.
3.2	Social acceptance is not a barrier if locals and targeted beneficiaries are informed in advance, being consulted, and presented with transparent project plan. Again, free, prior, and informed consent (FPIC) is necessary to prevent resistance and waste of resources.	Transparency International	Agree, therefore until they are presented with such transparent project plan (and other actions), social acceptance is a barrier.
3.2	Most local organizations that monitor and have programs on nature conservation have deeper knowledge, understanding, and experiences in various parts of the world. They should be consulted as they can be more knowledgeable than their respective governmental institutions.	Transparency International	Agree, but this does not change the meaning.

3. Paradigm Shifting Pathways: EES Result Area	I think it should say ' high <b>opportunity costs</b> ' not restoration costs (based on description)	Climate Risk Analyst, NBS Expert	This is correct, adjusted.
3. Paradigm Shifting Pathways: EES Result Area	And also a lack of data of how ecosystems operate together, e.g. coral reefs and mangroves, to dissipate wave energy	Climate Risk Analyst, NBS Expert	This is covered elsewhere in the guide.
3. Paradigm Shifting Pathways: EES Result Area	Reverse order – blue infra first, grey infra, second. Failure to recognise or underestimate the long-term maintenance of grey infrastructure, in comparison to 'blue infrastructure'.	Climate Risk Analyst, NBS Expert	Thanks for the comment, undertaken it is not clear. Note that the Infrastructure Sector Guide also includes section on ecosystem based solutions.
3. Paradigm Shifting Pathways: EES Result Area	IETA generally supports the selected barriers to paradigm shift in coastal zone and marine ecosystems management.	IETA	Agreed
3. Paradigm Shifting Pathways: EES Result Area	What about policy/regulatory-related barriers? There is a need to integrate EES actions into the National Adaptation Plans (NAPs)	IDB	Many of these barriers are also expressed through policies, so no need to add policy-specific barriers if they are already covered.
3. Paradigm Shifting Pathways: EES Result Area	Table 5. about mangroves. Who has considered mangroves unsanitary and undesirable? Please specify if this corresponds to the resort owners perspective because communities depending on the mangroves services (e.g. fishers) might disagree.	Germany	Thanks for the comment. We will try to address and amend this text so it is clear. It is usually urban dwellers who consider them 'unsanitary', villagers recognise the enormous potential and dependence on them for fisheries / non timber forest products / etc.
3. Paradigm Shifting Pathways: EES Result Area	Building with nature is probably a key concept for these guidelines, but it is never explained well. Please elaborate and integrate the concept more in the document	Germany	Definitions have been carefully adjusted.
3. Paradigm Shifting Pathways: EES Result Area	Since artisanal fishery plays a key role all over the world. It is important to provide financial literacy, business development and income diversification and complementary activities of ecosystem protection (e.g. establishment of no-take areas)	Germany	These are specific tools than can be used in projects, they are not excluded.



3. Paradigm Shifting Pathways: EES Result Area	In addition to MPA coverage being weaker than terrestrial area protected system networks, another challenge is that enforcing MPA rules is logistically more challenging and often more expensive than enforcing rules in terrestrial protected areas, allowing more illegal activity to occur.	Submission on behalf of USAID	Thanks for your comment. If here is evidence of the differences in costs and effectiveness would be useful, though it will have to be included in later stages of the sector guide. Though it is recognised that management of MPA's in developed and developing countries has resulted in problems. The reviewer may be interested in a forthcoming proposal being developed by CI to look at sustainable tuna fisheries in the Pacific. The Pacific countries have very good regulations for shared management of fish stocks (outside MPA's), but shows that it can be done effectively if there is the cultural and political support,
3.2	However, development in coastal areas is increasingly at higher risk from sea-level rise, more destructive storms, etc. Thus, if governments, businesses – society as a whole move towards considering ecosystems integral to a climate resilient development pathway then there will be ways to plan for appropriate level of natural ecosystems coverage.	UNDP	This is true, and the argument has been developed throughout.
3.2	Due again to path dependency.	UNDP	Thanks for or comment, unfortunately this is not clearly elaborated.
3. Paradigm Shifting Pathways: EES Result Area	Inadequate marine conservation finance and implementation: Coverage of marine protected areas is significantly lower when compared with terrestrial ecosystems, for large-scale or small-scale MPAs or OECMs.	Rare	Thanks for the comment, due to the size and scope of the sector guide we are unable to go into detail on this aspect.
3. Paradigm Shifting Pathways: EES Result Area	Lack of institutional models: Despite socioeconomic importance, small-scale fishers and fishing communities tend to have little or no access to traditional financing as they often operate within the informal economy. Financial institution must simplify and find ways to reduce costs of providing financial services. For rural households, access to useful and affordable formal financial products and services that meet their needs, also known as financial inclusion, can bring increased financial resilience. Furthermore, the local blue economy requires funding mechanisms, such as bonds, which enable the securing of capital required to finance a range of blue infrastructure projects, such as cold storage or processing facilities, all the way to coastal wastewater treatment plants or nature-based solutions.	Rare	This is all true but the proposed text does not add significantly, as it is too specific and case-dependent.
3. Paradigm Shifting Pathways: EES Result Area	How is coverage defined here?	Conservation International	Coverage is a universally used term in PA management.
3.2	IETA strongly supports the possible actions to support paradigm shifts for ecosystem-based coastal zone and marine ecosystems. IETA supports many of the similar points that are identified in the FLU draft (outlined in the section above), and in the above EES table (Line 642, Table 5) including improving monitoring, piloting and testing new methods and schemes.	IETA	Agreed

3. Paradigm Shifting Pathways: EES Result Area	These lists are very useful, and could benefit of grouping or more analysis, as some examples could be considered anecdotes and more examples of successful projects and programmes. It would be good to understand if these examples come from existing, successful GCF projects, when there are no direct references. - This may apply also for further tables in the section. Could Actions and Transformational potential be separated?	FAO	The table is not exhaustive, it is meant to provide some general ideas of the breadth of possible actions.
3. Paradigm Shifting Pathways: EES Result Area	Actions that can transform the ecosystem should involve local communities including environmental organizations and should be part in taking on major roles. Possible actions and plans should be transparent to the communities to encourage support and acceptance.	Transparency International	Agreed
3. Paradigm Shifting Pathways: EES Result Area	Throughout the table, consider adding "indigenous peoples" next to the wording "local communities (e.g. recognition of local [and indigenous] stewardship", "protect local communities [and indigenous peoples]", "empowered local communities [and indigenous peoples], reflecting existing COP decision languages (e.g. decision 1/CP.21; decision 2/CP.23; decision 2/CP.24)	UNFCCC secretariat	This has been done in those places where it makes sense.
3. Paradigm Shifting Pathways: EES Result Area	Under mobilization of finance at scale, consider adding "investing in small enabling activities that helps to bring about conducive policies and market conditions".	UNFCCC secretariat	Thanks for the comment, though we do not feel the change suggestions are sufficient to warrant their inclusion.
3. Paradigm Shifting Pathways: EES Result Area	Under expansion and replication of knowledge, consider adding the wording "in a manner that respects and promotes the rights and interests of local communities and indigenous peoples".	UNFCCC secretariat	This is not necessary, as it is mentioned earlier, and it is covered in GCF policies.
3. Paradigm Shifting Pathways: EES Result Area	Add bullet to Transformational planning and programming, "Integrating behavior centered solutions into all stages of project design, especially at the outset through inclusive participation of all relevant stakeholders."	Rare	This proposed language does not add significantly to current wording.
3.2	What are "international frameworks for carbon accounting"? Would be good to clarify.	UNFCCC secretariat	Agreed, reworded.
3. Paradigm Shifting Pathways: EES Result Area	Catalysing climate innovation: -Include scientific research for updated knowledge and inventories in these ecosystems for countries with virgin data. -Scientific research to be proposed in the NDCS of the different countries	Project Assistant YVE- Cameroon	The list is not exhaustive, these actions are not excluded.
3. Paradigm Shifting Pathways: EES Result Area	As with earlier comment, will the GCF support development of pilot innovations?	Conservation International	SAPs are explicitly for upscaling and replication. GCF can support proof of concept development (aka piloting).
3. Paradigm Shifting Pathways: EES Result Area	Need to consider the central role also of fisherfolk as custodians and contributors to some of the barriers as well as drivers of the potential opportunities	FAO	This is covered when local communities are mentioned, as fishermen are an integral part of them.
3. Paradigm Shifting Pathways: EES Result Area	Fig 6: seems to be some interchangeable use of terms 'outcomes' and 'drivers' and 'results areas' or 'pathways' to describe the four categories/pathways, e.g. 'Transformational planning and programming'. This is confusing.	UNEP-WCMC	Figure 6 is just a summary of the previous tables.
3.3	3.3 Role of GCF in financing the paradigm shifting pathways Figure 6 starting on line 661 This is a really interesting table and would be even more useful if concrete examples were given on the bullet points.	Finland	Thanks for the comment, examples are covered elsewhere. The list is not exhaustive, and examples here could restrict innovation.

