Eneco Biodiversity Code of Conduct

One Planet ambition on biodiversity:
Positive impact for all new onshore assets by 2025

November 2024

Contents

1. Introduction

In this introduction, we cover the objective of this Eneco Biodiversity Code of Conduct, introduce Eneco's One Planet Plan and explain the origins of the methodology.

1.1. Objective Eneco Biodiversity Code of Conduct

With this document, we aim to provide transparency and to account for our approach to biodiversity in relation to the sustainable assets we develop, such as wind and solar farms. The Biodiversity Code of Conduct is in line with the promise of our biodiversity ambition: positive impact for all new assets onshore by 2025. This way of working ensures that we can report on the progress of our ambition transparently and without greenwashing. In this way, we aim to provide transparency and accountability to our stakeholders, including governments, NGOs and our customers. The Biodiversity Code of Conduct also demands certain behaviour from our suppliers involved in the construction, operational and decommissioning phases. This behaviour is included in the Eneco Supplier Code of Conduct and in the related contract with the supplier.

1.2. One Planet Plan

Eneco's mission 'Everyone's sustainable energy' has been firmly anchored in our strategy since 2007. Our mission stems from the conviction that we must pass on a liveable planet to our children and the generations that follow. The 2022 WWF Living Planet report shows an average 69% decline in monitored wildlife populations of mammals, birds, amphibians, reptiles and fish between 1970 and 2018. Eneco has laid down its sustainability objectives in its One Planet Plan. Living within the natural boundaries of the planet is what Eneco believes in and strives for. Therefore, the plan contains measurable objectives in the field of climate, biodiversity, circularity and society. To reverse the loss of biodiversity, Eneco wants to take full responsibility for protecting biodiversity related to all its new onshore assets in scope (§2.1), such as wind and solar farms, heat grid and storage installations[1]. Support for the energy transition will only be maintained if it is not at the expense of the impact on biodiversity. Eneco's ambition for biodiversity is that, from 2025, all its investment decisions for new sustainable energy sources will have a net positive effect on biodiversity. This means that we will increase biodiversity more than we burden it. We achieve this by first avoiding and minimising the negative effects on biodiversity when developing and operating new projects and, in addition, by investing in nature restoration and development.

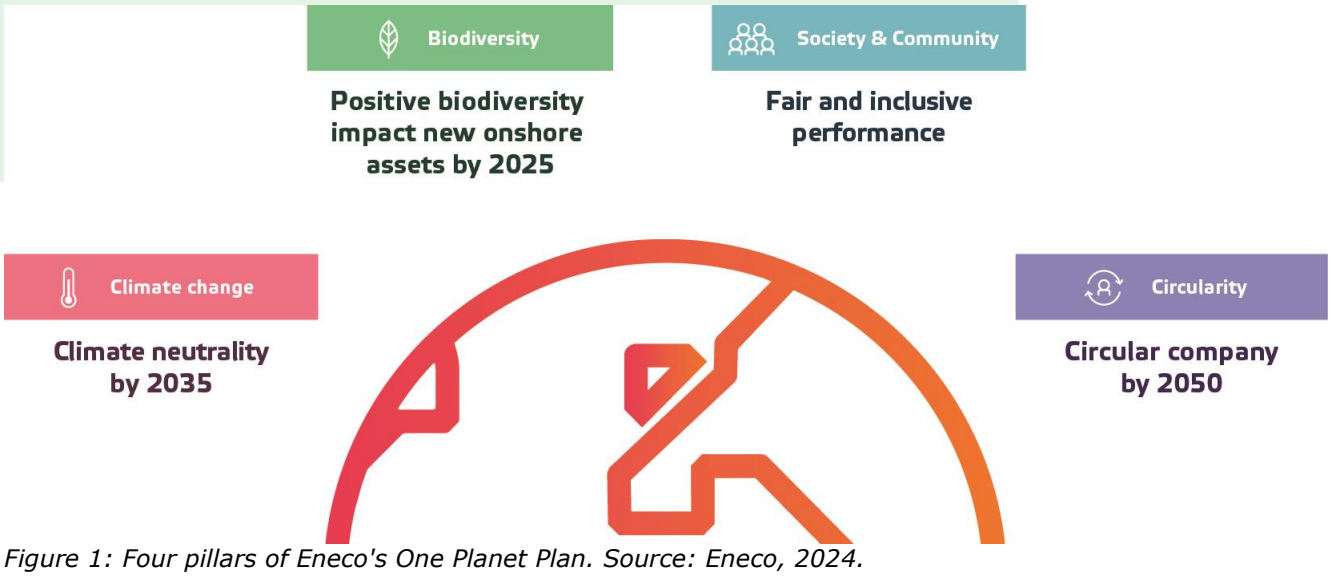

Figure 1: Four pillars of Eneco's One Planet Plan. Source: Eneco, 2024.

[1] The methodology applied is not yet applicable to offshore projects. As a result, it is not yet possible to determine whether offshore nature restoration measures lead to a positive impact on biodiversity.

1.3. Origins of the methodology

Arcadis was commissioned by Eneco to select a methodology and develop an application approach for restoring nature and ensuring a net positive impact on biodiversity for all Eneco's development projects within the scope. This approach is in addition to business as usual, which minimises the negative impact on biodiversity. The Biodiversity Metric, a tool used by the United Kingdom authorities, was found most suitable for supporting Eneco’s purposes.

