Leading companies in the natural resource sectors are setting more targeted and measurable environmental goals. This is based on an increasing recognition by business that they need to manage their operational and reputational risks due to major drivers of environmental change such as climate change, biodiversity loss, water scarcity, and pollution.

In regards to biodiversity related risks, such goals are increasingly being framed as ‘No Net Loss’ (NNL) or ‘Net Positive Impact’ (NPI) goals. While there is no universal definition for these terms, the conservation case is typically understood as follows: NNL or NPI are biodiversity goals for development projects in which the negative impacts on biodiversity values caused by the project are either balanced (for NNL) or outweighed (for NPI) by conservation gains, compared against a baseline of identified biodiversity values agreed upon with stakeholders. The intended biodiversity outcome is achieved through the project’s implementation of a systematic approach: first, to avoid and minimise the project’s impacts; then, to undertake on-site rehabilitation and restoration where feasible; and, finally, to fully compensate for any residual impacts, such that no overall biodiversity loss results from the development project.

The ‘net’ in NNL and NPI is indicative of the fact that some losses at the development site are inevitable, and that compensation measures may not be perfectly balanced – in regards to the time, space, or type of biodiversity involved. This is due to the inherent limitations of information available on the species and ecosystems involved. It is therefore always recommended to overcompensate for residual impacts - meaning that achieving an NPI goal is the only way of ensuring an NNL outcome for biodiversity, and therefore this report only uses the NPI term. This is also reflected in Figure 1 which depicts the systematic approach for achieving NPI goals through the ‘mitigation hierarchy’ – widely regarded as the best practice approach for managing biodiversity risk and realizing conservation opportunities in development projects.

**Figure 1**
The mitigation hierarchy for managing biodiversity risk

<table>
<thead>
<tr>
<th>Biodiversity values</th>
<th>Biodiversity impact</th>
<th>Biodiversity impact</th>
<th>Biodiversity impact</th>
<th>Biodiversity impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance</td>
<td>Avoidance</td>
<td>Avoidance</td>
<td>Avoidance</td>
<td>Avoidance</td>
</tr>
<tr>
<td>Minimization</td>
<td>Minimization</td>
<td>Minimization</td>
<td>Minimization</td>
<td>Minimization</td>
</tr>
<tr>
<td>Restoration</td>
<td>Restoration</td>
<td>Restoration</td>
<td>Restoration</td>
<td>Restoration</td>
</tr>
<tr>
<td>Offset</td>
<td>Offset</td>
<td>Offset</td>
<td>Offset</td>
<td>Offset</td>
</tr>
</tbody>
</table>

Net positive impact

Additional conservation actions
Why focus on the commercial agriculture and forestry sectors?

Developments in primary natural resource sectors such as agriculture, extractives, wood production, water management and fisheries largely shape the world’s current and future biodiversity as they exert direct pressures on biodiversity (namely: habitat loss and degradation, overexploitation, invasive species, pollution and climate change). These sectors also depend on biodiversity and ecosystems in various ways to provide food, fibre, wood, bioenergy and clean water for the world’s growing human population. Understanding the feasibility of NPI approaches in all of these sectors is therefore critical for the world to meet the UN Convention on Biological Diversity’s mission of halting biodiversity loss by 2020, and its longer term vision of ‘Living in Harmony with Nature’ by 2050.

To date however, much of the experience in implementing approaches with explicit NPI goals for biodiversity has been in the extractives and infrastructure sectors. In part, this is because these sectors typically have more spatially defined impacts managed by fewer stakeholders over a specific timeline, compared to the agriculture and forestry sectors. Also, these sectors generally have more financial capital available and exposure to international financial sector standards with NNLI and NPI requirements (for certain habitat categories) such as IFC’s Performance Standard 6 and the Equator Principles.

What is the aim and approach of this report?

The main aim of this report is to better understand the feasibility and potential benefits of NPI approaches in the commercial agriculture and forestry sectors. The report outlines a five stage process to implement a generic NPI approach, and describes what this process could look like when implemented in three hypothetical landscape scenarios.

This report is an outcome of a working group convened by IUCN’s Global Business and Biodiversity Programme in 2013 that brought together experts on these issues from both business and conservation communities. The report builds on the NPI experience of the extractives and infrastructure sectors, and on sustainability efforts related to biodiversity in the commercial agriculture and forestry sectors (such as policy and sustainability standards – see Figure 2). While important, the report does not include issues related to ecosystem services, social aspects and public policy in order to limit the scope of an already broad topic.

