## Guidance note on biodiversity for use by Hydro when entering into new projects and activities

Hydro's aspiration on biodiversity and ecosystem services is No Net Loss for major projects or activities where biodiversity is influenced by company decisions and actions. This is particularly important in areas where biodiversity is in an undisturbed, pristine state, is unique or threatened, or have a specific value for local societies affected. In cases where the ecosystems and species composition are already degraded or destroyed, the policy needs to be adjusted. Going back to an already degraded or destroyed situation is normally not a preferable option. Here restoration back to a preferred state should be discussed with relevant stakeholders and local/regional authorities. If the original biodiversity on the site was particularly valuable, the company might chose to make an effort for a "net gain" of biodiversity, reverting as close as possible to this original situation. Such a decision needs to be carefully considered.

The following guidance note explains more in detail "how" and "what".

## The concept and policy of No Net Loss of biodiversity – principles and dimensions

No Net Loss of biodiversity means that biological varieties at intraspecific species and community level is maintained, restored or offset in connection with industrial processes or actions influencing nature

No Net Loss is linked to geographical scale – both directly and indirectly. All influenced area should be included (also negative effects caused by roads, pipelines, power supply etc). Conservation and restoration on affected sites are first priority. Then offsetting in biodiversity similar areas can be acceptable. Offsetting should be done in relation to damage on site.

Offsets are therefore linked to the extent of mitigation and restoration efforts:

- on the geographical project area (directly)
- and/or in the indirectly impacted areas

Offsets could then take place in areas with similar biodiversity and ecosystem functions and services – to achieve No Net Loss

Before any offsets are introduced, it is vital to utilize the available options for conservation and restoration at the actual site, see figure below. The ideal objective at the site should be back to the "original state". "Original state" must be defined. If the actual site has been influenced or changed from its pristine condition, restoration back to "original state" can achieve a "net gain" of biodiversity in the area.

Objectives regarding timing of full restoration should be developed. As this may take long time, interim targets and good monitoring should also be developed.

Biodiversity at the intraspecific (within the species) level is usually poorly known. It is therefore easier to focus on the species level when applying the No Net Loss concept. It is also reasonable to pay great attention to what is protected, conservation-focused or prioritised species in the relevant region/country. In addition it is important to focus on biodiversity essential for maintaining critical ecosystem services. Variation at the ecosystem level must also have high priority

There is a lot of uncertainty regarding unregistered species and unknown relations between species and ecosystem functions/services. Therefore the No Net Loss concept should not be focusing too

narrowly. When developing restoration targets/offsets areas one should therefore apply the precautionary principle.

In preparing for using the No Net Loss concept the developer should make the necessary inventories identifying the baseline information. Important here is to be sensitive to the challenge of national authorities versus project developer's responsibility when it comes to establishing good baseline information.

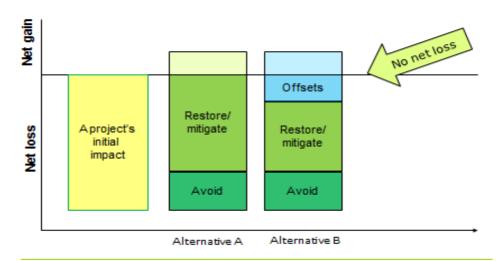
In most areas there will be a lack of good baseline data. When designing baseline investigations it is important to know what is required from a conservation perspective and from the authorities. In addition it is vital to be sensitive towards the link between the biodiversity/ecosystem services and human wellbeing in the region. The design of such investigations should also conform to the principles for developing a good environmental and social impact assessment (ESIA).

A matter of uniqueness of the biodiversity in the total area affected is important to understand. If the area is relatively common with regards to biodiversity/ecosystem services in a regional, national or international context - then it may be easier to go for offsets in other nearby geographical areas.

If any species or ecosystem are rare/endangered and have a great value, then the developer must be sensitive to this and assess these species in a: i) national ii) international context.

Finally as a cautionary note. When applying the No Net Loss concept, it is vital to realize that coming back to "the original biodiversity situation" is almost impossible to achieve in most cases. However, when defining the objectives for restoration and offsetting and planning the follow-up, the principles referred to above should ensure that key interests and principles has been taken into account when applying No Net Loss. Defining restoration targets and potential off-sets areas under a No Net Loss policy should be based on the above-mentioned principles and be developed in a transparent process including all relevant stakeholders.

## Mitigation hierarchy of biodiversity value



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