To make our ambition measurable, Arcadis has selected and further developed an approach that Eneco can apply to quantify biodiversity losses (due to project impacts) and gains (specific improved conditions, restoration, and restoration measures) in order for each onshore project to have a net positive effect on biodiversity. In this approach, nature restoration and development are designed as packages, tailored to achieve habitat improvement for impacted species in such way that a population increase of impacted species can be expected. The method developed enables Eneco to monitor the progress of its biodiversity ambition and report transparently. This Biodiversity Code of Conduct has been developed to ensure that the method is used as intended.

During the organised expert dialogue, the method received a positive response. Eneco has adopted the recommendations. The recommendations include the use of this Eneco Biodiversity Code of Conduct as well as the developed Monitoring Plan (Arcadis 2023). Transparency regarding scoping and a higher threshold to achieve a net positive project impact are also recommendations that have been followed up and are reflected in this Eneco Biodiversity Code of Conduct.

1.4. Reading guide

Chapter two discusses the limits of the Biodiversity Metric, including which aspects are in or outside its scope. Chapter three describes the preconditions and principles for applying the methodology, an explanation of the mitigation and conservation hierarchy, and the trade-offs to be made when making a site selection.. The fourth chapter lists Eneco’s guidelines for communication on biodiversity-positive projects. Finally, chapter five lists the references used in this Eneco Biodiversity Code of Conduct. A glossary is included at the end of the Code.

2. Limitations of the biodiversity methodology

The process of measuring biodiversity is in a state of flux. There is currently no comprehensive methodology endorsed by science. Every methodology has its limitations, as does the methodology selected by Arcadis and further developed for our purposes. This chapter explains the limitations of our biodiversity methodology.

2.1. Scope

2.1.1 In scope

Eneco intends to apply this biodiversity methodology for the construction and operational phase, meaning we consider the local impact on biodiversity and take into account the effects of local impacts on a wider area of influence (e.g. in case of wide-ranging bird or bat species).

In scope of our biodiversity methodology:

- Direct local impacts on biodiversity at the site of specific planned assets and biodiversity impacts in the immediate surroundings, within the area of influence of the planned asset.
- Onshore windfarms, solar panels on land, heat installations and pipelines, in which Eneco has operational control. In the situation of joint operations, Eneco endeavours to involve its partner to realise the biodiversity ambition, but will at least realise the biodiversity objective related to its financial interest in the entity concerned.
- Eneco's biodiversity ambition is evaluated for species and habitats within the ecological scope of environmental impact analyses.
- Impact drivers limited to land use change (including habitat fragmentation, collision risk for bat and bird populations, habitat loss and degradation or obstruction of flight paths, etc.), as these by far put the greatest pressure on biodiversity at site level.
- Construction phase (access roads, platforms, and the transport of material), operational phase (including maintenance and anything necessary to make the energy asset run properly) and decommissioning phase (access roads, platforms, and the transport of material).

2.1.2 Not in scope

Not in scope of our biodiversity methodology:

- Offshore projects, as the methodology applied is not yet applicable to offshore projects. As a result, it is not yet possible to determine whether offshore nature restoration measures lead to a positive impact on biodiversity.
- The effects on biodiversity in the supply chain (for example, the effects of steel production for wind farms).
- Any 'repowering' phase of Eneco's assets is considered a new project and will therefore be calculated separately.
- Prevented impacts due to the switch from fossil energy assets to renewables, such as impacts from GHG emissions and nitrogen deposition.
- Projects with negligible or no impacts on biodiversity. Examples include heat pumps, e-boilers installed in existing buildings and solar panels installed on existing roofs.
- Ecosystem services and genetic variability.
- Cumulative impacts.

2.2. Biodiversity aspect in the supply chain

Although our ambition 'Positive impact for all new assets by 2025' relates to local impact on biodiversity, we also consider biodiversity in the supply chain as part of the One Planet pillar Circularity.. The current demand for metals and minerals related to low-carbon technologies (wind, solar, and others) is too high. At a global level, the production and availability of these materials is not in line with the pace needed to combat climate change, pollution and biodiversity loss.

On top of that, the supply chains for metals and minerals unfortunately present Environmental, Social , Governance (ESG) risks that need to be addressed, not only relating to forests and ecosystems but also in the area of human rights and working conditions. Eneco feels and takes responsibility and aims to be a circular company by 2050.

In the meantime, Eneco is already actively taking measures to address environmental and social concerns in our supply chains. Examples include Eneco's commitment to the International Responsible Business Conduct Agreement for the Renewable Energy Sector, a multi-stakeholder partnership aiming to create transparency and establish best practice in the renewable energy supply chain (SER, 2023). The IRBC agreement includes goals on preventing and addressing severe actual and potential adverse impacts on people, the natural environment and biodiversity in the context of renewable energy supply chains, and on using the collective leverage of the participating parties to positively impact the sustainability of broader renewable energy sector supply chains. According to the IRBC agreement, parties must strive to minimise negative human rights, social and ecological effects throughout their supply chains and maximise positive effects.

More information about how we approach the phases prior to the realisation phase is available on our website: Circularity (eneco.com).

3. Biodiversity Metric

Several preconditions are important for the application of the biodiversity methodology. This chapter describes the preconditions and principles for applying the methodology, an explanation of the hierarchy for mitigation and nature conservation, and the trade-offs to be made in a site selection.

Eneco naturally adheres to all relevant national and international rules and regulations. However, in achieving a net-positive impact on biodiversity we go beyond compliance.