3.2	4th bullet point in the top row of Table 6 mentions "Integrating seagrass management into coastal and estuary management.." It would be equally important to include mangroves along with seagrass for the benefits mentioned including biodiversity and biomass harvesting.	FAO	Mangroves have been covered extensively, this is about seagrass.
3.2	2nd bullet point, second row, Table 6 ". particularly in erosion control (mangrove protection) and disaster prevention (coastal wetland conservation)". It should be noted that coastal wetlands can only mitigate and ameliorate coastal disasters, but often not prevent them altogether. Also, such disaster mitigation effect is correlated with the size, height and density of vegetation, which means healthy mangrove forests will have the greatest benefit as opposed to coastal wetlands in general.	FAO	This is true but is understood that these details will be discussed at the project level.
3. Paradigm Shifting Pathways: EES Result Area	Reduce repetition: Section "Coalitions and knowledge..." Exchange platforms, communities of practice and platforms are all practically the same thing.	FAO	These are under different pathways and are specific to each.
3. Paradigm Shifting Pathways: EES Result Area	Separation under coastal and terrestrial + freshwater does not seem to be necessary here.	FAO	This is a summary of the previous tables.
3. Paradigm Shifting Pathways: EES Result Area	The Food Acquisition Program – PAA adopts, to some extent, criteria for prioritizing access in the line of gender-inclusive approaches, in addition, of course, to directing the policy to family farmers. By better scoring the projects with the highest number of women, they empower gender and, consequently, increase their levels of capacity and skill, which indirectly suggests an escalation towards an improved and more sustainable management of the ecosystem. Such criteria are in line with this Guide, which advocates that such issues must be addressed and constitute changes in norms and practices that facilitate the full involvement and benefit of women in the EES.	CONAB	Thanks for the comment, though due to the extent and size of the guide we do not feel that adding this is relevant.
3. Paradigm Shifting Pathways: EES Result Area	Ensure blue investment is also highlighted by adding, "This fosters an environment conducive to green AND BLUE, resilient investment..."	Rare	Added
3. Paradigm Shifting Pathways: EES Result Area	Under "Catalysing climate innovation" as outcomes: -Include scientific research for updated knowledge and inventories in these ecosystems for countries with weak and incomplete data for improved baseline and time-series data. Scientific research to be proposed in the NDCS of the different countries  Under "Expansion and replication of knowledge" as outcomes: - the reference to "SMEs" should be changed to read "MSMEs"	GCF Observer Network	Thanks for the comment.
3. Paradigm Shifting Pathways: EES Result Area	This section should focus more on the role of removing subsidies that encourage ecosystem degradation. This needs to also include the acknowledgment that traditional financial de-risking approaches for the private sector operating within the EES could act to subsidize continued actions that degrade ecosystems (f.ex. plantation forestry or agricultural expansion operations). Likewise, the section needs to be much more explicit and honest about the shortcomings of current ecosystem related certification and labelling schemes, whose integrity in many individual cases has been challenged.	GCF Observer Network	Thanks for the comments. Due to the scope of the guide, we don't feel that we can fully explain in detail regards some of the issues that are mentioned.

<p>3. Paradigm Shifting Pathways: EES Result Area</p>	<p>There is disagreement among CSO organisations on the use of Carbon Markets. Many of the colleagues active in the GCF Observer Network are very dubious of the role of carbon markets in EES, given the use of carbon sequestration (or avoided emissions) as the sole criterion by which projects are measured, as opposed to approaches that better integrate the multiple benefits that the variety of ecosystem services can provide. We question their inclusion here given the lack of environmental integrity, non-fungibility of different carbon stores, lack of consideration of biodiversity values, and other issues. We note the statement at lines 277-279 in the FLU draft guidance, expressing doubt about the use of carbon offsets: "There are limitations to land-based mitigation, however, as net carbon uptake rates are slow and amounts are low when compared to CO2 released by fossil fuel combustion (Baldocchi and 278 Penuelas 2019)." In the opinion of many of our colleagues, carbon markets are unsuitable for EES approaches and if the GCF was to pursue those, we fear it could end up promoting corporate greenwashing. Given limitations on the remaining carbon budget to enable us to keep warming below 2°C, we suggest that the true paradigm shift to be accomplished here is to move away from offsets and toward the conservation, restoration, and sustainable management of ecosystems.</p>	<p>GCF Observer Network</p>	<p>Same as above</p>
<p>3. Paradigm Shifting Pathways: EES Result Area</p>	<p>Reference to nature-based solutions should be struck and replaced with ecosystem-based approaches or adaptation; likewise, financial viability should not be considered as the main criterion for the promotion of such approaches.</p>	<p>GCF Observer Network</p>	<p>Nature-based solutions not included in the document</p>
<p>3. Paradigm Shifting Pathways: EES Result Area</p>	<p>The reference to "green and blue bond issuance" pops up repeatedly in the draft EES guide; however, the issue of (sometimes questionable) certification schemes and their ability to ensure environmental integrity and the question of best practice standard (and comparability) is not sufficiently addressed. For example, in the few GCF projects/programs approved so far that do have a bond issuance component, the GCF has supported the issuance with reference to very different standards and standard-setting approaches. The same inconsistency is also found in this guide: p.23 mentions "green bond issuance that uses new certification standards" and line 727 says "green and blue bond issuance using best practice certification standards," which could be standards under the Climate Bonds Initiative (or be different for different sectors, as there is no uniformly accepted "best practice"). Overall we note that the existence of a certification scheme in the relevant sector does not itself provide an enabling environment for the introduction of bond finance.</p> <p>Likewise, the reference for "debt-for-climate and nature swaps" as an innovative financing approach capable to mobilize finance at scale (and this should be understood as public and private finance and not confined to the current MFS private sector pilot approach under the GCF) needs to be a bit further differentiated as many older approaches had significant problems and weaknesses that we would find unsuitable for replication and application in EES investments. For an elaboration of some of the problems with older iterations and how this could be considered and addressed in newer approaches, please see: <a href="https://www.boell.de/en/2020/27/11/debt-relief-green-and-inclusive-recovery-project">https://www.boell.de/en/2020/27/11/debt-relief-green-and-inclusive-recovery-project</a></p>	<p>GCF Observer Network</p>	<p>Thanks for the comments. The GCF encourages AEs to utilise innovative types of financing such as bonds, insurance, debt swaps. Many of these are innovative and require standards, methodologies and approaches to be developed, whilst also recognising different ecological, political and economic contexts may be different and a 'one-size fits all' approach may not be possible. As such, best practices need to be developed, and several financial agencies are already developing standards. GCF should continue to explore these financial mechanisms.</p>
<p>3. Paradigm Shifting Pathways: EES Result Area</p>	<p>Removing ecosystem harming subsidies is absolutely critical as it is an underlying driver of degradation. Subsidies need to be included in transformational planning section above as do measures to value ecosystems.</p>	<p>UK</p>	<p>We agree, thank you for the comment.</p>

3. Paradigm Shifting Pathways: EES Result Area	Can we make this section a bit clearer and more focused on what leads to climate innovation? Needs to also mention incentives to spur innovation. Helpful if the link between supporting the public sector to encourage innovation in the private sector is more explicit.	UK	Thanks for the comment. Given the scope of the guide, we cannot explain in more detail regards innovation. However, the reader should consult the latest GCF publication on climate innovation. GCF has developed a working paper on Innovation, Please see: <a href="https://www.greenclimate.fund/news/gcf-launches-innovation-working-paper-cop26">https://www.greenclimate.fund/news/gcf-launches-innovation-working-paper-cop26</a>
3. Paradigm Shifting Pathways: EES Result Area	Valuing nature, natural assets and incorporating natural capital accounting need to be incorporated into country planning processes and needs to be included in this section.	UK	Thank you for the suggestions.
3. Paradigm Shifting Pathways: EES Result Area	Could you explain what is meant by 'building with nature.'	UK	Building with nature - a comprehensive engineering approach that seeks to enhance the use of natural ecological processes to achieve efficient and sustainable hydraulic infrastructural designs. It strives for a flexible integration of land in water and water in land using interactions and materials present in nature. ( <a href="https://www.wetlands.org/ca-sestudy/building-with-nature-indonesia/">https://www.wetlands.org/ca-sestudy/building-with-nature-indonesia/</a> ).
3. Paradigm Shifting Pathways: EES Result Area	Addressing perverse subsidies that negatively affect ecosystem, biodiversity and rights of indigenous people and local communities	Convention on Biological Diversity (CBD) UNEP	This is in the tables and line 693
3.3	The Voluntary Guidelines on Tenure (VGGTs) give concrete guidance for the implementation of responsible land tenure governance. The FAO and relevant stakeholders have developed Technical Guides on how the VGGTs can be used in specific sectors, for specific groups, under specific conditions. There are several relevant Technical guides being developed by FAO: Safeguarding land tenure rights in the context of agricultural investment (FAO Technical guide number 4) Improving governance of pastoral lands (FAO technical guide number 6), A technical guide for investors (FAO Technical guide number 7), Governing Tenure Rights to Commons (FAO Technical guide 8), Valuing Land Tenure Rights (FAO Technical guide 11), Strengthening civic spaces in spatial planning processes (FAO Technical guide 12). To give guidance to land tenure governance, please make reference to the VGGTs and the technical guides.	Both Ends	We appreciate this work done by FAO, but these are very specific technical guides with narrow applicability in the broader context of the guide.
3. Paradigm Shifting Pathways: EES Result Area	Add "Other approaches include incorporating ecosystem services into land use planning AND MARINE SPATIAL PLANNING ..."	Rare	Agreed, text added.

3. Paradigm Shifting Pathways: EES Result Area	Or direct contributions from insurance companies to protect ecosystems / reduce risks to insured properties? RISCO model	Conservation International	Agree but not necessary to be too specific, this is not excluded.
3. Paradigm Shifting Pathways: EES Result Area	Another area for catalyzing climate innovation is in the space of ecosystems restoration with spatial planning tailored in accordance to the local context, innovative financing mechanisms creating revenues for ecosystem restoration <a href="https://wedocs.unep.org/bitstream/handle/20.500.11822/36251/ERPNC.pdf">https://wedocs.unep.org/bitstream/handle/20.500.11822/36251/ERPNC.pdf</a>	Convention on Biological Diversity (CBD) UNEP	Agree, this can be the right tool under certain circumstances, it is not excluded.
3.3	Creation of the sustainable extractive agriculture label that keeps the forest standing and inhibits its deforestation. Develop production chains and promote access to national and international markets. Financing of storage, processing and transport logistics.	CONAB	Certification is already included. The rest is not applicable here. Reviewer should also look at Agriculture and Forest/Land Use Sector Guide.
3. Paradigm Shifting Pathways: EES Result Area	Another area for catalyzing climate innovation is in the space of ecosystems restoration.	Convention on Biological Diversity (CBD) UNEP	Restoration is already one of the three keystone of both pathways.
3. Paradigm Shifting Pathways: EES Result Area	Also addressing sustainable consumption and production to minimize pressure on nature-based value chains	Convention on Biological Diversity (CBD) UNEP	This is already included in several ways, such as certification and green production (line 731 "certification schemes for ecosystem-friendly activities (market-pull)")
3. Paradigm Shifting Pathways: EES Result Area	This language is used again, but it is unclear what this means in practice for the GCF.	Conservation International	It means supporting actions that result in the removal of subsidies that encourage ecosystem degradation.
3. Paradigm Shifting Pathways: EES Result Area	Also addressing sustainable consumption and production to minimize pressure on nature based value chains	Convention on Biological Diversity (CBD) UNEP	This is included through certification. This is already included in several ways, such as certification and green production (line 731 "certification schemes for ecosystem-friendly activities (market-pull)")
3. Paradigm Shifting Pathways: EES Result Area	Or monitor / verify ecosystem management?	Conservation International	Monitoring ecosystem management has proven not to be very effective, thus the need for innovation (lines 697-697).
3.3	Same as above (line 690) They are complementary. (Creation of the sustainable extractive agriculture label that keeps the forest standing and inhibits its deforestation. Develop production chains and promote access to national and international markets. Financing of storage, processing and transport logistics.)	CONAB	This is already included.
3.3	Carbon markets are unfortunately not very well developed... GCF can greatly contribute to the development of framework conditions - so that, these markets can grow again as they were a decade ago.	GIZ	Agree, this is well covered.

