#EUBiodiversity

UN environment programme WCMC

SCIENCE BASED TARGETS NETWORK

European Commission

Business @ Biodiversity

Webinar series on 'Science-based targets for biodiversity'

Webinar 2: 'Allocation'

2 April 3.30-5pm CET

Summary

Context

At the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD-COP15) in October 2020, a global post-2020 agenda for biodiversity will be agreed by 193 states. Defining global goals on biodiversity is expected to be a key outcome of this COP15. This will have consequences for all societal actors, not least the business and finance community. Finance and business are therefore increasingly interested in setting science-based targets (SBTs) that contribute to the emerging post-2020 Global Biodiversity Framework.

Objectives and scope of the webinar

This webinar, taking place on 2 April 2020, was the second of a three-part series of webinar on 'Science-based targets for biodiversity' and focused on "Allocation" - How to share the efforts between various actors of society to achieve global goals on biodiversity". This webinar provided an overview of existing scientific methods to translate global biodiversity goals into actionable targets for countries and businesses, and associated methods to allocate contributions to each actor. The webinar also aimed to discuss the most appropriate allocation methods from the perspectives of the private sector and financial institutions.

Highlights of presentations shared by speakers

Information and final slides available on https://next-ma.eu/landing/eubiodiversity

Speakers	Key points
Alex Zvoleff, Science Based Targets and Network	■ SBTN has drafted three prototypes (still under development) to transform the global biodiversity goals into actionable targets for cities and companies: – **Footprinting approach**: Company footprints are calculated across places and, based on the footprint areas of priority, are selected to reduce impacts and contribute to protection and regeneration. – **Place-based approach**: Overall impact is identified in terms of scale and location and efforts are bundled in key places with stakeholder consultations. – **Safe operating space & sector-based approach**: Action and responsibilities are based on the historical impact of each sector and place. ■ Each approach consists of three components, which include downscaling (global to regional/scape state targets), prioritization (of highest priority areas based on materiality rules) and allocation approaches to share the mitigation burden. ■ The need to take into account ethical and scientific considerations with allocation was underlined.
Mark van Oorschot, PBL Netherlands Environmental Assessment Agency	■ The presented case study on translating planetary boundaries to national budgets showed that Western countries are not living within the global 'Safe Operating Space.' ■ Translating planetary boundaries into national resource budgets is a three-dimensional exercise. These dimensions need to be treated separately and in the

	following order: (i) biophysical dimension (global targets based on planetary boundaries i.e. resource budgets), (ii) socio-economic dimension (consumption-based perspective connecting trade flows) and (iii) ethical dimension (political choices on burden sharing). PBL developed its own indicator metric to measure biodiversity impact for the biophysical dimension, Mean Species Abundance (MSA), and can be used by other policymakers. ■ The study also analysed the distributional consequences of alternative perspectives on distributive fairness. Translating the global limits to the national level increases their policy relevance. However, such translation essentially divides up the global safe operating space and what is considered fair distribution is a political decision and depends on the preferred allocation method. ■ The allocation approaches applied were based on (1) current shares of global environmental pressure ('grandfathering'); (2) 'equal per capita' shares, and (3) 'ability to pay' to reduce environmental pressure. Which approach should be applied remains an ethical discussion and defining 'fair' contributions will always be political (tension between sovereignty, equity, and capability principles). ■ A lot of gaps and scientific uncertainties remain in terms of methodology and there is a need for further operationalization. Businesses, finance and policymakers should be included in the discussion to avoid a mere top-down approach. A local bottom-up approach needs to complement the process. ■ The study showed there is no single set of national fair shares/one-fits-all-approach.
Joshua Berger, CDC Biodiversité	■ Results and insights from the B4B+ Club workshop which took place in October 2019 were shared. ■ Applying allocation and translation methods for CBD objectives to business raises opportunities and challenges. On the one hand, there is a possibility of transposing an international biodiversity objective into corporate objectives. On the other hand, there is a need for a biodiversity trajectory and budget to eliminate scientific uncertainties and methodological gaps. ■ A variety of mechanisms exist for distributing efforts, which depend on the chosen allocation principles, and principles of equality, sovereignty or efficiency. Three options were added to the ones proposed in the PBL study, including convergence (sector method), contraction (emission) and differentiation allocation system. ■ An example was provided illustrating the possibility of translating global and national goals into specific corporate objectives. Outcomes depend on the chosen approaches (e.g. combination of footprinting approach with sovereignty principles generates different targets for a company than combining the safe operating space approach with the principles of equity). ■ Company profiles also played a role in the determination of goals.
Daniele Bufano, Schneider Electric	■ Schneider Electric shared its experiences of translating the biodiversity goals into actionable corporate targets. ■ The energy and automation company already had experience setting carbon targets to align with 1.5°C trajectory. Biodiversity, however, proved to be more challenging and less straightforward. ■ Takeaways from the Schneider's biodiversity journey included the need for a simple goal which companies can align. The complex nature of biodiversity was recognized, but this only heightened the requirement of a straightforward unifying goal. ■ Nevertheless, even though the science is not yet perfect, companies were encouraged to start acting. Schneider Electric already started to explore a way forward, using the Global Biodiversity Score to measure its footprint. ■ The company recognized its potential to improve its biodiversity strategy. It was impossible to assess the spatial impacts of its full value chain. ■ The need for high-level strategic decisions that can be implemented locally was emphasized. ■ Trade-offs were mentioned among the challenges of translating global planetary boundaries into action (rapid action vs more precision).