3.1. Mitigation hierarchy and conservation hierarchy

- Eneco follows the mitigation and conservation hierarchies in making decisions on net-positive biodiversity measures (see figures 2 and 3). The mitigation hierarchy mitigates future negative impacts to halt declines, while the conservation hierarchy delivers additional positive impacts to 'bend the curve'. This means that before nature restoration measures are taken, appropriate measures to avoid and minimise negative impact on nature must be taken and any unavoidable damage must be restored. Beyond these basic steps, measures with a net-positive impact on biodiversity will be taken to achieve a biodiversity net-gain.
- The largely agreed upon principles of best practice for addressing biodiversity impacts are listed in the Business and Biodiversity Offsets Programme (BBOP, 2012). The first principle is "adherence to the mitigation hierarchy: a biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy". Eneco applies the Business and Biodiversity Offsets Programme principles by restoring nature and delivering additional positive impacts.

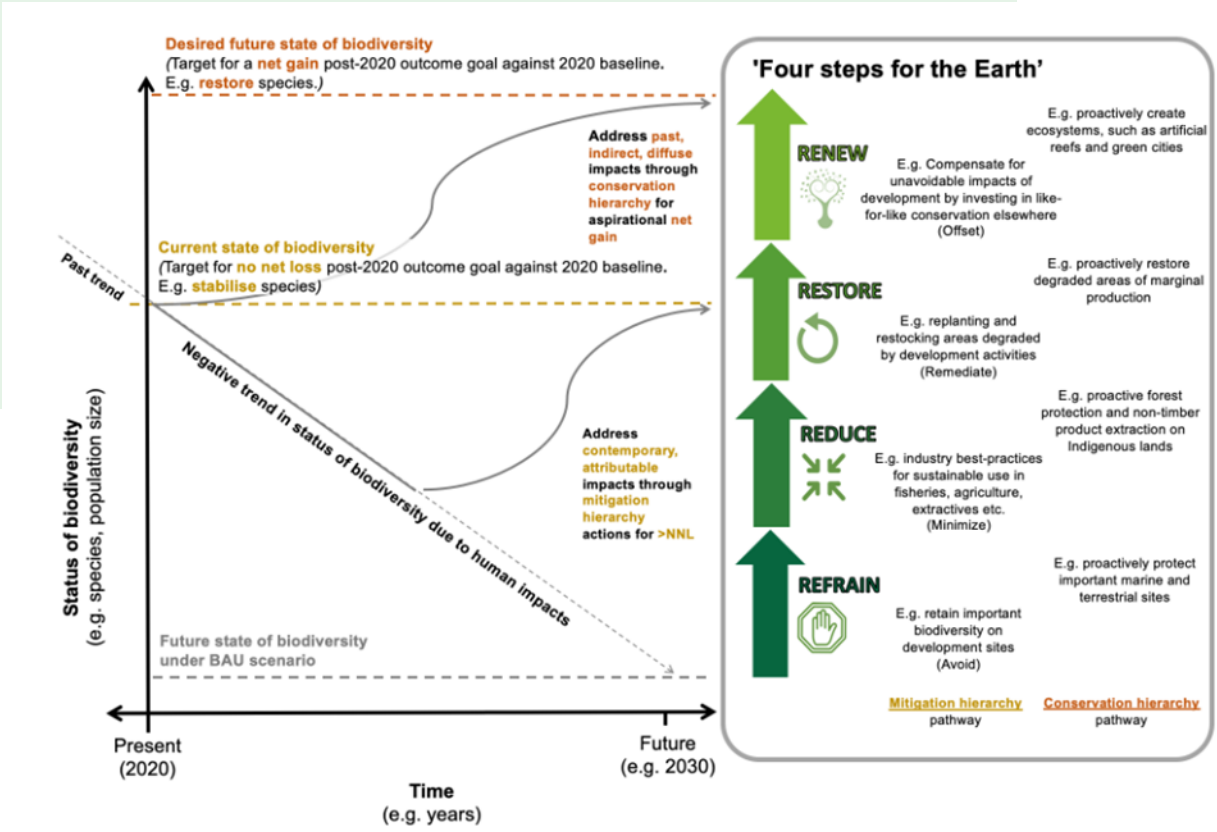

Figure 2: Mitigation and conservation hierarchy part 1. Source: Conservation Hierarchy, 2021.

