Minutes
Proteus Annual Meeting 2017

Day 2 - 28th June 2017

The David Attenborough Building, Pembroke Street, Cambridge, CB2 3QZ

Approximately 50 people met in Cambridge to explore the current status of activity on biodiversity indicators in the extractive industry as part of the Proteus Partners annual meeting. Participants were largely from the extractive sectors, but a number of experts on biodiversity indicators and people developing metrics for other sectors also attended. Three finance sector groups attended.

Objectives of the day

- To present the results of the Proteus scoping study on biodiversity indicators
- To bring together key groups working on biodiversity indicators, exchange information and explore synergies
- To explore potential next steps for collaborative working on biodiversity indicators

Presentations

Biodiversity Indicators and the extractive sector – state of play

- Biodiversity indicators in the extractive sector – scoping study results (Sarah Ivory, UNEP-WCMC) [download]

Exploring different models for biodiversity indicator development (morning session)

- Developing corporate biodiversity indicators – lessons learned from agribusiness and the finance sector - Helen Crowley (Head of Sustainable Sourcing Innovation, Kering) and Dr. Martina Di Fonzo (Research Associate University of Cambridge Institute for Sustainability Leadership, CISL) [download]
- Biodiversity indicators for biodiversity action plan implementation in Atora, Gabon - Vanessa Tassas (Senior Environmental Advisor, TOTAL) and Jon Ekstrom (Chairman, The Biodiversity Consultancy)
- The Global Biodiversity Score – evaluating the impact of the private sector on biodiversity using global data sets - Antoine Vallier (Chef de Projets, CDC Biodiversité) [download]

Exploring different models for biodiversity indicator development (afternoon session)

- Biodiversity Indicators - Company & Local level application - Aoife Reynolds (Environmental Advisor- Biodiversity, Group Environment - Sensitive Areas, Shell) [download]
- Monitoring biodiversity restoration at site level - Dr Theresia Ott (Principal Advisor, Group Environment, Rio Tinto) [download]
- Piloting a corporate biodiversity net impact approach - Charlie Butt (Partnership manager, CEMEX-BirdLife International) [download]
- Developing ecosystem-based indicators for Managing Impacts to Biodiversity and Ecosystem Services at a Peruvian Amazon Gas Field - Pippa Howard (Director Business & Biodiversity Programme, Fauna & Flora International, FFI) [download]

Supporting materials

- Agenda [download] and participants list [download]
- Biodiversity Indicators for Extractive Companies: Proteus Meeting Pre-Read [download]

Take away messages

What next steps are needed to move us closer to an accepted biodiversity indicator for the extractives industry?

- There are site and corporate level differences in indicator needs, and it will be challenging to find one indicator that suits both needs.
- Overall there was a feeling that site level biodiversity indicators were relatively straightforward and that many examples existed of such indicators within the extractive sector. The real need expressed by participants was to find an indicator that could be aggregated to corporate level to enable impact and response to be communicated to key stakeholders e.g. internal management, investors.
- Whilst models exist that could help with this thinking, none are yet fit for purpose for mining and oil and gas companies. Support was expressed all four indicator models and all are complementary. The core suite of indicators approach, however, is less appropriate for an aggregated measure of performance than the other models. Some of the models described will feed into the others, for example the decision model could lead to a framework model which could in turn lead to a single or suite of indicators. However, none of the models are mature and none have been tested as an aggregated corporate indicator.
- The IPIECA[1] reporting guidance is being revised in the coming two years, there is an opportunity to improve the process based measures set out in that guidance.
- We also discussed the fact that management measures such as the core and additional Global Reporting Initiative (GRI) indicators were important to track management responses. There is the potential to influence GRI to develop better indicators through the development of a more effective set of indicators.
- Participants expressed a desire to learn by doing, testing the models outlined above at a number of pilot sites using existing data. Such testing would require cross sector collaboration and coordination to enable lessons learned to be extracted and a generally accepted indicator framework to be developed which is complimentary to government policies and the Sustainable Development Goals (SDGs). It should be designed with multiple users in mind e.g. corporate head office, management, investors.
- There is a need to look for donor funding in developing these ideas further. A potential opportunity is to use technical assistance budgets' from Proteus Partners to support further development and explore how the collective knowledge can be brought together.
- To conclude, there is sufficient knowledge and a real energy to work to develop biodiversity indicators that provide an insight into corporate performance on the issue within the Proteus membership and a feeling that we just need to get on and do it! UNEP-WCMC will be exploring how we can help take forward this work in collaboration with key partners.