3. Paradigm Shifting Pathways: EES Result Area	The relevance and potential of NbS should be explained better. For example, the Adaptation Gap Report 2020 indicates that NbS is increasingly recognised to play a vital role in adaptation, and that implementation already takes place around the world and addresses all key climate hazards through a wide range of approaches. Furthermore, the Adaptation Gap Report also indicates that NbS often provides low-cost options that bring environmental, economic and social benefits to a wide range of stakeholders, incl women and children and marginalised groups, but that the organisation and management required for EbA projects is usually more complex	Germany	Definitions have been carefully adjusted.
3. Paradigm Shifting Pathways: EES Result Area	However, this guidance is on Ecosystem services and not necessarily catalogued as "NBS"	UNDP	Definitions have been carefully adjusted.
3. Paradigm Shifting Pathways: EES Result Area	While ensuring biodiversity safeguards	Convention on Biological Diversity (CBD) UNEP	This is implicit and safeguarded by GCF policies.
3.3	There doesn't appear to be any guidance on incorporating climate risks to ecosystems in financial decisions made by GCF. WWF would like to see the call for vulnerability assessments on ecosystems and climate-adaptive measures that manage those risks beyond traditional protection and restoration. For example, carbon stocks are highly vulnerable to increased wildfires. Where is the call to manage for increased wildfire to derisk investments?	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted. Some of the other comments are too specific to include in this sector guide.
3.3	Strengthen rural producer organizations, financing goods and values that can be shared, from soil preparation to production flow.	CONAB	Too specific, not excluded when appropriate.
3.3	We suggest including "climate-informed conservation" as part of this list, which is distinct from ecosystem-based adaptation in that it helps ecosystems adapt to climate change rather than using ecosystem services to help people adapt (EbA)	World Wildlife Fund (WWF)	Ecosystem-based adaptation helps account for these uncertainties, this has been adjusted.
3. Paradigm Shifting Pathways: EES Result Area	This section seems especially important for those planning for projects. It would be helpful if this section could be better articulated and put in the forefront.	FAO	Thank you, it is true that these statements are important but they are rather general. Detail comes later in the document.
3. Paradigm Shifting Pathways: EES Result Area	Generate multiple benefits for people, nature and economies; EbA and Eco-DRR approaches emphasize the importance of biodiversity and ecosystems in reducing risk, and build on other practices such as conservation and ecosystem restoration which seek to increase the resilience of ecosystems for the benefit of people (Adding reference to CBD's work on EbA)  <a href="https://www.cbd.int/doc/publications/cbd-ts-93-en.pdf">https://www.cbd.int/doc/publications/cbd-ts-93-en.pdf</a>	Convention on Biological Diversity (CBD) UNEP	Ecosystem-based adaptation definitions have been adjusted. Reference added to CBD 2009 (Technical series 93)
3. Paradigm Shifting Pathways: EES Result Area	While it is true that the focus needs to be on depth, ambitious initiatives on speed and scale are also possible and should not be discarded	FAO	These are not discarded.
3.2 Two paradigm shifting pathways	Focusing on large-scale coverage area alone does not necessarily protect the areas which provide the most important ecosystem services to coastal communities. Establishing and designing small-scale marine protected areas and/or managed-access areas that are well-connected can maximize ecosystem benefits in surrounding waters and additional co-benefits of social and economic resilience for local communities.	Rare	Thank you, this is covered, "scale sufficiently large" can accommodate, in the broader landscape, small-scale marine PA's.

3.2.	IETA strongly supports the recognition of the “key aspects of ecological sustainability related to climate benefits is the ability of the landscape to store and/or sequester carbon and provide ecosystem services for adaptation” and appreciates that carbon gains should not be achieved at the expense of other ecosystem functions. We strongly believe that carbon gains and other ecosystem and societal functions can and should be complementary. Many emissions reduction projects, particularly related to nature (forest and land use, ecosystems and ecosystem services) can deliver substantial environmental and social co-benefits associated with biodiversity, watershed protection, Indigenous engagement, rural economic diversification, and more.	IETA	Thank you, agreed.
3. Paradigm shifting pathways: EES result area	The permanence of carbon gains depends inter alia on the resilience and health of ecosystems. As this is important under climate change in the long run please add this to the idea that carbon gains should not be achieved at the expenses of other ecosystem functions.	Germany	Thank you, the current text is sufficient to address this concern.
3. Paradigm shifting pathways: EES result area	Financing for sustainable fisheries management almost exclusively comes from public and local budgets. The underlying reasons that result in fisheries management being significantly underfunded have their origins in the high level of sector informality and the resulting challenges regarding tax collection and tax allocation at the local governance level. Sector formalization needs to play a crucial role – can help increase the local tax base, which can then be used to improve local tax collection and allocation towards sustainable fisheries management entities and initiatives.	Rare	Thank you, sustainable fisheries management also occurs through incentives and enforcement of the private sector. There are excellent examples with tradable quotas; some projects also in development.
3.3	We appreciate reference to multi-stakeholders platforms and multi-stakeholder processes for dialogue and decision making in transformational planning and programming. Engage non-state actors, particularly private sector, universities, research and Indigenous People and local communities. Youth should also be highlighted with regard to Nature-based Solutions approaches here, such as: a) building business models for increased investment in NbS at the local level; b) building knowledge on locally appropriate and gender- and vulnerable group- sensitive NbS and thereby support local governments’ capacity, with a focus on long-term and sustainable implementation. This would also be consistent and reinforce references to NbS in lines 721-725 in the EES Sectoral Guidance.	Ministry of Economy and Finance (MEF) Italy	Thank you, these are good comments but these issues are already covered in several places.
3. Paradigm Shifting Pathways: EES Result Area	Add a section that provides coastal community context with regards to the rights of local stakeholders such as, “[...] Similarly, strengthening collective land governance through, and include the right to free, prior and informed consent when applicable or appropriate. Additionally, there is also a need to secure priority and preference (through rights-based fisheries management systems - or Territorial Use Right Fisheries, also known as managed access) to local communities in their access to and management of their local coastal fisheries/waters.”	Rare	Thank you, too specific this may be the proper tool under certain circumstances but this is not excluded.
3. Paradigm Shifting Pathways: EES Result Area	Removing “subsidies that encourage ecosystem degradation AS WELL AS MOVING FROM OPEN-ACCESS FISHERIES TO A MANAGED-ACCESS SYSTEM FOR COASTAL AREAS ARE complementary and long overdue actions.”	Rare	This is too specific and detailed here.
3.3	There are untapped opportunities for social innovation such as peer-to-peer quality assurance systems, such as participatory guarantee systems to de-risk value chains ensuring supply of quality traceable sustainable products and securing consumer’s interest	Both Ends	Thank you, these may be appropriate tools under some circumstances too specific to add much to the current text.
3. Paradigm Shifting Pathways: EES Result Area	“...green AND BLUE bonds aiming to raise capital to finance activities earmarked for the green economy...”	Rare	blue' added.
3. Paradigm Shifting Pathways: EES Result Area	Please explain what is meant by next-generation PES (throughout the document)	Germany	The term "innovative" has been added to qualify.



3. Paradigm Shifting Pathways: EES Result Area	Please add the evidence base for this. We fully agree that EES valuations methods do not accurately represent all values attached to ecosystems and the final impact of their application on the state of ecosystems and communities are yet to be assessed. But that does not mean that doing more of the same (stacking provided values for ecosystem services) is the solution. We recommend more prudence in suggesting this an ideal approach. See the paper 'Selling Nature to save it?' By McAfee (1999) or the work by Constanza	Germany	Thank you, these are not recommendations to be applied without previous analysis and careful risk and cost benefits analyses. Most of these approaches are under innovations.
3.2	It would be helpful to introduce actions related to quantifying and tracking, as appropriate, the multiple benefits of NbS for climate mitigation and adaptation, as well as for biodiversity conservation, human health and well-being. It would be also helpful with the view to inform planning decisions and build new businesses and finance models (i.e. the IUCN Global Standard for Nature-based Solutions), and to include the integration with urban pathways (i.e. through approaches to accounting of city-level natural values, conservation and sustainable use of urban biodiversity and using nature-based solutions to avoid losses, spur economic gains and create local jobs). It is important that these instruments for NbS promotion would also be integrated within the IRMF, by reporting progress on scale up of NbS as a contribution towards the achievement of the Sustainable Development Goals and under the UNFCCC.	Ministry of Economy and Finance (MEF) Italy	Thank you, important comment but more relevant to the IRMF..
3.2	The creation, piloting, implementation and scale up of regulatory policy levers and financial enabling environments should be also considered in terms of mobilization of finance at scale, especially as it concerns long-term consistency of finance flows in line with the PA (for example, by exploring application of pollution taxes or outright prohibition and removal of subsidies on resource extraction and agricultural production, which are another class of institutional changes that can be brought about by public policy).	Ministry of Economy and Finance (MEF) Italy	The Guide differentiates between additional funding, from realignment of public funding.
3.2	As a general comment, while it was acknowledged in previous chapters, the part related to the integration of protection and restoration on the scale with sustainable management of forest, agricultural and urban pathways could be strengthen with specific activities/proposals. See possible examples/actions that could be further integrated with other ones, including Nature-based Solutions specific activities: Support efforts, which harness the multiple benefits of NbS in cities and across land and seascapes in order to achieve climate mitigation and overall resilience, as well as biodiversity, health, employment and well-being objectives (i.e. a) mangroves, dunes, seagrass beds and healthy reef systems that protect coastal cities from storm surges; b) wetlands that provide habitat for biodiversity, increase water infiltration and thereby reduce flood risks as well as urban heat effects related to climate change and the risk of droughts; c) forested catchment areas that naturally filter, provide clean water and store carbon among other benefits, etc.); promote efforts to design locally applied NbS including EbA that recognize the value of biodiversity, ecosystem functions and services for urban communities and considering existing or past natural ecosystems and land- and seascapes including, drainage patterns, habitat integrity and connectivity; Foster cross-border cooperation and collaboration in light of the boundary-spanning nature of interconnected ecosystems, particularly through city-region cooperation, including but not limited to watershed management and peri-urban farming, and planning of ecological corridors between and within cities.	Ministry of Economy and Finance (MEF) Italy	Thank you, these are all good examples but by no means the guide and its examples should be considered exhaustive.
3.2	The role of protected areas to conserve ecosystems should be further considered here. Protected areas are also viable for promoting sustainable eco-tourism, bringing in potential for supporting economic sustainability and de-risk/leverage private sector investments on ecosystem protection and restoration.	Ministry of Economy and Finance (MEF) Italy	Protected areas have been added explicitly under "protection."