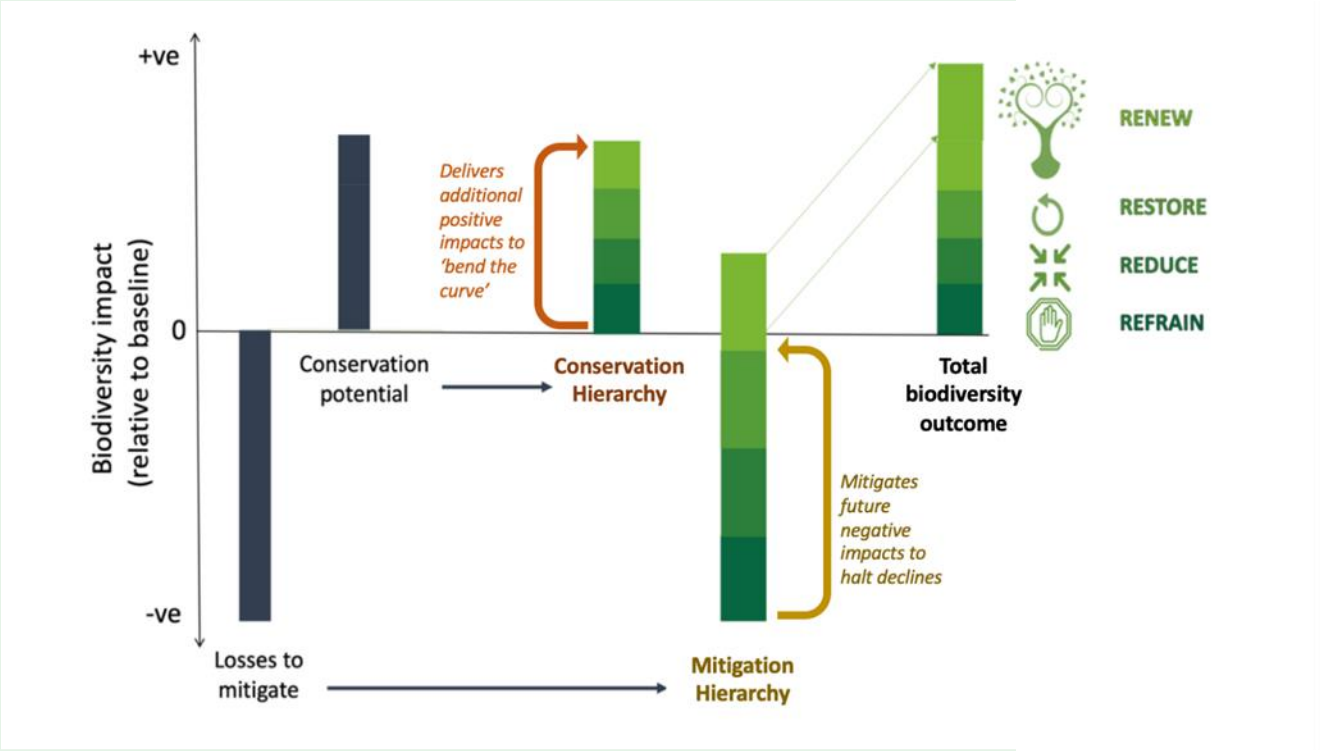

Figure 3: Mitigation and conservation hierarchy part 2. Source: Conservation Hierarchy, 2021.

3.2. Net positive

No Net Loss (NNL) means zero impact on biodiversity, while Net Positive is the situation where positive impacts exceed negative impacts, resulting in a biodiversity gain. In practice, the latter means that the biodiversity state of the post-intervention situation exceeds the biodiversity state in the baseline situation. The guidelines of the Biodiversity Metric refer to values that are also used in BREEAM (a widely used sustainability building standard), which distinguishes two levels of a positive biodiversity impact:

- Net biodiversity positive for the habitats assessed: restoration required of 105% - 109% of the value before.
- Significant biodiversity positive for the habitats assessed: restoration required of 110% or above of the value before.

Following an expert workshop, the decision was made by Eneco to set the ambition at 110% biodiversity net gain compared to the baseline at the start of a project..

3.3. Site selection

Early planning allows for impact avoidance through site selection, the most effective measure available to renewable energy developers. At an early stage, it is feasible to make changes to infrastructure siting and operational planning, with potential for large reductions in project risks and requirements for further mitigation or restoration. A key strategy to reduce project risks focuses on avoiding renewable energy projects to be situated in Key Biodiversity Areas (KBA) such as protected areas and areas that are important for meadow birds, and to prevent projects from having negative external effects on these areas. Eneco uses the "No, unless" principle for KBAs and any external effects on these areas. The "No, unless" principle means that assets will not be situated in these areas unless there is no reasonable alternative, and it can be demonstrated that there is no likelihood of any significant effect on the species and habitats for which the KBA has been established. This principle also applies in Natura2000 areas and NNN areas in The Netherlands, Natura 2000 areas and VEN areas in Flanders and similarly categorised areas in other countries. Important habitats and flight routes of vulnerable populations of birds and bats are also avoided (also see, Dutch only: https://www.iucn.nl/blog/natuur-en-landschapsrandvoorwaarden-bij-windenergie-op-land-een-voorstel/).

3.4. Ecological consultation

At the environmental impact analysis stage, how to first adhere to the mitigation hierarchy and any nature restoration measures for the given project must be based on the expertise of an ecologist. Ecological expertise is also essential for decisions regarding where and how to compensate for biodiversity loss in order to achieve the best results regarding positive effects on biodiversity and ensuring a 10% biodiversity gain.

Eneco is making efforts to prevent what is known as an 'ecological trap'. An ecological trap is spoken of when animals choose to settle in places with poor habitat quality, even though better or even good habitats exist in the same landscape. An ecological trap can occur, for example, when nature development near wind turbines leads to an increase in collisions among birds. When determining the type of new nature for nature development, its attractiveness is taken into account. The starting point is always to prevent additional casualties as a result of new nature development. In cases where there is a chance of an ecological trap, nature restoration will take place at an appropriate distance, the distance being species-dependent.

Decisions on net-positive biodiversity measures are made in consultation with an ecological expert or a team of relevant ecological experts. Eneco will work with in-house ecologists where possible. When the situation requires expertise or validation not available in-house or the situation is such that an independent assessment is required, Eneco will hire external expertise and apply independent third-party validation and verification.

3.5. Monitoring and managing progress

Compliance with the requirement of having a net positive impact on biodiversity can only be guaranteed by implementing a reliable monitoring and adaptive management approach which therefore needs to be included in the nature protection and restoration measures setup. Twenty to thirty years is a relevant time horizon to determine the effectiveness of biodiversity interventions and to see if the positive impact target has been met. It is advised to include species indicators in the monitoring approach to measure the site's biodiversity progress. Monitoring allows for adaptive management to ensure measures continue to have the intended effect. For a project to be considered to have a net positive impact on biodiversity, the confirmation of a 10% gain in biodiversity must be based on measurable results. For details on monitoring, see the Monitoring Plan (Arcadis 2023).

3.6. Project-specificity of nature restoration sites

As every project site is different, the variety of specific locations, species and stakeholders needs to be considered. This paragraph relates to nature restoration.