A summary of feedback from workshop participants is provided in Annex 1.

[1] IPIECA is the global oil and gas industry association for environmental and social issues

Biodiversity Indicators and the extractive sector – state of play

UNEP-WCMC presented the results of a scoping study conducted with Stuart Anstee & Associates that identified extractive sector drivers for monitoring, uses of indicators and current practice based on a combination of desk research and company interviews. Key findings from the analysis:

Drivers varied across companies and across different levels within the same company, and there tended to be disconnects between site and corporate levels.
Local compliance, monitoring implementation of internal standards, investors, project finance were all identified as important drivers.
The drivers and uses of indicators were largely in risk identification and business decision-making, with challenges around cost, methodology, quality, accessibility and inconsistencies.
Key requirements for indicators include reliability, scientific robustness, and straightforward communication.

Group discussion: Reaching consensus on extractive industry needs and drivers

Are the results reflective of the sector as a whole? Partners confirmed the identified drivers were in line with their practices but queried the relatively low priority placed on project finance and local stakeholders. Company size, project funding strategies and location were identified as potential influencers of the drivers for indicators that should be considered in the analysis. Additional requirements were suggested that were not reflected within the analysis: indicators need to have a well-defined objective, be repeatable, fit for purpose and shareable across the sector via IPIECA, International Council on Mining and Metals (ICMM) etc.

Is aggregation from site level indicators into a single corporate indicator an essential pre-requisite for corporate biodiversity indicator? A need was expressed for an indicator that can be aggregated to give a picture of performance at corporate level. Thinking has been developed within the agribusiness, conservation sector and within governments that could assist in this (for example by the National Parks system in the United States of America).

Do different user needs require different indicators/ reporting approaches? There is a need for a mixture of indicators that answer different needs, modelled on approaches and frameworks already available e.g. ISO14001 Environmental management standard.

Are there any differences in the needs and drivers between the oil and gas and mining industries? Indicators for induced impact on a landscape level are likely to be common between sectors, but assessment and scale of footprint will be different between industries. Investor interest in the issue will drive alignment between different sectors as they seek a means to compare performance within and between sectors.

Exploring different models for biodiversity indicator development (morning session)

Presentations in this session illustrated existing indicator development processes from the apparel, extractive and finance sector. UNEP-WCMC's scoping study on biodiversity indicators identified four potential models for indicator development: composite indicators of biodiversity, a core suite of indicators, a framework, or a decision tree model.

In partnership with Kering, CISL developed a metric for corporates to measure their impacts on biodiversity. This metric is based on measures of land use and impacts on the quality and quantity of biodiversity at the site level. The apparel sector is at a much earlier stage of identifying and managing impacts on biodiversity and ecosystem services than extractives with less data available at a site level to inform indicator development.

In the extractive sector, TOTAL shared insights gained in the context of the implementation of a Biodiversity Action Plan (BAP) in Gabon. The Pressure-State-Response (PSR) framework was very helpful in formulating the BAP. Adaptive management thresholds, developed with The Biodiversity Consultancy, allowed more time- and cost-efficient monitoring. Partnerships and stakeholder engagement were key in streamlining the process.

From a finance perspective, CDC Biodiversité's "Global Biodiversity Score" was created in response to stakeholder demand for aggregated, global or corporate level data on biodiversity. The score's underlying methodology draws on global datasets (e.g. GLOBIO) to identify production footprints of target commodities, as well as corporate data to perform a Life Cycle Assessments of a company's supply chain.

Break-out group feedback

Is a single aggregated indicator at site/corporate indicator feasible and credible?

- Broad agreement that a single aggregated indicator would be very valuable and answer an existing need. It would need to cover both risk and performance, in order to reduce pressures and improve management.
- There is as yet no consensus with regards to the methodology that could achieve this. A range of methodologies exist of varying robustness / scientific credibility.

What links should be made to policy focused indicators e.g. SDGs?

- Local level indicators should not be developed without considering the global context. Indicators should focus on SDG 14 ("Conserve and sustainable use the oceans, seas and marine resources for sustainable development") and SDG 15 ("Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse"). SDGs provide a good framework to report against given current board level interest on company contribution to them and interest from external actors. The challenge will lie in developing ways in which to measure company performance on each of the SDGs.
- Aichi targets lend themselves less to a single indicator, as they are less known and more state driven. However, they allow a connection between the national, regional and global levels to be established and should where possible be considered as a part of the development of an indicator.