3. Paradigm shifting pathways: EES result area	<p>The absence of markets and financial mechanisms to properly value nature, ecosystem services, cultural values, and other externalities might be, to some extent, a barrier in some contexts. Issues such as wars, illegal practices, armed conflicts, poverty and colonisation should also be analysed and specifically mention the connection with barriers.</p> <p>In general, we encourage a revision of the table to identify and indicate which barriers apply and why are they linked to ecosystem degradation</p>	Germany	<p>Thanks for your comment. There are absent markets for natural capital and this requires paradigm shift and marled transformation. We encourage, Accredited Entities to develop and submit such proposals, either as GCF Readiness or included in project submissions. However, to fully include these comments within the table / text is not clear at this stage give the limited scope of the sector guide.</p>
3.2	Aren't other investments also subject to safeguards and other considerations – this is not clear; high perceived investment risk, yes, but certainly not higher risks to human or environmental welfare from protection and restoration than "other types of investment"	UNDP	Yes, otherwise they would be mainstream. Markets are averse because they perceive risk.
3.2	Traditional Ecological Knowledge (TEK)?	UNDP	Reference to Traditional knowledge included.
3.2	The vision is spot-on. However, the methods to achieve this vision could be improved upon.	World Wildlife Fund (WWF)	<p>Thank you for the comments. Due to the size and scope of the sectoral guides it is not possible to add more details at this stage. However, we recommend also linking at the other sector guides, especially water, agriculture, forests and infrastructure</p>
3. Paradigm shifting pathways: EES result area	<p>It would be important to highlight the multiple options and meanings of insurance that go beyond formal financial instruments. This section could be made much stronger through a focus on insurance in setting disincentives to occupying ecosystems and continuing with actions that perpetuate the loss of ecosystem services. We would like to see an even stronger focus on the 'insurance' function that ecosystem-based adaptation approaches provide; such approaches are grounded in participatory, community-governed processes that provide 'insurance' against climate impacts. Thus, 'insurance' is not just provision of a financial instrument for managing risk; rather, 'insurance' is resulting from a set of positive actions that build resilience, and the goal of insurance -- either as a financial instrument or as a function of a set of actions – should be to change behaviours that create the risk of loss. It should not be to indemnify individual or corporate losses in order to facilitate continued unchanged behaviour that is potentially destructive of ecosystems.</p>	GCF Observer Network	<p>Thanks for the comments. Due to the scope of the guide we are not able to go into depth for financial instruments. However, we agree with the points made regards insurance.</p>
3. Paradigm Shifting Pathways: EES Result Area	And Early Warning Systems (only mentioned once in this document)?	Conservation International	There is a Sector Guide on Early Warning Systems and Climate Information Systems.
4. Financing Paradigm Shifting pathways	in different geographic locations	Convention on Biological Diversity (CBD) UNEP	This is implicit.

4. Financing Paradigm Shifting pathways	Willing to pay (WTP) and Payment for Ecosystem Services (PES) not included under finance policy framework , biodiversity fund be institutionalized and included in this section as like carbon bonds	Dr. Prachi Ugle Pimpalkhute	There is a section with examples. Due to the scope and size of the text we cannot elaborate further.
4. Financing Paradigm Shifting pathways	Conab has expertise in executing a program in partnership with the National Development Bank - BNDES, which financed production assets to associations and cooperatives, at grant assistance, resulting in innovation and business leverage, demonstrated by variables collected after two to three years of completion of the project. The project had the symbiosis of the two bodies, in which both participated in the planning, preparation of notices and solution of any doubts and changes in the course. The resources were provided by BNDES and the execution, follow-up to the rendering of accounts and presentation of some indicators were carried out by technicians from Conab. Therefore, similar projects that add an environmental component are perfectly feasible.	CONAB	This is not the place to present project ideas.
4. Financing Paradigm Shifting pathways	The finance section could benefit of further examples from the focus ecosystems to make the recommendations more tangible.	FAO	There is a section with examples. Due to the scope and size of the text we cannot elaborate further.
4. Financing Paradigm Shifting pathways	Wy cap and trade, development to conservation payment concept ratio not included?	Dr. Prachi Ugle Pimpalkhute	Cap and trade is implicit in carbon markets, even voluntary.
4. Financing Paradigm Shifting pathways	Would it make sense to underline here e.g. funding in particular projects which have development targets with income-generation (across economic sectors, e.g. not only from the land use sector) as a focus area in order to reduce dependence on external funding? This is possible in many landscape-scale projects, and would speed up the spread of best management practices	FAO	This is covered within the concept of sustainability.
4. Financing Paradigm Shifting pathways	It is suggested to consider the option to engage the private sector also through the hydropower companies, who often have a great interest to contribute to river basin management and secure the water provisioning services in different parts of the basin	FAO	Thanks for the comment. Sustainable hydropower is an important part of landscape management, and can be an important source of ecosystem service payments.
4. Financing Paradigm Shifting pathways	Missing to mention the GCF comparative advantages as in other sectoral guides	IDB	These are included in the same manner as in the two published Guides (Agriculture and Cities).
4. Financing Paradigm Shifting pathways	We suggest specifying what exactly is not available by other sources of finance. How will GCF determine if it is the only source of such finance?	World Wildlife Fund (WWF)	Text is clear as stated "unavailable from other sources that allows risk-taking, making such proposed interventions feasible"
4. Financing Paradigm Shifting pathways	You may want to consider adding another approach that aims to reconcile the top-down approach of unlocking capital to support the adoption of sustainable ecosystem services management with the grassroots efforts through community-based interventions to build financially resilient communities.	Rare	This is also covered but it is not part of unlocking capital for investment.
4. Financing Paradigm Shifting pathways	Several social programs rely on public budgets, among them the PAA, the PGPMBio, currently executed by Conab, that can introduce environmental variables. Therefore, changes in the regulations are necessary. The example of the project carried out with the BNDES is directly related to a successful inter-institutional partnership, which with some adaptation could introduce sustainable practices as mandatory and produce socioeconomic and environmental indicators.	CONAB	Interesting example but it does not add to current text.

4. Financing Paradigm Shifting pathways	We agree that it is useful to have a mix of financial solutions for mechanisms in the EES results area, and that an integrated approach that addresses multiple root causes and ensures multiple benefits should be used. Core to such approaches, especially to the extent that they rely on fees and charges in order to function, is to ensure that financing mechanisms are progressive and socially protective of the poorest members of those social groups most dependent on ecosystems and ecosystem services for their survival. Fees and charges should not create barriers to continued access to and use of resources for local subsistence needs; but also, fees and charges should not provide subsidies or incentives for commercial resource extraction or a privileging of export-oriented commodification approaches. It is not clear if the BIOFIN framework, referenced in the draft guide, would be a good practice example of such a differentiated integral finance approach based on human and community rights of local communities and their survival needs.	GCF Observer Network	Thanks for the comment.
4. Financing Paradigm Shifting pathways	<p>We note with caution the enthusiastic but largely uncritical focus on Blended Finance in this section. Persistent challenges with blended finance, particularly in relation to transparency and GCF's ultimate accountability for blended finance activities in the EES sector, should be better aired in this section, to ensure that multiple-benefits beyond a cost-effectiveness focus, in full compliance with the GCF's ESS, gender and Indigenous Peoples' policies, will in fact be delivered.</p> <p>In this context, and with all the other examples of specific funds or financing mechanisms used in this section, it should be clarified that the draft sector guidance (such as its reference to the Sustainable Commodities Conservation Mechanism (SCCM)) uses these, as ILLUSTRATIVE examples only. Their reference and inclusion should not imply an endorsement of either those approaches or mechanisms as suitable for a GCF investment approach to EES, as the guide lacks an in-depth analysis of any of those approaches.</p>	GCF Observer Network	Thanks for the comment, we will revise the text herewith.
4. Financing Paradigm Shifting pathways	Would the GCF support the development of Sustainable Finance taxonomies that can help standardise climate and EES investments while facilitating the reporting and monitoring activities?	Germany	Thanks very much. This sounds more like a Readiness support for a given country or region. We do have some projects that include natural capital accounting. Reference can be given to FMCN Rios Project in Mexico.
4. Financing Paradigm Shifting pathways	Global Peatlands Initiative does not have extensive links with the agriculture sector (this would be e.g. farmers, farmer unions etc.)... This can be misinterpreted. Something along the lines: "One example could be the collaboration of the Global Peatlands Initiative's members while aiming to reduce the carbon footprint of peat extracting industries." or something similar, could work.	FAO	Thank you, text added as suggested.
4. Financing Paradigm Shifting pathways	The private sector could also invest in natural infrastructure as a means to protect their physical infrastructure, save operational costs, or a safeguard a supply that they depend on e.g. water	Climate Risk Analyst, NBS Expert	This is correct and it is not excluded.
4. Financing Paradigm Shifting pathways	It would be really useful here to provide examples of successful project which have leveraged private sector investment and explain the mechanisms on how these work. "Private sector engagement" in and of itself can be quite broad and therefore, it would be	UNDP	There is a section with examples.
4. Financing Paradigm Shifting pathways	Such funds could be used to leverage businesses that are already basically structured, such as cooperatives with a good level of maturity in management, financing projects of a socioeconomic and environmental nature. The selection could be via public calls, organized, executed by Conab, whose projects would be executed under supervision, monitoring and inspection of Conab, culminating in an impact assessment that could also be carried out by Conab, even though preferably by another public or private entity. IPEA would be a good option to carry out this assessment.	CONAB	This is not to present project concepts.