While the Biodiversity Metric groups habitat types and projects work with nature restoration packages, the specific type of habitat that needs to be restored can differ per location. The nature restoration packages per asset type in a landscape typology are the basis for the measures to be taken, but decisions on the exact measures per project must be taken in consultation with an ecologist. The measures are based on a landscape ecology approach, meaning that the starting point is the ecosystem in which the asset is placed.

Project-specific information needs to be gathered to determine project impacts and, in turn, the exact nature restoration measures to be applied, taking the following into consideration:

- The exact landscape type for the asset.
- The presence of rare and/or protected species.
- The specifications of the asset such as surface area and rotor diameter.
- The disturbance distance/encroachment factor, that needs to be appropriate for the species that occur within the asset's sphere of influence.

This information will help specify the nature restoration package in accordance with the location situation. The number of measures to be applied needs to be specified in accordance with the habitats that are present in and nearby the project area. In addition, measures should be as contiguous as possible to avoid fragmentation of different measures. Contiguous nature is by definition more resistant and often species-rich than fragmented nature. This allows for optimal enriching of the habitat for guiding species and the inclusion of additional population strengthening measures for vulnerable species. Project proponents are advised to work with government and local conservation organisations that have sufficient local knowledge and the

ability to set up and manage successful conservation projects that will serve as a nature restoration measure.

3.7. Asset lifetime in relation to nature restoration

The benefits of nature restoration measures must remain in place as long as the project continues to have an impact and require sustained management to ensure that the benefits continue over time. To achieve such continuity, it is recommended to ensure legal protection of restored areas and secure funding to manage the nature restoration for the asset's entire design life (construction phase, operational phase and decommissioning phase). Nature restoration design must also be integral to conservation planning and other land use planning in the project landscape. For each project, a management plan must be set up which ensures the development of biodiversity value and describes how to apply additional control measures when monitoring results show that progress towards the biodiversity goal is not in line with the intended timeline.

It is important to note that the Biodiversity Metric assumes that it may take up to 30 years for biodiversity to mature. This is reflected in the form of a minimal multiplier limit of x 0.320 to take account of temporal risk. This corresponds to a period of over 30 years, which is seen as the maximum realistic planning horizon for most projects. This is also why 20-30 years is a relevant time period for determining the effectiveness of biodiversity measures. Beyond this, the multiplier reduces very slowly. If the time for the habitat to reach the target condition of 10% biodiversity increase exceeds 30 years, the proposed interventions may not be the most appropriate.

Table 1: Multipliers for different time periods using a 3.5% discount rate. Source: Panks et al., 2022.

Time to target condition			
Time (years)	Multiplier	Time (years)	Multiplier
0	1.000	16	0.566
1	0.965	17	0.546
2	0.931	18	0.527
3	0.899	19	0.508
4	0.867	20	0.490
5	0.837	21	0.473
6	0.808	22	0.457
7	0.779	23	0.441
8	0.752	24	0.425
9	0.726	25	0.410
10	0.700	26	0.396
11	0.676	27	0.382
12	0.652	28	0.369
13	0.629	29	0.356
14	0.607	30	0.343
15	0.586	>30	0.320

3.7.1 Construction phase

Biodiversity loss may occur during the pre-construction phase due to activities such as land clearance or setting up meteorological equipment. The focus of the Biodiversity Metric is on the construction and operational phase, but pre-construction phase effects on biodiversity can be considered throughout the planning process. Many construction phase impacts are temporary and can be limited by implementing mitigating measures based on a biodiversity-quick scan for aspects of disturbance. Noise disturbance is included in the calculation of wind asset impacts as it is part of the disturbance distance and encroachment factors.

3.7.2 Operational phase

Due to its timespan, impacts of the operational phase are the most significant and the selection of biodiversity measures is focused on this phase of the asset's lifetime. It is also relevant to note that the effect of construction or operation on certain species can vary depending on the time of year and even the time of day.

3.7.3 Decommissioning phase

The International Union for Conservation of Nature (IUCN) and The Biodiversity Consultancy have published guidelines for project developers on mitigating biodiversity impacts associated with wind and solar energy development that include recommendations for this phase (IUCN and The Biodiversity Consultancy, 2021). Eneco takes these guidelines into consideration throughout the decommissioning phase.

3.7.4 Effects beyond asset lifetime

As the impacts of a project may exceed the asset's lifetime, it is advised to consider extending the effects of nature restoration measures beyond the decommissioning phase. In addition, while the basis for projects is that measures remain in place as long as impacts continue, extending the positive effects of nature restoration measures beyond this point would mean that restoration and conservation efforts have a lasting effect.

3.8. Ecological safeguarding in case of nature restoration

The method studies species based on their habitats. As habitats are part of a larger system, there are some important considerations to take into account when deciding on which biodiversity measures to take to ensure the safeguarding of these larger ecological systems.

3.8.1 Ecological values and functions

Ecological values and functions help underpin the success of interventions. Considering the composition, structure, and function of biodiversity in the ecosystem and the area immediately surrounding the planned asset when determining interventions can enhance the resilience of the ecosystem.

3.8.2 Habitat connectivity

This method acknowledges that habitat connectivity is an important factor in considering nature restoration measures. When possible and beneficial for biodiversity, knowledge of the habitats surrounding the project site as opposed to only the baseline habitat of the project site itself is necessary to ensure habitat connectivity. Habitat connectivity makes it possible for plants and animals to move between similar habitats. This ecological connectivity facilitates crucial ecological processes such as seed dispersal and leads to overall improved resilience (IUCN, 2020). Ecological corridors between the planned asset site and areas of ecological significance in the vicinity of this site are an example of a measure to be included in the set of nature restoration measures. Neglecting the integration of the project site into its surroundings could lead to fragmentation of habitats in the vicinity of the project site, including the obstruction of flight paths of bird and bat populations, and decreased resilience.