Can we use proxies instead of measuring target features?

- Proxies are almost inevitable, as it will never be possible to monitor everything in all its complexity. Proxies are already frequently used: For instance, measures of habitat coverage capture several features (*quality* of habitat and *change* in habitat).
- However, care needs to be taken that proxies are indeed reflective of and correlated with the feature to be monitored. There is a risk of loss of critical information due to oversimplification.

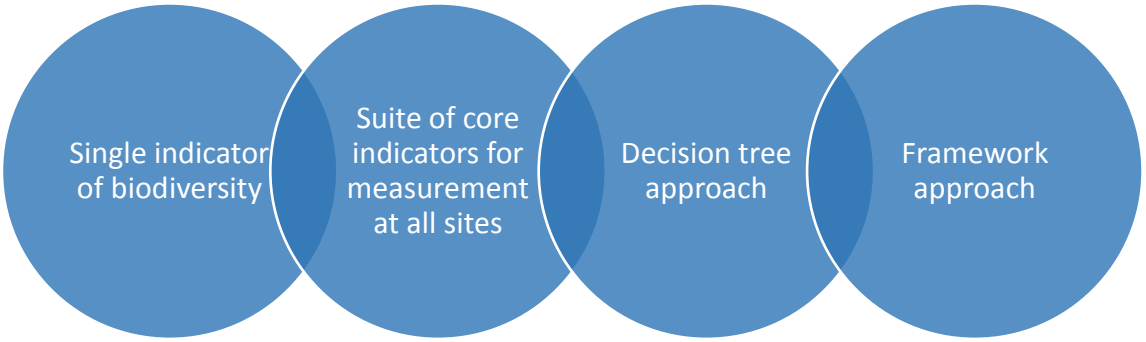
Exploring different models for biodiversity indicator development (afternoon session)

- Significant activity is underway at a site level within the extractives sector to identify and monitor appropriate biodiversity performance metrics to track biodiversity action plan implementation, monitor restoration and measure performance. Transferal of information and insights from site level monitoring to corporate head office remains challenging.

Site-level biodiversity indicators may be developed as part of restoration activities and benefit from long-term monitoring programmes, as illustrated by Shell's bog and marsh restoration efforts at the Corrib Gas site (Ireland) and Rio Tinto's coastal forest restoration efforts at the Richards Bay Minerals site (South Africa). Comprehensive data collection can enable the development of a suite of indicators over time, to assess restored habitat in comparison to baseline measures taken from nearby natural habitats. Monitoring programmes may involve third parties, at Richards Bay site-level biodiversity metrics rely on comprehensive data collected as part of a long-standing monitoring and research program in partnership with the Conservation Ecology Research Unit of the University of Pretoria. Shell also uses biodiversity indicators to demonstrate performance at the company level, in particular for disclosure on commitments made with respect to activities in natural World Heritage sides and national-level protected areas and monitor implementation of biodiversity action plans.
A number of companies are partnering with Non-Governmental Organisations (NGOs) developing biodiversity indicators as part of broader biodiversity management programs. NGO partnerships may provide a means of accessing local community knowledge. Local stakeholders can feed into indicators which are typically harder to quantify. Birdlife International outlined a corporate biodiversity net impact approach that it is piloting with CEMEX. Net impact is determined as a function of changes in habitat coverage, habitat condition (species-based) and habitat importance (stakeholder-informed). Independent, reliable grassroots expertise was emphasised as the key to success. Challenges identified include the long monitoring timeframes to achieve Net Positive Impact (NPI) and integration with day-to-day operations.

FFI's experience working with a Peruvian Amazon Gas field to develop a BES (Biodiversity & Ecosystem Services) indicator framework highlighted the need to design indicators that reflect the link between BES and ecosystem function, for instance, by going beyond the number of species and considering the diversity of species traits.

Potential models for indicator development discussed during break-out sessions



Break-out group feedback

Participants discussed the four models of indicator development identified as part of UNEP-WCMC's scoping study, asking: How well do such models meet user needs? What technical challenges might they pose? What solutions can be applied to these challenges? What steps are required to move forward?

