

Nature Credit Markets – Case Finland

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Vision

**The world's best-performing nature credit markets
– mobilising impactful investments to improve the state of nature**





Three main objectives



1. **ECOLOGICAL EFFECTIVENESS:** Nature credit markets prevent biodiversity loss and improve the state of nature.



2. **MARKET FUNCTIONING:** Nature credit markets function smoothly and reliably, and become part of biodiversity action.



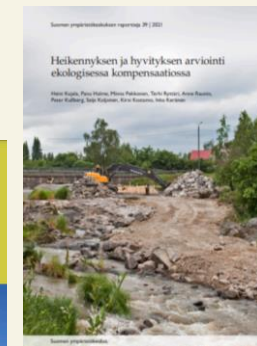
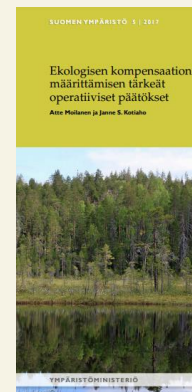
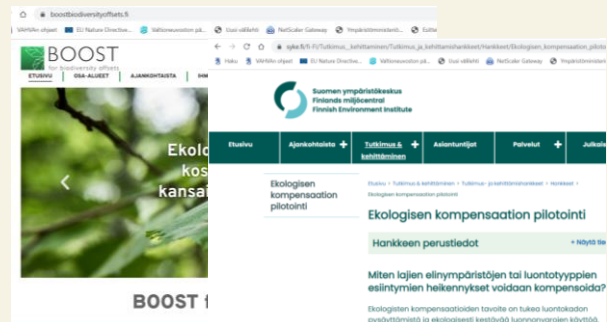
3. **GOVERNANCE AND LEGISLATION:** Legislation and governance concerning nature credit markets is actively developed, and policy measures remain coherent.

ECOLOGICAL EFFECTIVENESS



Nature Conservation Legislation: Offsets

- Drafting of legislation was supported by an expert group of ~100 ecologists
what, where and when criteria to achieve **no net loss**
- Chapter 11 in the Nature Conservation Act (9/2023) contains rules for certification & offsetting
- Metrics in the Decree of the Ministry of the Environment on Voluntary Ecological Compensation (933/2023).

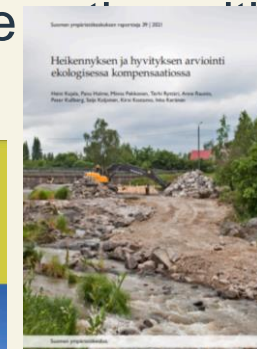
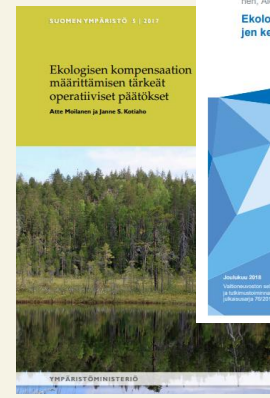
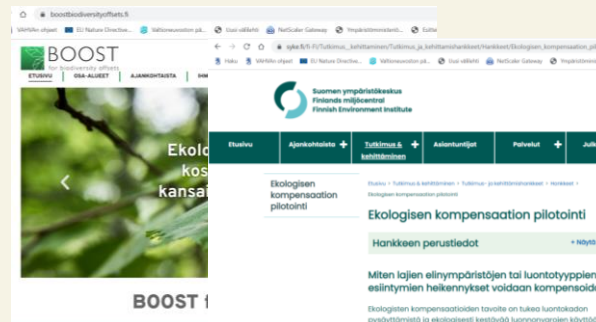


Nature Conservation Legislation: from offsets to biodiversity markets

Legislation consists of

- a) certified generation of (additional) nature values (*nature value hectares* = national nature credit unit)
- b) rules for both offsetting the degradation of natural values and nature positive certified *nature credits*.

Numerous preceding studies & ongoing research.



External Evaluation of Finnish Model

Dr. Sophus zu Ermgassen (University of Oxford) evaluated in 2026 the Finnish voluntary offset legislation.

Conclusions

- The Finnish voluntary offset model is exceptionally strong in international comparison
- Particular strengths include: Additionality, Permanence, Public authority verification, Open register
- Gives a credible base for expanding into nature credit markets.



FUNCTIONING MARKETS

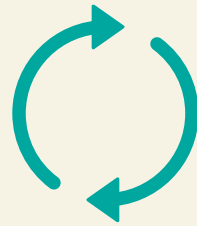
What are the buildings blocks of Nature Credit Markets?