Figure 2

What benefits could an NPI approach add to current sustainability efforts in agriculture and forestry sectors?

An NPI approach can add the following benefits for business and conservation:

1. Defines measurable goals and metrics for biodiversity outcomes in a landscape context.
2. Completes important steps of the mitigation hierarchy that often have less emphasis in existing sustainability efforts — e.g. restoration, compensation (such as biodiversity offsets), and additional conservation actions.
3. Enables achieving NPI systematically and making a credible conservation claim based on demonstrable impact and outcomes.
4. Actions with clear conservation gains are typically beneficial for important ecosystem services such as carbon sequestration and water provisioning.

Comprehensive sustainability standards often have biodiversity requirements that typically emphasise the ‘avoidance’ and ‘minimise’ steps of the mitigation hierarchy, with some restoration aspects.

A company may have a biodiversity-specific policy (or an environmental policy with biodiversity elements) that goes above regulatory requirements, may integrate sustainability standard commitments, and may even have NPI elements.

Regulatory requirements related to biodiversity establish minimum levels of biodiversity protection and must be fully complied with. NPI must be in addition to this level (unless the regulation has explicit NPI goals).
Is an NPI approach feasible for the commercial agriculture and forestry sectors?

Yes - based on the application of the five stage process (see Figure 3) which includes the full implementation of the mitigation hierarchy - an NPI approach could be feasible in development projects under three broad conditions (which are not mutually exclusive):

- More native biodiversity features - such as native species, vegetation types or habitats - are retained or restored in the project site, compared to an established baseline or reference frame.
- Ecologically sensitive species or areas identified within the project site are protected against negative impacts from productive activities; and safeguards against the conversion of ecologically sensitive areas for productive purposes are enforced over the long term.
- Where natural habitats in the project landscape (i.e. beyond the project site boundaries) are under high risk of conversion for productive purposes, collaborative multi-stakeholder efforts to safeguard these habitats against conversion are taken in areas where it is feasible for project proponents to have an influence.

The report also identifies three situations that have no potential for an NPI approach, on the basis that the risk of biodiversity losses would outweigh any opportunity for additional conservation gains:

- Where the development project will cause large scale impacts on ecosystems or species in natural areas where regional biodiversity loss is not already occurring.
- Where the development project will cause large scale impacts on ecosystems or species in natural areas where regional biodiversity loss is not already occurring.
- Where the development project will cause large scale impacts on ecosystems or species in natural areas where regional biodiversity loss is not already occurring.

Figure 3
What are the main stages typically required to implement an NPI approach?

1. **Identify** priority biodiversity values in the region and define NPI goal
2. **Map** locations, compile trends, and establish a baseline of the biodiversity values
3. **Overlay project plan** to biodiversity data and apply the mitigation hierarchy
4. **Implement the resulting project plan**
5. **Monitor progress** towards the NPI goal and feed back into updating the project plan

The report applies this five stage process to three hypothetical landscape scenarios in agriculture and forestry:

- Existing managed land,
- Using ecologically degraded land, and
- Expanding into new legally authorised concessions.
Figure 4
Process in practice: a snapshot of one hypothetical scenario*

Moving Forward

The report is not an exhaustive analysis. It is meant to start a more in-depth understanding of NPI approaches - including the application of the mitigation hierarchy - to the commercial agriculture and forestry sectors. Some suggested topics that will need additional analysis specific to each of these sectors include:

- Further consideration of credible and feasible baselines or reference frames.
- Assessment of appropriate measures for the mitigation of negative impacts commensurate with identified biodiversity values.
- A more detailed understanding of the boundaries between different steps of the mitigation hierarchy.
- A broader consideration of compensation options including: area-based offsets, resources allocated to address drivers of biodiversity loss, strengthening of protected area management.
- Piloting proof-of-concept projects with NPI goals in each sector.

IUCN’s Global Business and Biodiversity Programme welcomes future collaborations with organisations interested in working on such topics to advance a more defined conservation impact in these sectors.

More Information

Contact IUCN’s Global Business and Biodiversity Programme at biobiz@iucn.org

The report will be available in December 2014 at: www.iucn.org/business

References (full citations in the report)

3. UN Global Compact and IUCN (2012): A Framework for Corporate Action on Biodiversity and Ecosystem Services
5. UN Convention on Biological Diversity, Strategic Plan for Biodiversity: http://www.cbd.int/sp/

* Refer to the report for the details of all 3 scenarios.