1 Part 1: Introduction to the workshop

Moderator: Katie Leach, Senior Programme Officer, UNEP-WCMC

1.1 Welcome & Opening

In his welcoming remarks, Lars Müller, EU Business@Biodiversity Policy Officer and coordinator of the EU B@B Platform, European Commission, stressed that planetary boundaries can be incorporated in business strategies as illustrated in previous webinars. The importance of continued collaboration with and between partners to better understand and measure companies' footprints on the climate, but also, and in particular, on all dimensions of natural capital was highlighted. The impact on biodiversity serves as a basis for developing SBTs for natural capital. The need to share information and ideas and encourage business and financial institutions to undertake action, rather than impose a way forward was highlighted as key objective of webinar 2 and 3.

1.2 Introduction to translational science and allocation methods – Possible options for use in setting Science Based Targets for Nature

Alex Zvoleff, from the Science Based Targets Network (SBTN), presented the various approaches currently under development to translate biodiversity goals at organisational level. The development of SBTs is driven by the need to protect Earth's Life Support Systems and the economic value of nature and its services, worth of $44 trillion according to WEF. SBTN is replicating the process of developing SBTs for climate for biodiversity, but recognises the challenges of translating global biodiversity goals for nature at regional and local level. Among nature-specific indicators, addressing biodiversity, space and location represent key differentiating factors compared to climate indicators.

The three draft goals that SBTN is using as a basis for the development of SBTs and allocation approaches include:

1. Zero net loss of nature from 2020
2. Net positive by 2030
3. Full recovery by 2050

The translation of biodiversity goals to actors follows a three-steps approach allowing to allocate each goal per sector and associate a level of materiality. Allocation must match the location-specific material impacts and dependencies of actors. While climate targets and actions don't necessarily need to be place-specific, targets and actions on water, biodiversity, lands and oceans will need to be place-based. Allocation must also account for local environmental conditions and stakeholder interests. This is done through downscaling global goals to action relevant at a regional/scape level and through prioritization. Companies need to focus on avoiding and reducing the impact along their value chain and by investing in biodiversity restoration and regeneration.

The importance of monitoring and evaluation was emphasized to improve and transform biodiversity strategies. The three prototype allocation methods the SBTN is developing were introduced. The approaches all illustrate the importance of space, but are only based on initial thinking and will be developed further over the coming years.

1. **Footprinting approach** built on existing work in for example the LCA community. Companies or cities calculate their footprint across places, and first avoid loss where possible, then reduce impact in the places of company's choice and finally contribute, generate and restore where

possible. The distinction between restoration (restore biodiversity spots/land) and regeneration (new lands), and the importance of both, was recognized.