Nature credit

... a unit that represents a nature-positive outcome, derived from a certified and independently verified action and quantified using a recognised biodiversity metric or indicator - COM(2025) 374 final: Roadmap towards Nature Credits



Vendors



Intermediaries, Platforms



Buyers



Objectives of Finnish NC Roadmap 2035: Markets

1. Markets are transparent, easy to use and scalable
2. Market practices, services, market information and actors' expertise are sufficient
3. Opportunities offered by nature credits market are well communicated to grow the market
4. Companies, municipalities, the wider public sector, foundations, landowners and other actors participate widely.



Impacts for Companies

- A way to demonstrate nature responsibility credibly and measurably
- Improved protection against greenwashing claims
- No new mandatory regulation – clear rules of the game for voluntary actors.





Impacts for land owners

- New income opportunity
- Participation on a voluntary basis.

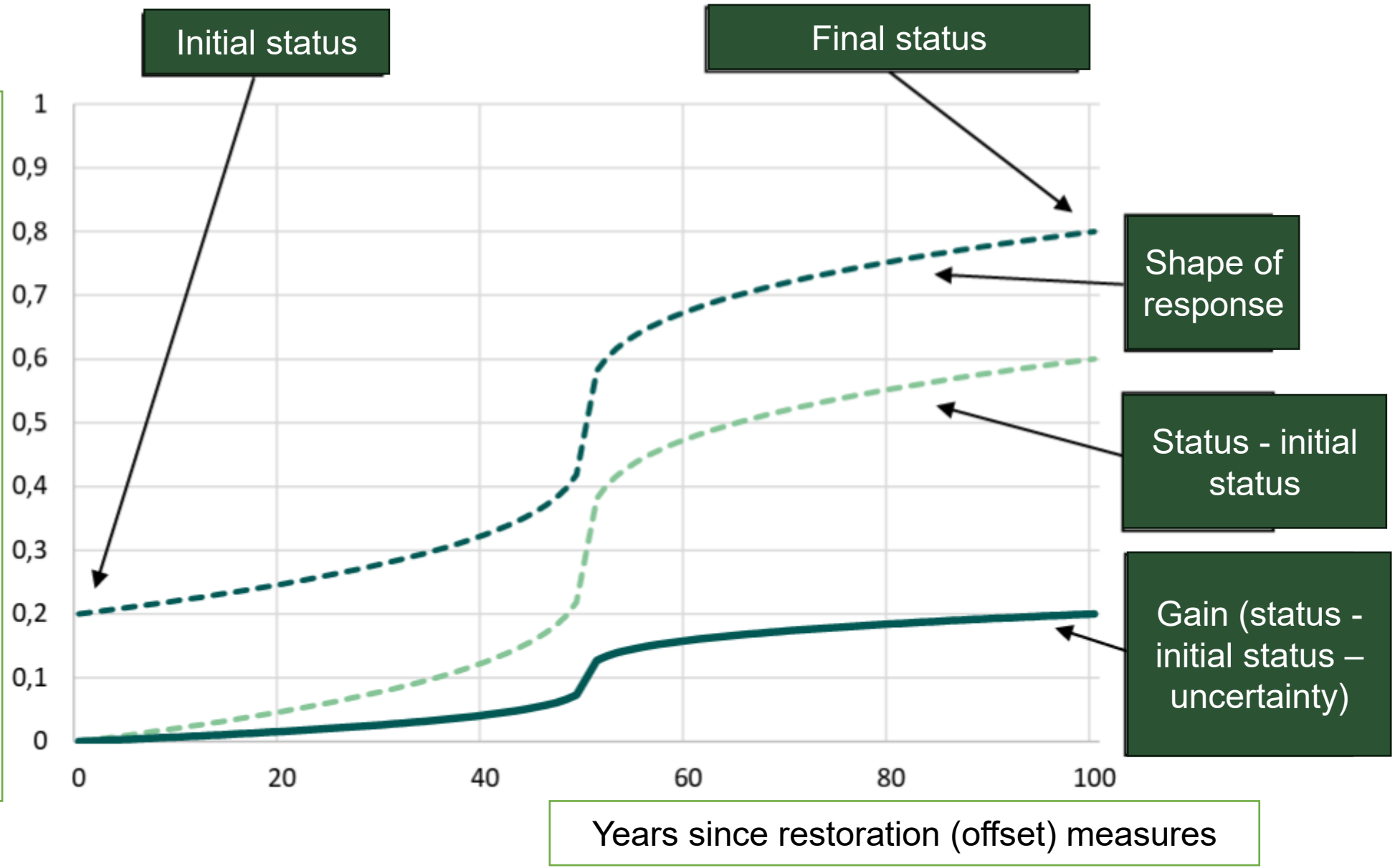




Ympäristöministeriö
Miljöministeriet
Ministry of the Environment



Ecological status / gain (increase)



GOVERNANCE AND LEGISLATION

A close-up photograph of moss plants. The foreground is filled with a dense carpet of bright green moss. Several upright, thin, reddish-brown stems rise from the moss. Two of these stems are in sharp focus, each bearing a single, elongated, yellowish-green capsule (the sporophyte) at its tip. The background is softly blurred, showing more moss and stems, creating a sense of depth.