4. Financing Paradigm Shifting pathways	Analogous to the previous item. (line 815: Such funds could be used to leverage businesses that are already basically structured, such as cooperatives with a good level of maturity in management, financing projects of a socioeconomic and environmental nature. The selection could be via public calls, organized, executed by Conab, whose projects would be executed under supervision, monitoring and inspection of Conab, culminating in an impact assessment that could also be carried out by Conab, even though preferably by another public or private entity. IPEA would be a good option to carry out this assessment. )	CONAB	This is not to present project concepts.
4. Financing Paradigm Shifting pathways	DC Water environmental impact bond is another good example here - pay for performance model of green infrastructure	Climate Risk Analyst, NBS Expert	This example is not excluded from options to be used.
4. Financing Paradigm Shifting pathways	<p>Traditional grey infrastructure tends to have a negative environmental impact on the surrounding area and is less resilient than natural systems. In many cases, grey infrastructure is also more expensive than blue and green alternatives. Blue infrastructure, a more integrated approach to infrastructure development that incorporates nature-based solutions with sustainably designed grey infrastructure, is needed for coastal ecosystems and coastal communities to thrive. It can replace or enhance traditional infrastructure options in most communities, promoting sustainability, protecting ecosystems, and likely saving communities money through their lower installation and maintenance cost.</p> <p>Rare, in collaboration with the Magnitude Global recently published a white paper on "Blue Infrastructure Supporting SDG 14 in Coastal Communities in Indonesia," which outlines blue infrastructure solutions, blue alternatives, and nature-based adaptations to traditional infrastructure that are best suited to address the needs of coastal communities in Indonesia, while also supporting U.N. Sustainable Development Goal (SDG) 14 <a href="https://rare.org/wp-content/uploads/2020/06/Blue-Infrastructure-Supporting-SDG-14-White-Paper.pdf">https://rare.org/wp-content/uploads/2020/06/Blue-Infrastructure-Supporting-SDG-14-White-Paper.pdf</a></p>	Rare	We are not using the term "nature-based solutions" but ecosystem-based management instead, as well as "building with nature." A reference to blue infrastructure is already there.
4. Financing Paradigm Shifting pathways	Add: "towards infrastructure investments that protect and enhance natural ecosystems in coastal and marine areas, while reducing the vulnerability of coastal communities and infrastructure."	Rare	This is mentioned in numerous places.
4. Financing Paradigm Shifting pathways	<p>The concept of green-grey infrastructure could be stronger here. Traditional grey finance and infrastructure, such as for wastewater management, can directly protect and enhance the ecosystem but needs to be supported to be constructed to protect the health of both coral reefs and people. Wastewater management facilities should include gray-green solutions such as permeable pavement or porous asphalt to mitigate flooding and increase groundwater recharge; rain gardens and bio-retention basins to mitigate flooding, filter runoff, and increase groundwater recharge; and renewable energy systems.</p> <p>Solutions should take advantage of benefits of both grey and green infrastructure instead of just using either individually. Additional examples include, integrating wetland restoration with living shoreline approaches to breakwaters, combines the wave attenuation and flood control value of wetlands with the benefits of engineered structures to stabilize the coastal zone. The combined solution can be more comprehensive, robust and cost-effective than either solution alone.</p>	Rare	These issues have been covered clearly and substantially in the guide.
4. Financing Paradigm Shifting pathways	Rephrase to "TRADITIONAL grey finance' as grey infrastructure generally refers to human-engineered infrastructure.	Rare	Not sure what non-traditional grey infrastructure is.
4. Financing Paradigm Shifting pathways	Add the concept of grey-green infrastructure: "...and marine areas ('blue finance') and 'green finance' to support the development of grey-green infrastructure for necessary onshore solutions."	Rare	This comment does not add significantly to the main concepts under discussion.

4. Financing Paradigm Shifting pathways	This is worth introducing here with a bit more detail.	UNDP	Not need to add more detail, it is sufficiently covered for a guide.
4. Financing Paradigm Shifting pathways	Sponsoring the creation of labels for extractive products, developing production chains aimed at domestic and foreign markets, in which the restoration of areas adjacent to those of native forest currently exploited with natural species from that biome and that have commercial value or that can be developed. The policies currently in place could be adapted to add this ecological service.	CONAB	These are good suggestions but are already properly covered under the concept of corridors. Page 23 "Financing the establishment and protection of ecological corridors that connect compatible land uses with landscape-level ecosystem maintenance." And line 732.
4.1	Why natural capital asset managemtn not explained by aligning with Science based targets or nature based targets	Dr. Prachi Ugle Pimpalkhute	It is implicit that everything to be financed must have a reasonable science basis.
4. Financing Paradigm Shifting pathways	Add "strengthening local development institutions, LOCAL GOVERNMENTS, and local organizations..."	Rare	Local governments can be covered under local organizations.
4. Financing Paradigm Shifting pathways	What is GCF's role here?	UNDP	"seeks to drive cooperation between financing mechanisms to help countries navigate the climate finance landscape."
4. Financing Paradigm Shifting pathways	How can GCF capital be leveraged by these vehicles?	UNDP	In various ways, for example financing and barrier removal.
4.2	Financing the structuring of cooperatives of family farmers and extractivists aiming at their marketing autonomy, having as counterpart financing the restoration of native forests, the recovery of degraded areas, the practice of organic agriculture, among other sustainable ones. The resources could be used for the initial structuring of the business and the start of sustainable practices and recovery of areas. Conab, like the other proposals, has the expertise to select, via public calls, the policy execution, supervision, monitoring and inspection, culminating in the impact assessment that could also be carried out by Conab, but preferably by another public or private entity. IPEA would be a good option to carry out this assessment	CONAB	These are possible activities that are not excluded.
4.2	Why is that cst-benefit ratio, SWOT analyis and PSALM biodiversity model not included?	Dr. Prachi Ugle Pimpalkhute	The discussion is not exclusive of other possibilities.

4.2 Financial barriers	Is additional guidance available on this financial mechanism? Revolving loans / reimbursable grants. Particularly for AEs who are only accredited for grants.	Conservation International	For those AEs with limitations regarding their accreditation scope (i.e. project management only). Innovation is requested in the way grants are used for a period that goes beyond the project implementation timeline. Key elements to consider when structuring the financial mechanism of the proposals: competitive advantage of the AE, complementarity and coherence with other funding agencies as well as with local financial institutions and markets, including revenue-generating activities. Additional elements to consider: Viewing farmers, smallholders and beneficiaries as co-investors, Workable business models for different types of beneficiaries, accompanying financial models, Tailored financial products & services, Innovative financial structuring within accreditation scope.
4. Financing Paradigm Shifting pathways	Is this for adaptation and mitigation?	UNDP	All instruments are for both adaptation and mitigation, unless otherwise stated.
4.2	Lack of accessible funding, in the form of grants for local communities and groups of land users and adequate loans for cooperatives and small (social) enterprises for sustainable and inclusive management, use and restoration of ecosystems and natural resources	Both Ends	These are possible activities that are not excluded.
4. Financing Paradigm Shifting pathways	Local governments, financial entities, and the private sector do not have the capacity to access international climate funds because information is not well shared, procedures are too cumbersome, intermediaries are too numerous and negotiations are complex.	Submission on behalf of USAID	This may be true, but this is not the type of document to address such shortcomings.
4. Financing Paradigm Shifting pathways	Under "Lack of equity", please include the fact that local communities aren't always included in decisions about benefits flows-- this is a large barrier related to them receiving the benefits from investments.	Submission on behalf of USAID	This is covered under mobilization of finance at scale.
4.2 Financial barriers	It may be good to include an additional row for a financial barrier specific to the limited access to capital of micro-enterprises, particularly small-scale fishers. Businesses in this sector are often small and may lack the management capacity to accept commercial financing, making efforts to scale their businesses nearly impossible.	Rare	The specific challenges of micro-enterprises can be approached on a context-specific basis.