2. **Place based approach** focused on specific places with the biggest needs. Companies or cities identify their overall impact in terms of scale and location and then focus their efforts in a number of key places (landscapes, seascapes or basins) where allocation is performed by a stakeholder driven process. Direct social consideration was identified as an advantage of this approach. Multi-actor governance models can be used to directly involve stakeholders in the process, to decide where action happens and how.
3. **Safe operating space & sector-based approach** blended elements of the first two approaches, in which actors' responsibilities are based on the baseline historical impact of each sector. Targets are downscaled for each place. With this approach, compared to the place-based approach, it was not deemed necessary to take into account the needs of the people and nature in those specific spaces as allocation is predetermined.

To conclude, the three components of translation were reiterated, which included (i) downscaling of global goals to regional targets, (ii) prioritization of areas and, finally, (iii) allocation approaches to share the mitigation burden at a landscape/regional level. Both the scientific and ethical dimension of allocation was highlighted, although only slightly touched upon during the webinar.

Question: How is the work divided?

→In terms of species, IUCN is leading the work, UNEP-WCMC has been taking the lead on the ecosystem side, Conservation International are leading on Nature's Contributions to People, and genetic diversity is yet to be addressed.

Question: Based on which indicators would you calculate a company's footprint in method 1? And it seems method 1 is in based on a maximisation approach (best effort possible). Would you say that this method would lead to the greatest impact?

→ All nature indicates (land-use, freshwater, …) serve to calculate the footprint. One approach is not more effective than another. All approaches can have the same impact and SBTN is now looking into this. These prototypes approaches were developed at a rapid pace to provide businesses with tools as fast as possible to start acting now.

Question: Are the allocation approaches specific to biodiversity or are they the same for the Land, Ocean and Water hubs?

→ Because these approaches are still prototypes, SBTN first focused on biodiversity and the impact of corporates on biodiversity. SBTN recognizes the need for integration around the different areas and develop an integrated approach for an allocation method equal for all indicators.

Question: If, I well understood, allocation is to reduce biodiversity loss. But what is dedicated to change the process which has impacts on biodiversity or design a more earth friendly process?

→Allocation touches primarily reduction, and restore/regenerate in that it provides guidance on the level of each that is needed depending on the company (sector, activities, etc.) and place(s) in which they operate (this is after first avoiding impacts as the first step in the process). The framework we've developed for the SBTs for Nature also includes a component on transformation - this is where broader behaviour change and the enabling conditions to achieve the global goals are addressed. The elements you mention would be addressed here - guidance on the transformation component is currently under development but initial framing will be included in the integrated proxy guidance document we are developing for June.

1.3 Scientific insights on translational and allocation principles: a case study using planetary boundaries thinking

Mark van Oorschot, Senior Researcher International Biodiversity Policies at PBL Netherlands Environmental Assessment Agency, presented a PBL case study on translating planetary boundaries (PB) to national budgets and elaborated on the equity principles in allocation. The study aimed at revealing the distributional consequences of alternative perspectives on distributional fairness, which is always a political decision. Global limits of selected planetary boundaries (climate, land-use, nutrients and biodiversity) were downscaled to resource budgets for the EU, US, China and India, using three different allocation approaches from the climate literature. The allocation approaches were based on current shares of global environmental pressure ('grandfathering'); 'equal per capita' shares 'ability to pay' to reduce environmental pressure. The approaches respectively build on the principles of sovereignty, equality and capability.

Results showed that the four economies are not living within the global safe operating space. Their 2010 environmental footprints were larger than the allocated budgets for all three approaches. The outcome of the study also revealed that grandfathering was most favourable for the EU and US for all PBs, while equal per capita allocation and ability to pay were found most favourable for China and India. This explains diverging preferences for specific allocation approaches and underlines the ethical dimension.

The study built on an earlier PBL study[1], inspired by a Finish Framework[2], which proposed a more systematic conceptual framework for translating PBs to national policy targets. In translating the PBs, their biophysical, socio-economic, and ethical dimensions were analysed. They were, and have to be, treated distinctly and in that specific order. The biophysical dimension deals with the geographical scales of planetary boundary processes (e.g. the global level for climate change and watershed level for water scarcity) and their interactions. The socio-economic dimension addresses the sub-global relationships between production and consumption through international trade, pointing at environmental impacts outside national borders. The ethical dimension takes into account the differences between countries' rights, abilities, and responsibilities with respect to resource use and environmental impacts. Finally, the three-dimensional approach of the case study was put forward to serve as a framework to develop biophysically grounded and socio-economically responsible, fair and just national shares of the global challenges.