3.8.3 Ecosystem services

While ecosystem services are not within the scope of this methodology, it is important to note that project proponents should be aware of the ecosystem services that stem from the site's biodiversity. When changing the composition of biodiversity in each area, the types, quality and quantity of ecosystem services can be affected. Stakeholder consultation can help identify which ecosystem services are provided in the baseline scenario and how the surrounding community would be affected by changes. It is advised to take the ecosystem services that may be gained or lost into account when determining the nature restoration measures to be implemented. Ecosystem services can be investigated as part of Eneco's initial environmental management quick-scans in the planning phase.

3.9. Nature restoration

3.9.1 The like-for-like or better principle

Nature restoration packages are developed on a 'like-for-like or better' basis, meaning that the impacted area is replaced with similar habitat or better. This is in line with international guiding principles on

biodiversity-positive land-use changes. These 'in-kind' or 'like-for-like' nature restoration measures seek to generate benefits similar to the biodiversity value(s) impacted by the project. There is a strong body of opinion that like-for-like is the best starting point because it better ensures ecological equivalence, but that strict adherence to the principle of like-for-like is not feasible and that 'trading up' (or 'like-for-like or better') may sometimes be appropriate. There is some level of agreement that a 'graduated response' is most appropriate for trading up – e.g. trading up can be acceptable for impacts on biodiversity that has a lower conservation priority (e.g. more common or widespread species), but stricter 'like for like' is important for biodiversity that has a higher conservation priority (e.g. rare or restricted species). As stated in the base assumptions, Eneco's assets are not expected to be situated within biodiversity hotspots or high conservation priority areas. However, it is possible that rare or vulnerable species reside within the project area and this must therefore be carefully investigated and considered.

3.9.2 The out-of-kind principle

Sometimes, it may be desirable to implement measures that restore or conserve biodiversity of greater conservation value than that which is to be impacted by the project. For example, if a project impacts a very common natural habitat in the landscape, it may be desirable to 'trade up' to a measure that conserves a rarer and/or threatened habitat that has been identified as a priority for conservation. This is called an 'out-of-kind' nature restoration and should only be implemented after proper consultation with conservation stakeholders to ensure both its technical validity –the measure is genuinely of greater conservation value – and its public acceptance, i.e. stakeholders perceive the measures to have greater value. It is also important to consider whether the abiotic conditions (e.g. sunlight, precipitation, soil composition, salinity, etc.) necessary to achieve the intended habitat are present on the site where measures will be taken.

Out-of-kind nature restoration can help address local, regional or national conservation priorities and requires more additionality. 'Out-of-kind' nature restoration can be appropriate in some circumstances, particularly where the biodiversity affected is not especially vulnerable or irreplaceable, in which case it may be beneficial to allow the flexibility to 'trade up' to preserve the biodiversity of a higher conservation value than that affected. The more vulnerable and irreplaceable the affected biodiversity, the stricter the 'like-for-like' requirement should apply. It is also important to note that 'out-of-kind' nature restoration must not be applied to an unlimited extent. If off-site, the location of the 'out-of-kind' nature restoration must be selected in consultation with conservation stakeholders and separate biodiversity calculations must be conducted for the nature restoration site and be included in all monitoring and reporting. See table 2 for the habitat type trading rules outlined in the Biodiversity Metric.

Table 2: Habitat distinctiveness trading rules in the Biodiversity Metric. Source: Panks et al, 2022.

Baseline habitat distinctiveness	Distinctiveness of replacement habitat required by trading rules (N.B. applies to creation and enhancement)
Very high	Losses are not permitted within the metric (Principle 4 and Rule 3) Bespoke assessment and compensation required
High	Must be replaced with biodiversity units of the same habitat type (Rule 3)
Medium	Must be replaced with: Medium distinctiveness habitat from same broad habitat type OR Any habitat from a higher distinctiveness band (Principle 5)
Low	Must be replaced with: Same distinctiveness habitat OR Any habitat from a higher distinctiveness band (Principle 5)
Very low	Replacement not required (Are of little/no biodiversity value – zero biodiversity unit score)

3.9.3 Spatial principles

The Biodiversity Metric includes two spatial components, which are described in more detail in the Biodiversity Metric User Guide (Panks et al., 2022). The principles underlying these components are important to consider when deciding on on-site or off-site nature restoration and the exact location in which to implement biodiversity measures.

The first component is the strategic significance of the project site, which can be defined as the local significance of the habitat or its location. When the project site is determined to have strategic significance, it is advised to implement nature restoration on-site.

The second component is spatial risk, which reflects the relationship between locations where biodiversity loss will occur (on-site) and where habitat is being delivered (off-site). This is only relevant in situations where nature restoration will be implemented off-site. Off-site nature restoration can lead to both ecological and social risks like biodiversity depletion in local areas or a loss of ecosystem services provided to a local community. The Biodiversity Metric takes this into account in the form of a spatial risk multiplier. This essentially entails that the metric lowers the biodiversity score of the proposed nature restoration measures if they are off-site.

3.10. Minimum expected impacts in case of nature restoration

For some asset types or locations, the effect of the project on biodiversity is expected to be minimal. For example, solar assets on roofs tend to have negligible or no impact on biodiversity. As no impact would mean a 10% gain is no gain, this cannot be dealt with based on the Biodiversity Metric. Because of this, assets with negligible or no impact are considered to be out of scope of the biodiversity methodology.