4. Financing Paradigm Shifting pathways	It is very helpful that Table 7 highlights “few assets or collateral in local communities to engage in projects and derive benefits” as key financial barriers to EES related to the lack of equity and development capital. This should be the main focus of GCF equity investment approaches: helping to develop those local assets. However, current practice in the GCF appears quite different; the primary focus has tended to be more on providing equity for large-scale investments (in both infrastructure and financial intermediation). Going beyond the mainstream financial approach to understanding of ‘de-risking’, a paradigm-shifting approach from the GCF would indicate a separate but equally valid approach to ‘de-risking’, namely, how the application of small-scale finance provision (again, through small grants and revolving small loan funds) can be applied for EES investments and create a much more resilient basis both for economic development and the protection and enhancement of ecosystem values. See also below comment re: Section 4.3.	GCF Observer Network	Thanks for the comments. We welcome proposals that use diversified approaches for equity investments, including investments in ecosystems-based management interventions enhancing climate resilience.
4.2	While the focus on financial innovation can be useful, it should not be overhyped (as is the case with many of the financing innovation approaches described in Table 8). Innovation can come in the form of new products and approaches, but innovation can also be found in the appropriate application of already field-tested financial approaches that support community and human-rights-centered ecosystem-based adaptation. Innovation can show up as the provision of finance for cross-cutting approaches with multiple benefits through the GCF’s use of stronger targets on financial provision to “bottom of the pyramid” MSMEs and communities through small grants and revolving small loan funds. Thus, it would be really useful in this guide to get a more detailed elaboration of what the GCF specifically can do to address related risk (mis)perceptions and the misalignment of incentives for GCF accredited entities to provide such targeted financial intermediation for EES investments.	GCF Observer Network	Thanks for the comment. Please see the new GCF publication on Innovation. <a href="https://www.greenclimate.fund/news/gcf-launches-innovation-working-paper-cop26">https://www.greenclimate.fund/news/gcf-launches-innovation-working-paper-cop26</a>
4.3	Table 8: suggest that ‘Solutions integrating grey and green infrastructure’ is not a financing instrument, rather it is a type of intervention. Different financial models/instruments can be used to implement grey-green solutions	UNEP-WCMC	This is indirectly a financial instrument, as it is explained therein.
4.3	Why outbound, debundled projects, financial markets, fiscal spaces, hedge bonds, seed fund in not included - challenges with opportunities explanation not included?	Dr. Prachi Ugle Pimpalkhute	Table 8 includes a series of possible financial tools, but it is not exclusive.
4.3	Non-repayable financing for the structuring of cooperatives of family farmers and extractivists combined with the implementation of a green label, aiming at their marketing autonomy, while contributing to the achievement of the Paris Agreement goals. The initiative would have as counterpart the restoration of native forests, the recovery of degraded areas, the practice of organic agriculture, among other sustainable ones. The resources would be used for the initial structuring of the business and the start of sustainable practices and recovery of areas, so as to generate a continuous flow of sustainable development. Conab, like the other proposals, has the expertise to select, via public calls, the implementation of the policies, supervision, monitoring and inspection, culminating in the impact assessment that could also be carried out by Conab, but preferably by another public or private entity. IPEA would be a good option to carry out this assessment.	CONAB	Not appropriate to advocate for use of CONAB in a general guide such as this.
4.2	This document seems heavily focused on mitigation potential of EES. It is more evident here when referencing natural climate solutions.	FAO	This may be the result of traditionally ecosystems have been seen as sources of carbon, but there is a lot of emphasis on using ecosystems for adaptation.
4.3	ETA acknowledges and strongly supports that the role for the GCF in financing projects and programs in the EES and FLU areas is de-risking (line 893 EES guide, line 723 FLU guide).	IETA	Agreed



4.3	We appreciate the deliberate broader application of 'de-risking' beyond a narrow understanding to financial contexts only to highlight that "stacking of ecosystem services" to provide multiple benefits "is one form of de-risking by increasing the resiliency of projects and programmes and the people and communities that depend on them, and diversifying income streams" for them. This is related to increased access, including direct access to devolved small-scale financing, to these communities, which should be facilitated through the GCF "de-risking" its (mis)perception of the financial/performance risks applied to those structures.	GCF Observer Network	Thanks for the comment, given the scope of the report we do not think we can explain in more detail.
4.3	In addition to "require(ing) to clarify and secure land tenure" as part of de-risking future investments, also add the "need to establish management bodies that are responsible for the administration of risk management plans and for the "receipt and management of funding and management of transition to sustainability." Lack of these types of entities represents a key barrier to investment.	Rare	Not sure these types of "management bodies" will facilitate private investment.
4.3	IETA supports the financial instruments outlined in Table 8 in both guides (line 906 EES guide, line 728 FLU guide), but urges the GCF to specifically identify and recognise carbon markets as financial instruments in the FLU and EES result areas. As a part of their role de-risking, and as a part of the paradigm shifting pathways identified in both guides (including piloting programs for monitoring and evaluation systems, testing alternative policies and markets, using new technology, and piloting new financial incentives and mechanisms for rewarding maintenance of nature and ecosystems) the GCF has a clear role to play in supporting some of the early action that can help harness the full power of markets that will both leverage the significant financing available in the private sector, and efficiently protect, restore and manage natural landscapes and ecosystems. Specifically, IETA encourages the GCF to ensure that some of the enabling actions identified in the guides including piloting programs for monitoring and evaluation, using new technologies, and other activities that will help local communities participate in carbon markets should be more explicitly identified in these guides as a critical piece of ensuring the FLU and EES result areas contribute to meeting climate and biodiversity goals.	IETA	Carbon markets are specifically mentioned. They are also covered in the FLU Guide.
4. Financing Paradigm Shifting pathways	Protecting and restoring ecosystems directly through EbA is often the best way to improve climate resilience and reduce risks. Insurance products can play an additional role, reducing the risks of private investment and protecting livelihoods from climate-related disasters. Insurance and risk finance are relevant to all types of EMS and have been particularly used in relation to coastal ecosystems and programs that combine ecosystem services with more sustainable agriculture. The financing of community mutual systems already in place such as the Village Savings and Loan Association (VSLA) near areas of high ecological and ecosystem value will make it possible to strengthen and extend to a larger scale the protection and direct restoration of ecosystems.	Submission on behalf of USAID	This is already covered.
4. Financing Paradigm Shifting pathways	It seems that not all of the examples listed here are from the GCF portfolio. Would be useful to see GCF portfolio examples.	UNDP	Examples do not need to be exclusively from the GCF portfolio. It is a young portfolio and therefore there are many examples elsewhere.
4. Financing Paradigm Shifting pathways	Is there an example of debt-for-nature swap, in which GCF has participated?	UNDP	GCF has looked at debt swap for climate change in participation with some governments, such as Antigua. Its an area we may explore but hasn't generally been implemented or developed.
4. Financing Paradigm Shifting pathways	Who/which institution would manage the trust fund?	UNDP	It can vary significantly from case to case. There is a substantial experience with conservation trust funds.

4. Financing Paradigm Shifting pathways	This is not exactly a financial instrument	UNDP	It can be considered one (Public-Private Partnerships), and for the purposes of the table it can be included.
4. Financing Paradigm Shifting pathways	How is this a financial instrument?	UNDP	This is indirectly a financial instrument, as it is explained therein.
4. Financing Paradigm Shifting pathways	The private sector has been easier to mobilize for nature-based mitigation, but private sector investments in nature to reduce risk have been challenging. Such investments which yield broader benefits than just a single company are viewed as a public service with costs to be borne by the public sector. It is also difficult to mobilize private finance for adaptation because of the metrics associated with avoided loss. It is difficult to quantify a return on investment. And unlike insurance, there is no payout when disaster strikes, just potentially reduced loss.	World Wildlife Fund (WWF)	This comment is correct, which is why valuation is required. Also, barrier removal to make investment feasible.
4. Financing Paradigm Shifting pathways	PES schemes are not limited to “generate(ing) payments and fees implementation of land AND COASTAL management practices...” PES covers two main mechanisms: Payments made on the basis of actual provision of service, i.e., amount of carbon sequestration or increase in biodiversity Payments made on the basis of implementation of certain land, water or other resource (not just land) management practices	Rare	Coastal added.
4. Financing Paradigm Shifting pathways	Suggest to add impact bonds as potential financial instruments in the EES result area: Instrument: Impact Bonds Definition: Blend impact investing, results-based financing, and public private partnerships; private investors provide up-front capital for social services and are repaid by an outcome funder contingent on the achievement of agreed-upon results (Gustafsson-Wright, E., Boggild-Jones, I., Segell, D., & Durland, J. (2017). Impact Bonds in Developing Countries: Early Learning from the Field. Global Economy and Development at Brookings) GCF Role: Guarantor: Provides a financial guarantee to the investors, meaning the investor(s) will not lose their entire investment if the impact bond-funded program does not meet objectives. For example, the guarantor can guarantee that the investors will get a percentage of their investment back, whether the impact bond succeeds or fails. This model is useful in getting investors interested. In the original model, it is difficult to attract investors because there is a risk of losing the entire investment Barajas, A., Barajas, L., Burt, K., Harper, T., Johnson, P., Larsen, E., ... & Yeh, C. (2014). Social impact bonds: A new tool for social financing. Princeton, NJ: PPIA Program, Princeton University. Saatavilla: <a href="https://www.princeton.edu/sites/default/files/content/Social%20Impact%20Bonds,202014">https://www.princeton.edu/sites/default/files/content/Social%20Impact%20Bonds,202014</a> ) Technical assistance for structuring the deal, for selection of outcome metrics and repayment and for performance management during the implementation phase  Transformational (paradigm shifting) Potential “There is some evidence to suggest that service provider performance has led to increased funding and, therefore, the ability to scale up the intervention and thus reach more beneficiaries; significant progress in building a culture of monitoring and evaluation, driving performance management, and incentivizing collaboration across government agencies and among cross-sector stakeholders” (Gustafsson-Wright, E., Osborne, S., & Massey, M. (n.d.). Measuring the Success of Impact Bonds: Do Impact Bonds Affect the Ecosystem of Social Services Delivery and Financing. Global Economy and Development at Brookings	Rare	Text and example of impact bonds added.