This was illustrated for biodiversity, by using an indicator for ecosystem integrity (MSA) and applying the downscaling principles to the PB-value proposed by Steffen et al (2015). The different principles result in a wide variety of national allocated budgets, but whatever principle is applied, most Western countries are currently not living within a "safe space". For further operationalisation of national budgets to the level of business, a multi-stakeholder dialogue is necessary between policy makers, business and finance, taking the local context and potential of different businesses into account.

Question: Are you able to determine with this MSA method if one type of agriculture is better than the other, or is it in the margin of uncertainty of figures?

→ The basic idea is to give an index of the impact of activities on biodiversity. Applying the MSA indicator results in a beneficial local effect in the case of organic agriculture compared to more intensive conventional agriculture. Uncertainty issues have to be solved by having enough field studies available for systematic analysis. However, trade-offs to the higher scales also need to be considered. Organic

[1] Häyhä, T., Lucas, P. L., van Vuuren, D. P., Cornell, S. E., & Hoff, H. (2016). From Planetary Boundaries to national fair shares of the global safe operating space—How can the scales be bridged?. *Global Environmental Change*, *40*, 60-72.

[2] Kahiluoto, H., Kuisma, M., Kuokkanen, A., Mikkilä, M., & Linnanen, L. (2015). Local and social facets of planetary boundaries: right to nutrients. *Environmental Research Letters*, *10*(10), 104013.

agriculture is also known to have a lower production output. Comparisons per kg of product often show a preference for intensive agriculture. This is an example of present omission in comparative analysis, that neglect the multiple benefits of organic agriculture systems in the equation, a problem that has to be solved by improving LCA analysis.

Question: Do you believe we can use MSA to be translated to the company level for all types of companies?

→Yes, it can be used by different types of companies. However, work needs to be done to operationalise the MSA approach for different sectors. A lot of work has already been done on the food industry so far. For example, mining has a rather low global impact due to its limited land-use, but locally it has a heavy impact. The sector proves to be challenging to add to the equation and company footprint analysis done so far (see Wilting & van Oorschot, 2017)

Question: Would a budget at corporate level (net impact approach) allow a company to destroy nature in one place as long as they compensate it in another place?

→Not necessarily. This can be prevented by strictly following the no-net-loss approach, where avoiding and reducing impacts have to be applied first, before turning to compensation of the remaining impact.

2 Part 2: Sharing experiences of applying allocation methods

2.1 Gaps and obstacles in allocating efforts for biodiversity to business – Lessons from the B4B + Club

Joshua Berger, GBS Project Manager from CDC Biodiversité, presented the results of the B4B+ Club October 2019 workshop on translation with a focus on value chain and finance. The workshop tried to address the question whether and how the CBD objectives for biodiversity can be translated into actual reduction and gain targets for businesses through a biodiversity budget. Gaps and obstacles encountered in applying the translation and allocation methods to the private sector were raised.

The biophysical, socio-economic, and ethical dimensions were used to set and translate a global resource budget into fair shares for business. Participants of the workshop also looked at the different allocation methods and distributive consequences. A few other allocation methods besides the ones addressed by previous speakers were discussed. These methods propose (i) converging the biodiversity intensity of the company towards that of its industry, (ii) decreasing towards a sectoral biodiversity intensity target, or (iii) differentiating reduction targets dates by country.

The outcome of the workshop showed that companies are able to transpose national goals into corporate objectives.

It also revealed how each allocation system has different consequences for the level of efforts companies need to make based on the company's profile. Using a sovereignty allocation system, for example, implies that all companies have to make the same kind of effort, namely and average contribution to reach the objectives. However, the same relative effort results in different absolute efforts determined by the company profile.

Many gaps continue to exist when it comes to translation and allocation methods, including the absence of global and regional budgets that can be translated into fair shares and actionable targets. In addition, the scientific uncertainty on the global 'Safe Operating Space' for many ecoregions also revealed itself as a major challenge to allocation. The urgent need for a biodiversity trajectory and a clear budget format that corporates can use to allocate efforts was underlined

2.2 Corporate perspective

Daniele Bufano, CO2 & Environment marketing deployment leader at Schneider Electric, provided a corporate perspective on allocation in this webinar and shared the company's experience in translating global biodiversity goals into corporate objectives. Schneider Electric is an energy and automation company providing digital solutions for energy efficiency and sustainability.