4. Communication guidelines

Our guidelines on how we communicate:

- All communication, both internal and external, must be honest and substantiated.
- All reporting must be done in accordance with national and international sustainability reporting requirements.
- All communicated claims must be underpinned by best available scientific evidence and be based on the planning, monitoring and reporting (preliminary) of results of nature restoration measures throughout the project lifespan.
- We work with and support local communities and organisations to promote support for our growing range of energy sources. More detailed general guidelines on stakeholder participation and communication can be found in the publicly available national codes of conduct regarding onshore wind assets (NLVOW, 2014) and solar assets (Holland Solar, 2019).
- In our annual report, we report on the progress of our One Planet ambition. The annual report must include the results on the monitoring indicators and actions taken towards realising the biodiversity gain. It must also address the use of adaptive management when it is observed that biodiversity is not developing according to plan.
- On our website, we report on the progress of biodiversity impact per project within the scope. The monitoring indicators include the condition of the habitat (and whether the condition at the moment of observation is in accordance with the expectations about nature restoration) and the size of the area measured in hectares. The frequency with which indicators are measured and the measurement period depend on the type of habitat. The frequency of monitoring must therefore be decided per project.
- Based on monitoring results, adjustments of management or design measures to achieve 10% biodiversity positive will always be considered. Any adjustments made will be communicated. For these projects it is of particular importance that the progress and results are properly communicated in order to be able to prove that the claim of being biodiversity net-positive is actually achieved.
- Monitoring must be done by an ecologist (or team of ecologists). When the situation requires expertise not available in house or the situation is such that an independent assessment is required, Eneco will hire external expertise and apply independent third-party validation and verification.

Further details on the indicators, methods and guidelines on how to develop a project-specific monitoring plan can be found in the Monitoring Plan (Arcadis 2023).

5. References

Arcadis (2023). Biodiversity monitoring plan Eneco.

Bennun, L., van Bochove, J., Ng, C., Fletcher, C., Wilson, D., Phair, N., Carbone, G. (2021). Mitigating biodiversity impacts associated with solar and wind energy development. Guidelines for project developers. Gland, Switzerland: IUCN and Cambridge, UK: The Biodiversity Consultancy.

Business and Biodiversity Offsets Programme (BBOP) (2012). Biodiversity Offset Design Handbook-Updated. BBOP, Washington, D.C.

Conservation Hierarchy (2021). What is the Mitigation & Conservation Hierarchy? (2021, January 20). https://conservationhierarchy.org/what-is-conservation-hierarchy/

Eneco (2022). One Planet Plan: Living withing the boundaries of the planet. https://www.eneco.com/wat-we-doen/One-Planet-Plan/

Hilty, J.*, Worboys, G.L., Keeley, A.*, Woodley, S.*, Lausche, B., Locke, H., Carr, M., Pulsford I., Pittock, J., White, J.W., Theobald, D.M., Levine, J., Reuling, M., Watson, J.E.M., Ament, R., and Tabor, G.M.* (2020). Guidelines for conserving connectivity through ecological networks and corridors. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN.

Holland Solar (2019). Gedragscode zon op land. https://hollandsolar.nl/gedragscodes/gedragscode-zon-op-land

IUCN (2021). Biodiversity offsets. https://www.iucn.org/resources/issues-brief/biodiversity-offsets

IUCN NL (2023). Natuur- en landschapsvoorwaarden bij plaatsing windenergie op land: een voorstel.

International Finance Corporation. (2012). Biodiversity Conservation and Sustainable Management of Living Natural Resources [IFC Guidance Note 6]. https://www.ifc.org/wps/wcm/connect/5e0f3c0c-0aa4-4290-a0f8-4490b61de245/GN6_English_June-27-2019.pdf?MOD=AJPERES&CVID=oe06jKf

IPBES (2021). Core Glossary. https://ipbes.net/glossary

IPBES (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. https://doi.org/10.5281/zenodo.3831673

IPBES (2018). The IPBES assessment report on land degradation and restoration. Montanarella, L., Scholes, R., and Brainich, A. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany. 744 pages. https://doi.org/10.5281/zenodo.3237392

NLVOW (2014). Gedragscode windenergie op land 'samen naar duurzaam. https://www.nlvow.nl/system/files/article-files/2019-10/gedragscode-versie-1.1-28-oktober.pdf

Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russel, T., Cashon, C., Goddard, F., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B., and Stone, D., (2022). *Biodiversity Metric 3.1: Auditing and accounting for biodiversity – User Guide*. Natural England. The Biodiversity Metric 3.1 - JP039 (nepubprod.appspot.com)

Social and Economic Council (SER) (2023). *International Responsible Business Conduct Agreement for the Renewable Energy Sector.* https://www.imvoconvenanten.nl/nl/hernieuwbare-energie/over-het-convenant/-/media/AE83C4728BB8431EAD7130BEFD69C0E1.ashx

Glossary

Asset	The object of the project, e.g. wind turbines, floating or regular solar panels, heat installations, large scale batteries, geothermal heat stations, bio-gasification plants. This does not include renewable energy sources that have no or negligible impact on biodiversity such as heat pumps and electric boilers installed in existing buildings and solar panels installed on existing roofs.
Area of influence	The area affected by the development and operation of an asset in terms of biodiversity loss. For these assets, the focus is on the impact driver responsible for most of the biodiversity loss at the location of the asset, which is land use change (including habitat removal, habitat degradation and fragmentation). For solar assets, the surface area of the project site is equal the area of influence in terms of biodiversity. For wind assets, the footprint of the wind turbine and associated buildings, the rotor diameter, and the disturbance distance for species outside the rotor diameter need to be considered.
Baseline	A minimum or starting point with which to compare other information (e.g. for comparisons between past and present or before and after an intervention). In this context, the starting point from which to determine a biodiversity increase of 10%.
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variation in genetic, phenotypic, phylogenetic, and functional attributes, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [IPBES], 2019).
Biodiversity Code of Conduct	The present Eneco Biodiversity Code of Conduct dated December 2023
Biodiversity hotspot	A generic term for an area high in such biodiversity attributes as species richness or endemism. It may also be used in assessments as a precise term applied to geographic areas defined according to two criteria (Myers et al 2000): (i) containing at least 1,500 species of the world's 300,000 vascular plant species as endemics; and (ii) having lost 70% of its primary vegetation (IPBES, 2019).
Biodiversity No Net Loss	Situation in which the impacts on biodiversity caused by a project (or plan or programme) are balanced by measures taken to avoid and minimise the project's (or plan's or programme's) impacts, to undertake on-site restoration and finally to compensate or restore the residual impacts, so that no loss remains.