4. Financing Paradigm Shifting pathways	the taxonomy of financial instruments, they have a nice list of examples of programs that are providing grants to Indigenous Peoples and Local Communities. (It would be important to add the Forest and Farm Facility to that list.) However, there does not seem to be any reference to the fact that the GCF currently lacks any instrument for providing funds directly to Indigenous Peoples and Local Communities such as the CIF, IFAD, UNREDD, and GEF, all have.	FAO	The GCF can do it through the AEs.
4. Financing Paradigm Shifting pathways	It is suggested to change to "micro to large".	FAO	The current text distinguishes according to specific situation (some are micro to large, other micro to medium, or micro to small).
4. Financing Paradigm Shifting pathways	GEF is working on designing an impact programme on restoration that is useful for further alignment in this context.	FAO	Thank you for the note, projects should look for synergies in this regard.
4. Financing paradigm shifting pathways	See also the comment above. Please reflect in the guidelines that EES valuation methodologies cannot come up with the "true value" of ES. They can be used as a reference for decision-making, but, moreover, efforts should be made to evaluate the state of ecosystems, establish a baseline and innovative monitoring to account for changes, causes, initiative results and social dependencies. This means, inventories and science-based databases are the best way to improve EES knowledge.	Germany	Thank you, these are not recommendations to be applied without previous analysis and careful risk and cost benefits analyses. Most of these approaches are under innovations.
4. Financing paradigm shifting pathways	The statement "This can be achieved through provision of transport, clean water and energy and flood and erosion control" lacks the component of sustainable use of marine resources. One of the main objectives of the EU taxonomy refers to "sustainable use and protection of water and marine resources." Recent financing products for water-related infrastructure projects that have been developed recommended the use of this objective to give clarity to investors of the contribution of financed project or an investment vehicle to preserving Blue Natural Capital.  We can replace this with terminologies used by GEF Adaptation Program such as "through better land-use planning, climate-resilient coastal infrastructure and sustainable management of natural infrastructure."	Rare	Thanks for the comment. We believe that the existing text is sufficient.
4. Financing Paradigm Shifting pathways	(Table 7) Finance literacy, bancarisation, business development trainings (innovation: online markets, connecting producer and consumer, etc.), and business formalisation are important activities for which many countries do not have enough capacities. Many low-scale producers cannot access funds due to lack of infrastructure (e.g. roads, ships), knowledge, interest from FIs and people, remote locations of finance facilities, among others. Correspondingly, FIs can develop tailor-made products that better respond to natural productive cycles and the possibilities of their clients, e.g. harvest-responsive loans, long grace periods for bioeconomy projects (research can take years) etc.	Germany	Thank you, this is correct but not sure that such general enabling activities should be covered in this guide and financed by the gcf unless they are actual identified barriers for specific agreement with the t4.t.
4.2 Financial barriers	Section needs a bit more clarity. Not sure one can really refer to 'rapidly expanding market in green bonds' for land conservation and restoration. This would need some justification and evidence. Although strange to refer to PES as "speculative new markets" in line 887, as in most cases PES are neither speculative nor a new idea.	UNFCCC secretariat	Agreed, text adjusted.
4.2	Is the lack of investment in 'natural climate solutions' mostly because of a lack of investor confidence, as explained? What role does the expected return-on-investment play? The aspect of how to create a business case that's attractive for investment is somehow missing here	UNFCCC secretariat	Thank you, investment confidence is primarily related to risk and return is agreement within the text. There are many other factors but given the limited size and scope of the document we feel that we can not elaborate further.

4.3	Add The Meloy Fund for Sustainable Community Fisheries an example under Equity as it was created to invest in fishing and seafood-related enterprises that will lead to better management and protection of these formally underappreciated and undervalued natural assets. <a href="https://www.meloyfund.com/">https://www.meloyfund.com/</a>	Rare	Thank you, Meloy Fund added.
4.3	The examples given for “Solutions integrating grey and green infrastructure” don’t really fit the definition given.	UNFCCC secretariat	Thank you, they do as all are tools that can promote such integration.
4. Financing Paradigm Shifting pathways	These are very useful clarifications that give more directions to AEs. It would be helpful to incorporate more of that in the guide.	Germany	Thank you, some examples such as this one are included but too many examples can give the false impression that they are exclusive.
4. Financing Paradigm Shifting pathways	Add “New modalities and strategies are essential to reach communities, MSMEs, and “bottom of the pyramid” organizations. Examples could include strategies that target the change in financial behaviors of both communities and governments that could build a formal and thriving rural economy.”	Rare	Thank you, none of these possibilities are excluded.
4. Financing Paradigm	<p>We welcome a number of very positive references and elaborations in the table, especially with reference to small scale, community-centered finance, the provision of finance for ‘bottom of the pyramid’ organisations, MSMEs and community organisations, and including through the role of grants. It is important to highlight the core role of grant finance, including full-cost grant finance provision. This is particularly true in EES, given the particular sector challenges of using incremental cost approaches. So we are eager to see here a reference to full-cost grant finance provision</p> <p>We also appreciate that the taxonomy clearly spells out that the financial instrument is not in and of itself contributing to the transformational /paradigm shifting impact, but that it can only support such transformative EES actions if recognized shortcomings of the proposed instrument[s]. and inherent structural economic challenges, are addressed openly and consistently in GCF investments.</p> <p>It is important to highlight that loan or equity facilities as approaches need also to be made available to micro and small scale actors – not just as the vehicle for engaging larger-scale investments and actions. The basis for the use of loan and equity facilities becomes clearer when appropriately detailed and circumscribed by clear exclusions (investment no-go-areas that can run counter to the imperative of protecting EES) and increased transparency, for example in sub-projects approvals, that will help ensure meaningful consultation and the participation of Indigenous Peoples and local communities as rightholders as well as FPIC.</p> <p>We acknowledge the challenges associated with PES schemes focused on biodiversity protection, challenging because accounting for multiple, ‘beyond carbon’ benefits requires complex quantification approaches. We would note further that the integrity (leakage and permanence) of carbon sequestration benefits are often not secured – and thus even carbon-centric schemes are more challenging to quantify than is commonly</p>	GCF Observer	

Shifting pathways	<p>than is commonly understood. Thus, PES approaches need to be carefully applied and should be seen as one of many financial support structures for local communities, but certainly not the sole one.</p> <p>As highlighted previously, we agree with a categorization of climate risk management and related insurance beyond the financial instrument by looking at EbA approaches as a way to enhance climate resilience and reduce risks. These should be the primary risk mitigation approaches in this sector, with financial insurance products playing at best a supplementary role, and only if they also focus on disincentivizing maladaptive and resource-extractive behaviour.</p> <p>Some further clarification is needed on what is meant in terms of “solutions integrating grey and infrastructure.” An “integration approach” cannot mean and should not mean window-dressing continued grey infrastructure development by adding some “green component” (à la an ill-advised discussion about “nature-based solutions”) See reference line in table 8 which makes this link. Instead, the table should use a “building with nature” description and approach to ensure consistency for example with references in line 642/Table 4; or lines 655/Table 6 and line 689 which describes a more comprehensive, and less utilitarian approach. This inconsistency in the text should be resolved with a clarification to exclude ‘nature-based window-dressing’ of fundamentally unchanged grey infrastructure.</p> <p>In this context, and with all the other examples of specific funds or financing mechanisms used in this table, it should be clarified that the draft sector guidance uses these as ILLUSTRATIVE examples only. Their reference and inclusion should not imply an endorsement of either those approaches or mechanisms as suitable for a GCF investment approach to EES, as the guide lacks an in-depth analysis of any of those approaches.</p>	Network	Thank you for your comment.
4.3	I don't think this is a financial instrument, rather it's the goal of financing	Climate Risk Analyst, NBS Expert	This is indirectly a financial instrument, as it is explained therein.
4. Financing paradigm shifting pathways	We think the top-down approach also has benefits	N/A	Language adjusted and softened.
5. Case Studies	Case studies: would add value here if you could also refer to the expected co-benefits for each case study intervention, e.g. for biodiversity, livelihoods, etc. Consider also adding a peatlands or grasslands case, given reference to these biomes in the document.	UNEP-WCMC	Co-benefits are implicit and should be sought by projects.
5. Case Studies	Case studies should have been more specific, strategic and with a plan of action for more countries to pledge for restoration, protection and management of Ecosystem Services.	Dr. Prachi Ugle Pimpalkhute	Case studies were chosen because they illustrate several of the issues discussed and illustrated in the guide.
5. Case Studies	This is a great input to the guidance note.	UNDP	Thank you for the comment, this was the objective.
5. Case Studies	National Action Plan and NDCs should include biodiversity and natural capital commitments and targets	Dr. Prachi Ugle Pimpalkhute	Not clear if this comment is appropriate for this guide or if it is a more general comment.
5. Case Studies	66% of NDCs include NBS according to Seddon et al.	FAO	Thank you, corrected to 66%
5. Case Studies	It would be useful for others to hear what is especially good in these selected cases - which of the approaches, funding schemes etc. could be examples to others? What has been learned from the projects?	FAO	Case studies were chosen because they illustrate several of the issues discussed and illustrated in the guide.

5. Case Studies	It could be useful to remind reader of the barriers here.	FAO	Thank you, barriers are included in each case study.
5.1	Provide more context and citation (IPCC) for how sea level rise causes more frequent and intense storms	Rare	Reference added.
5.3	Unclear what the 'barriers' are in this description, and how they were addressed.	UNFCCC secretariat	Text explaining that the main barrier is fragmentation of effort.
5.3	The 'expected impact' reads as if the GCF doesn't really believe the claims. Suggest to rephrase, or choose another example, in case there are doubts about the 'success claims' of the project.	UNFCCC secretariat	The GCF cannot guarantee these claims unless it cites an independent evaluation or other such assessments. Current text is quite objective regarding the good progress to date.
6. Impact potential	This section could benefit of the "ridge to reef" approach where the landscape approach is being applied and interaction between the continuum of different ecosystems is being taken into account. See e.g. <a href="https://panorama.solutions/fr/building-block/ridge-reef-approach">https://panorama.solutions/fr/building-block/ridge-reef-approach</a> .	FAO	Too specific for this section.
6. Impact potential	<p>We appreciate the very detailed elaboration of investment criteria here, which is congruent with that found in the draft FLU sector guide. We also appreciate that it makes explicit references to many of the issues that the GCF Observer Networks have brought up as core elements to consider in projects/programs, including:</p> <ul style="list-style-type: none"> <li>-“stacking” multiple ecosystem benefit approaches</li> <li>-participatory stakeholder engagement and planning and monitoring and assessment frameworks as part of paradigm shift</li> <li>-placing gender equality and women at the core of projects/programs, and</li> <li>-FPIC as part of stakeholder approaches that are core to an understanding and definition of country ownership (which is very well articulated in Table 9).</li> </ul> <p>However, on “<b>efficiency and effectiveness</b>” the reference to an alignment with the Equator Principles is insufficient, as the principles themselves, and the enforceability of their application, are too weak. Likewise, under the same criteria in Table 9, there is a reference to “best available technologies.” This reference is not clear; it should maybe be replaced by instead using “most suitable technologies” as often high-tech (best technology) solutions are not the ones most adequate, equitable or even effective and technology needs assessments need to be also grounded in local/community experiences and knowledge. Efforts to define effectiveness broader than just cost effectiveness are good and needed; however we are concerned that “quantifying the values of a functioning ecosystem and how EES contributes to livelihoods” reinforces a current-paradigm financialization approach. Please make it more explicit in this discussion that “value” has to be broader than “financial valuation”.</p>	GCF Observer Network	This has been answered in other comments.
6.1	Mention irrecoverable carbon specifically?	Conservation International	This has been mentioned before several times and discussed extensively.
6.2	<p>Add additional language on how behavior change is critical for a successful paradigm shift, such as “It is well established that human behavior is responsible for driving global environmental change. Intensified pressure on natural resources (via consumption, population growth and other human activities) has led to accelerated global change. These actions have resulted in local, regional and Earth system changes, such as increasing temperatures, changes in precipitation, and ocean acidification.” – or- “Understanding human behavior, and its consequences across scales, both temporal and spatial, is therefore paramount in dealing with change and in planning for a more resilient future.”</p> <p>Metternicht, G., Carr, E., Stafford Smith, M. 2020. Why behavior change matters to the GEF and what to do about it. A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C.</p>	Rare	Behaviour is an important issue in some contexts, but it is too specific to be included in this context. It depends on incentives, which is the essence of what is discussed here.