The company had already developed and validated carbon targets to reduce their climate impact and align with the 1.5°C trajectory. Acknowledging the severe state of global biodiversity, Schneider Electric decided to integrate biodiversity into their sustainability strategy. Nevertheless, as for many companies, the complexity of the subject proved to be a deterrent and challenging factor. This also explains the few quantitative strategies, with actionable targets, available for businesses. Moving from a qualitative and punctual approach to a quantitative and holistic strategy was however highlighted as one of the main priorities among business needs. This will enable industries to measure and asses their impact and allocate budgets and benefits in order to transform business and operations.

Assessing spatial impacts across their entire value chain (over 50,000 suppliers) was another main challenge that they failed to overcome. Last, applying allocation methods forced the company to try to understand the trade-off between fast development allowing a snowball effect reaching a critical mass, and the slower scientific approach allowing more precision. Finding an equilibrium was highlighted as a crucial point of focus.

Even though business and finance are lacking the perfect tools, efforts should be made to already translate and implement global high-level strategic decisions into action at a local level

Question: What is the risk that destruction is accelerated "borrowing" from the future, but restoration cannot happen due to irreversible transformations?

Question: Grandfathering? What is with new entrants to the market as there are always new companies?

Question: Daniele can you please let us know a bit more about the methods being used in your case given that you are unable to fully spatialize your supply chain at this time?

Question: When and how are stakeholders engaged in the process of restoration or mitigation? As underlined by Giulietta there is often a lack of capacity.

Cf. Giulietta: At CBD the discussions are very different. The main obstacle is the slow pace of implementation, the lack of capacity in many countries, the lack of political will in many OECD countries, but thus far the negotiations haven't really touched on top -down vs bottom up. And at CBD there exist already the NBSAPs (the national biodiversity strategies).

3 Part 3: Group discussion on allocation

3.1 Questions and topics for discussion in breakout groups

- What are the obstacles in applying this allocation method?
- How concretely could allocation methods be applied? Do you have concrete examples of implementing an allocation methodology and what methodological issues remain to be agreed upon?
- Does this allocation method fit with a corporate or financial institution's way of working?

The participants were broken up different groups and discussed the questions above. Each group reported back after 15 mins with a short summary of the discussion.

Group 1, led by Mark van Oorschot and Anne-Marie Bor, focused on "footprint of consumption / production / portfolios". Issues were raised on the obstacles of applying allocation methods to business. The difficulties to assess the effects of the entire value chains of large companies was pointed out. ASN bank was put forward as a best practice. They will do an assessment of their whole portfolio and apply general methods for the portfolios, which could serve as a source of information for other large companies. (https://www.asnbank.nl/over-asn-bank/duurzaamheid/biodiversiteit/biodiversity-in-2030.html). Methodological issues were also raised as they continue to exist when applying general LCA analyses running the chance to neglect specific high-value areas. Finally, the need to consider and compare societal gains to commercial values was underlined.

Group 2, led by Katie Leach and Sebastian Bekker, also discussed key obstacles in applying allocation methods. One of the main obstacles and challenges identified was the complexity and trackability of supply chain. For supply chain, information can be taken from procurement (quantity/quality by raw materials / fabricated components), while space/location is rather approached statistically (either by literature review or InputOutput Tables). Another point addressed was the fact that it makes sense to use a science-based approach and include stakeholders in the allocation steps because of their experience in the field.

Group 3 was led by Alex Zvoleff and Joshua Berger. The challenges and risks related to top-down approaches for allocation were highlighted. When setting biodiversity targets, this should be taken into account, before strategies are imposed on various actors. The way forward should depend on and reflect everyone's capabilities. Following this argument, it was pointed out that many companies are already implementing SBTs as these are sometimes imposed by permit conditions. The bottom-up actions at local company level could serve as best practices for other companies, rather than waiting for guidelines. There is space to build on what is already available, like the case of ASN Bank, which could be drawn to for information.

3.2 The way forward on biodiversity SBT & Closing remarks

Registration for Webinar 3, April 16, can be found on the following webpage:

https://next-ma.eu/landing/eubiodiversity