A single composite indicator of biodiversity for use at all sites

- Although of value as an approach, the methodology must be simple and easy to understand to facilitate uptake across multiple sites and business divisions.
- The approach needs to be piloted both at corporate and site levels to ensure buy-in. For instance, the group discussed proximity to protected areas as an indicator that could give insight to risk exposure on the ground.
- At the technical level, participants felt that the development of one indicator for Pressure, State, and Response will be challenging. There is currently no composite indicator that can summarize these in a single number and existing indicators tend to focus on one aspect. For example, the Ocean Health Index and Living Planet Index focus on pressures. Responses are usually reported in the Global Reporting Initiative (GRI), Biodiversity Action Plans (BAPs) and IPIECA indicators but participants felt that these need to be improved to provide the insight into management effectiveness required. Indicators for states, pressures and responses need to be separated because responses will change the state. Alternatively, the state can be considered as the stock, with pressures and responses understood in relation to the stock.
- The single indicator model is limited in its ability to provide a comprehensive picture. It is however useful for prioritisation in the absence of actual data and would be powerful for communications. Participants expressed a desire for such an indicator while acknowledging the challenges that developing such an indicator posed.
- If companies are already looking at other indicators, there is a need to consider how a single composite indicator would be placed among or against those.

A suite of core indicators for measurement at all sites as a minimum standard

- The key advantage of this approach is that it could be applied at all locations using a standardized methodology, allowing for easy aggregation.
- Discussions focused on the applicability of Essential Biodiversity Variables (EBVs) as a core suite of indicators. EBVs are a good way to measure the state of biodiversity, however businesses seek to measure their *impact* on biodiversity. As such, EBVs do not work as an indicator in their current form.
- The concepts and thinking underlying the EBVs could be developed and adapted to identify a set of variables adapted to industry needs. Two layers of analysis would be required: first, measure biodiversity values and indicators. Often, companies will already be collecting data that can fit under one of the 22 existing EBVs. Second, allow companies to assess *impacts* on biodiversity, which is more relevant for their reporting requirements.
- It is important to note that any set of variables or indicators, would be industry-specific - e.g. results for the apparel sector will probably be quite different from the extractive sector.

A decision tree to help identify which indicators from a broader 'core suite' would be appropriate for the context of their site

- This model was perceived as having great potential due to its flexible approach. The technical challenge is that a decision-tree does not currently exist, and some work is required to ensure a developed tree is workable. It would also require regular updating. Participants showed interest in developing such a decision-tree model.
- Participants drafted a high-level decision tree model, identifying key elements and questions that would guide users through the process:
- The model starts with a high level question aimed at helping users identify their motivations for developing indicators (e.g. for legal compliance, pressure from stakeholders, to understand risks and/or impacts).
- Users then specify what information they need and at what scale (e.g. site or corporate/global).
- The decision tree would help users to identify which biodiversity features to measure, what types of indicators they can measure (i.e. process, outcome, or policy indicators) and what the indicators tell users (i.e. whether they show trends or provide comparisons between different states of biodiversity).
- Finally, the decision tree would give users an idea of the frequency at which monitoring and evaluation would need to be carried out.
- This approach would still be dependent on the development of a core or broad suite of indicators in order to be of value.

A framework which allows sites to assign scores to indicators of pressure or state in a simple and comparable way

- The model is expected to work well as a corporate oversight model due to its flexibility: The use of a simple framework for aggregation at the corporate level does not preclude complexity at the site level. A simple framework would have the additional benefit of being communicable.
- Corporate users will need an overall picture of what is going on throughout the company, whereas site-level users will want to identify which specific actions need to be taken. Two frameworks are therefore actually needed: First, a framework where sites can be comparable with each other. Second, a framework allowing for aggregation from site- to global-level.
- The model would therefore need to be combined with a site-level review or auditing process to verify the approach undertaken and its consistency with the required framework.
- Additional issues to consider within this model included: tackling the challenge of cumulative impact attribution; agreeing upon change thresholds; arranging site-level trials; considering the integration of "Impact" in the PSR model or exploring the value of other models (such as the Pressure State Benefit model).

Annex 1: Summary of feedback survey

- All respondents were happy with the workshop format followed on Day 2 (28th June) this year and found the workshop sessions interesting and relevant.
- The presentation sessions were just right and the majority of respondents benefited from the group discussions.
- Although the majority felt that the time available for discussion after the presentation sessions was just right, some felt that more time was needed, and straight after the presentations, for questions.
- Suggested topics for the workshop day in future meetings:
- Marine data and impacts
- CBD COP 14
- Follow-up to indicators work
- Biodiversity offset policies
- Headquarters and steering committee engagement on importance of biodiversity management
- Biodiversity and ecosystem service application – examples and challenges.