Biodiversity (Net) Positive or Biodiversity Net Gain	Situation in which the impacts on biodiversity caused by a project (or plan or programme) are outweighed by measures taken to avoid and minimise the project's, plan's, or programme's impacts, to undertake on-site restoration and finally to compensate or restore the residual impacts so that the gain exceeds the loss. For Eneco's projects to be biodiversity net positive, there must be at least a 10% gain in biodiversity. See the Monitoring Plan for details on the expected timeline of restoration of different habitats.
Biodiversity offsets	Measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimisation, and restoration measures have been taken (International Finance Corporation [IFC], 2012). In the context of No Net Loss or biodiversity positive ambitions, offsets are also applied as a last resort, for example as part of the mitigation hierarchy. They cover any residual adverse biodiversity impact (not only the significant impacts) in order to achieve a positive balance, i.e. more biodiversity gains than biodiversity.
Conservation hierarchy	The order in which nature conservation actions must be taken. The conservation hierarchy addresses past, indirect and diffuse impacts on nature. The conservation hierarchy describes how to refrain from causing negative impact, for example by protecting habitats. If this is not possible, impact must be reduced by means of proactive protection and regulation of resource extraction. If this is not possible, the area must be restored and ultimately renewed, for example by proactively creating ecosystems, such as artificial reefs and green cities (Conservation Hierarchy, 2021).
Discount rate	Rate used to compare benefits and costs over time. Used to express future costs or benefits at today's equivalent value.
Ecologist or ecological expert	A person who has demonstrable experience in and knowledge on habitat- and/or species-specific ecology corresponding to the situation and species for which they are approached. This person must meet or exceed the following experience and knowledge requirements (additional requirements may apply for other countries than the Netherlands): • a degree with ecology as the focal point; • and/or working as a recognised ecological expert; • and/or demonstrably being dedicated to the field of nature conservation and affiliated with or working for a recognised conservation organisation.
Ecosystem services	Services that are provided by an ecosystem as an intrinsic property of its functionality, or the benefits that people obtain from ecosystems. In the Millennium Ecosystem Assessment, ecosystem services can be divided into provisioning services, such as food and water, regulating services such as flood and disease control, cultural services such as spiritual, recreational and cultural benefits, and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth (IPBES, 2021).
External effect	Term used to describe negative external effects on the environment.
Habitat	The place or type of site where an organism or population naturally occurs. Also used to refer to the environmental attributes required by a particular species or its ecological niche. (IPBES, 2021)

Habitat connectivity	The degree to which the landscape facilitates the movement of organisms (animals, plant reproductive structures, pollen, pollinators, spores, etc.) and other environmentally important resources (e.g., nutrients and moisture) between similar habitats. Connectivity is hampered by fragmentation (IPBES, 2019).
Habitat fragmentation	A general term describing the set of processes by which habitat loss results in the division of continuous habitats into a greater number of smaller patches of lesser total and isolated from each other by a matrix of dissimilar habitats (IPBES, 2018).
IRBC agreement	International Responsible Business Conduct Agreement for the Renewable Energy Sector
Key Biodiversity Areas (KBA)	Sites contributing significantly to the global persistence of biodiversity in terrestrial, freshwater and marine ecosystems. The Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016) sets out globally agreed criteria for the identification of KBAs worldwide. (IUCN: Key Biodiversity Areas | IUCN)
Monitoring Plan	het *Biodiversity monitoring plan Eneco* from Arcadis (2023).
Mitigation hierarchy	The sequence of actions to anticipate and avoid impacts on biodiversity and ecosystem services; and where avoidance is not possible, minimise; and when impacts occur, rehabilitate, and restore; and where significant residual impacts remain, offset. (CDP, CSBI, 2015)
Mitigation measures	Measures to avoid or reduce the likely significant effects on biodiversity.
Nature restoration	The restoration of nature by facilitating the recovery of an ecosystem and its habitats and species that have been degraded, damaged, or destroyed.
Negative impacts	Impacts that affect biodiversity in a negative way.
Positive impacts	Actively creating or restoring biodiversity (going beyond reducing negative impacts).
Project site	The surface area of the location where the project will take place. This can be calculated based on capacity. For solar assets, this is approximately 1 MW = 1 hectare. For wind assets, this is approximately the rotor diameter * 3,5 = 1 hectare.
Species	An interbreeding group of organisms that is reproductively isolated from all other organisms, although there are many partial exceptions to this rule in particular taxa. Operationally, the term species is a generally agreed fundamental taxonomic unit, based on morphological or genetic similarity, that once described and accepted is associated with a unique scientific name (IPBES, 2021).
Stakeholders	Any individuals, groups or organisations who affect, or could be affected (whether positively or negatively) by a particular project and its associated policies, decisions, and actions (IPBES, 2021).