6.2	Provide a citation or examples to the reference of ‘..zero-degradation business models’	Rare	Changed to zero deforestation.
6.2	Something better to use than zero-degradation? This could be misleading and co-opted by conservation/restoration agendas that undermine human well-being (Adaptation, DRR, SDGs, etc.). Important to use the right words, particularly given the growing corporate interest around EES and the potential impacts this could have on indigenous and local communities in the long-run. Opt to use the term regenerative (throughout the document) as an opportunity also for discussion on managed ecosystems. For FAO our focus is on productive agro-ecosystems. How can we focus on making them regenerative rather than non-degrading? It is semantics, but the term regenerative says more in the context of actionable restoration than zero-degradation. In general the document is missing language on restoration that should be strengthened.	FAO	Changed to zero deforestation.
6.2	Provide examples of which ‘culturally appropriate indicators’ are being referred to	Rare	No need to define here, these are context specific.
6.5	In section 6.5: Add Women and pastoralists to the line of underrepresented stakeholders such as indigenous people and community leaders	Both Ends	Text adjusted.
6.6	This was an important input provided to us by GCF Secretariat for one of the recently approved UNDP proposals, however it is not necessarily clear what this means. We interpreted it to mean the inclusion of the added cost of a do nothing scenario (meaning the added cost of ecosystem degradation in the form of reduced benefits). It would be good if this interpretation (if considered appropriate) could be included in this paragraph for a common understanding on what “financial returns without the project” means and how to approach this analysis. Also, one of the important causes of degradation of ecosystems is the fact that the range of services they provide is not internalized in the decision of the use of resource, hence we see overexploitation. In the absence of quantifiable benefits of ecosystems, project proponents often look at shadow price of such ecosystems by assessing past disasters and differentiating loss and damage with and without ecosystem protection. During project development, proponents are often compelled to move away from those areas for which such data is available to undertake an economic and financial analysis, inadvertently leaving vulnerable ecosystems to be exploited. But this would not have been the case if GCF openly acknowledges the in-situ or intrinsic value of such ecosystems even if quantifiable benefits may not be made available. We suggest for GCF to signal more strongly that, in assessing the proposals dealing with ecosystems, they recognize the in-situ value of ecosystems so that proponents are not incentivized to protect only those ecosystems for which their quantifiable benefits can be demonstrated.	UNDP	At fund level, it is true that our impact for adaptation is measured in terms of # of beneficiaries (that have increased resilience), but Core 4 under IRMF also includes hectares conserved / restored.
6.2	Not all communities are indigenous, so local peoples or communities are also important stakeholders	Rare	Not clear what the comment refers to.
6.7	Perhaps also including a “best option analysis” meaning comparing cost effectiveness of an ESS solution vs a grey infrastructure BAU solution.	UNDP	This is not excluded and can be included when it adds value.
6.2	Ensure inclusive approach to stakeholder engagement for all IPLCs not only Indigenous peoples as some local peoples may not be indigenous	Rare	Agreed, text adjusted.
6.7	For “Impact” the mitigation section has strong overlap with the FLU guide, especially given that most countries classify their mangroves as forests. This would be a good example to show complementarity of the guides, and how they can be used in combination.	UNFCCC secretariat	Text has been strengthened to explain the linkages.
6. GCF Investment Criteria	Only these ecosystems?	Conservation International	Examples are not exclusive of others.
6. GCF Investment Criteria	Should the sustainable development benefits focus in particular to the SDGs as countries have already defined their goals?	FAO	These are very specific to the EES sector.

6.8	It miss the reference to how the GCF might implement these things (example how to avoid top-heavy coalitions and instead include Indigenous peoples and women, to reflect their experiences, knowledge, and priorities. Involving those sectors and actors – commonly with contradictory development priorities – to coordinate and align goals through discussion, negotiation and planning may produce more effective outcomes. )	FAO	This doesn't say how, it states a desired direction.
6.8	Same as above, ensure inclusive approach to stakeholder engagement for all IPLCs not only Indigenous peoples as some local peoples may not be indigenous	Rare	Indigenous peoples and women are used only as examples and do not mean to exclude others.
6.8	Not sure the sentence is understandable. Does this mean UNFCCC is classified as a 'coalition'? For what and with whom?	UNFCCC secretariat	In this context it works as one.
6.8	It is suggested to mention here also "the UN Decade on Ecosystem Restoration 2021-2030"	FAO	Thank you, too specific in this context.
7. Conclusion	The post 2020 global biodiversity framework	N/A	Not need to mention each and every framework.
7. Conclusion	In section &: Add Ministry of Finance to the sectoral ministries that are being explicitly named	Both Ends	Not sure what this comment refers to.
7. Conclusion	This concluding paragraph should be more centrally placed and elevated (for example replicated in the Executive Summary).	GCF Observer Network	Note taken.
7. Conclusion	Again 'depth' is mentioned as key but I do not find the measurement of this clear	GGGI	Depth is defined in the text (lines 603-605): "Deep transformations cut across sectors, levels and generations, and are needed to change cultures, power dynamics, and structures (markets, laws, institutions)."
7. Conclusion	Sentence may need to be reworded, as it reads as if biodiversity 'need to be reduced' to achieve the Paris Agreement.	UNFCCC secretariat	Thank you, text is correct degradation and loss is what needs to be reduced.
7. Conclusion	It is suggested to add biodiversity goals (Aichi targets CBD) and land degradation target (UNCCD)	FAO	Thank you, too specific for the conclusion section.
References	We suggest not to take IPBES as reference citations, since this report has many problems, like lacking solidified resources, taking suppositional opinions and resources.	China	We explicitly tried to rely on IPCC and IPBES as intergovernmental reports, followed by peer-reviewed academic articles and only minimally used grey literature. IPCC and IPBES also released a joint report recently which very much echoes the priorities for restoration that we outlined in the sector guide.
Glossary	Add the definition of zero-deforestation which we suggest to emphasise sustainable forest management and utilization	China	Definition added in the glossary.
Glossary	The 37% value is a highly contested number, and is raising unrealistic expectations. In addition, it's unusable without a corresponding timeframe.	UNFCCC secretariat	37% removed.
Glossary	"Additionality" is not used in the REDD+ WFR. Given the approach to implement on national level, this is not necessary.	UNFCCC secretariat	No reference made to Warsaw Framework in this guide. It is included in the FLU Guide.
Glossary	In the context of REDD+ it would be important to reflect the notion of non-carbon benefits as outlined in decision 18/CP.21	UNFCCC secretariat	Thank you, not necessary in a glossary.



Glossary	This is again wrong. REDD+ goes far beyond 'results-based compensation to developing countries for preserved forests'. It would be important to give a clear definition that also includes the equally important readiness phases of REDD+, and is true to all 5 REDD+ activities.	UNFCCC secretariat	Thank you, agree it goes beyond but does not exclude it.
Glossary	The GWP values for different GHGs differ significantly between different sources, including different IPCC reports. When using these, it would be useful to clearly provide the source that was used.	UNFCCC secretariat	Thank you, when possible ranges are provided or multiple sources.
Glossary	The definition of mangroves would benefit from adding the information that mangroves fall under the forest definition in most countries, and therefore forest-based activities such as REDD+ may apply.	UNFCCC secretariat	Text added that mangroves are forests in most countries and thus REDD-plus may apply - see Forest and Land Use Sector Guide
Glossary	Peatlands' definition should still mention that peatlands develop in watersaturated condition. In this context, it would be also good to underline that a drained peatland can be covered by many different types of vegetation, and may be challenging to recognize. To add: 11-15 percent of peatlands are estimated to have been drained and another 5–10 percent are degraded due to other changes such as removal or alteration of vegetation. (FAO, 2020) <a href="http://www.fao.org/3/CA8200EN/CA8200EN.pdf">http://www.fao.org/3/CA8200EN/CA8200EN.pdf</a>	FAO	Current text is sufficient to explain what a peatland is for the purposed of the guide.
Glossary	Definition needs to be checked, the final sentence doesn't seem to make sense. How could CO2 or GHG emissions be greater than the residual sources?	UNFCCC secretariat	Thank you, the sentences says that their degradation turns them from sinks to sources this is correct carbon is released instead of uptake.
Glossary	<p>We would strongly suggest to align the decision of REDD+ with the agreed Warsaw Framework for REDD+ (EFR). The current definition only adds to the confusion.</p> <p>The correct definition is: "reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)"</p> <p>For detailed comments on the current list: This is wrong. All REDD+ activities must be backed by a UNFCCC Party in accordance with the WFR. Subnational or integration of other levels are possible if the Party chooses so, as interim measures, but the aim is to go national level</p> <p>This is just a description of phase 3 of REDD+, as decided by the COP in para 73 of decision 1/CP.16</p> <p>The objective is integral part of the WFR since 2/CP.13, not sure what is separate from i. Difficult to see that activities would be undertaken without an objective.</p> <p>This is completely wrong, as REDD+ at this stage is not part of any mechanism under the Convention.</p>	UNFCCC secretariat	Definition adjusted.