Resolving Pre-Existing Challenges

Identified challenge	How addressed
Activities are not implemented (offset)	Fundamental measures or conservation has to precede deterioration. Separation of the roles of generator of nature values and party causing degradation.
Result is not permanent	Permanent prohibition on destruction and deterioration of the nature values of the site once used as offset / nature positive action.
Lack of additionality, Double counting	Same action cannot be obligatory under legislation or other obligation.
License to trash, Greenwashing	Verification by public authority, open access register.
Low willingness to invest in production of nature values	Pilots, initial burden sharing. Introduction of intermediaries.



Moving forward

- ✓ Ensure that national nature credits market are compatible with EU-level and global developments.
- ✓ Safeguard public resources for market oversight, verification and monitoring.
- ✓ Develop policy instruments for scaling up the market, such as tax incentives or mandatory ecological compensation.
- ✓ Develop and evaluate nature management methods that can be used to improve the state of nature effectively on agricultural and forestry land under productive use.
- ✓ Monitor the impacts of the activities on sectors using natural resources.



Additionality

- Only such measures generate nature values that are **not** required by legislation, agreement or other, e.g. certification
- Offset measures = restoration towards the natural state or a desired state in terms of biodiversity / increase of the surface area of the habitat or in the ecological quality of the habitat
- Conservation offset = maintains or improves the natural state or the desired state in terms of biodiversity by preventing activity causing the deterioration of the natural state **and produces a better ecological outcome than offset measures**
 - only passive restoration response accepted currently (until a scientifically sound assessment method for avoided loss for each potential habitat type is presented).



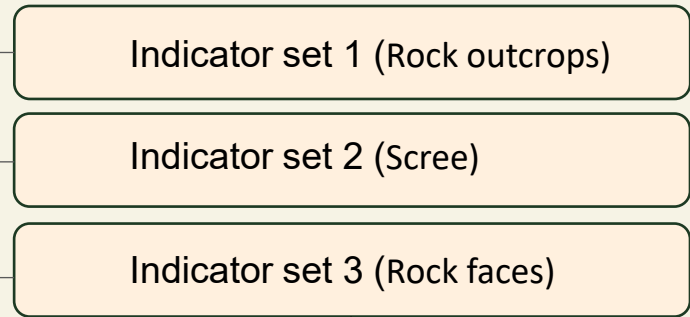
Metrics

- **Nature value hectare** = quantity (area) x quality (status of the nature value = habitat / habitat of species)
- **Status of the nature value** = ten-step scale from 0 (= a site that has lost its natural state) to 1 (= a site that is in its natural state or a comparable state) based on the assessment of the indicators for each habitat type group
 - Listed in the Ministerial Decree on Ecological Compensation Annex 1; Detailed guidance by the SYKE financed by MoE and the BOOST research group financed by the Finnish Academy
- **Increase in nature value hectares** = Quantity (area) x quality (increase of the status due to restoration / passive restoration 0-1) already accrued + average cumulative gain in the next 30 years
- **Response to offset measures** = "best available scientific information" of the maximum improvement / duration / (un)certainty of tested restoration measures for all habitats (available <https://boostbiodiversityoffsets.fi/tyokalut/> in Finnish)
- **Response to conservation** = Passive restoration response accepted currently (until a scientifically sound assessment method for avoided loss for each potential habitat type is presented)



Habitat Specific Indicators

- Habitat types are divided into 8 main groups (Red List of Habitat Types 2018)
- Each main group has 2 to 5 subgroups of habitat types
- Each subgroup has an **indicator set**, consists of 2–8 indicators
- For each meter, a **condition class** will be assessed = value 0,1...1,0
- Short verbal description** given for 2 to 5 condition classes
- Additional instructions given in an **interpretation guide**.



Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5
Edustava kasvillisuus, Luontotyypille, maantieteelliselle alueelle, paikallisuosuhteille ja
Kasvillisuuden edustavuus jonkin verran heikentynyt.
...
...
Ei edustava kasvillisuus, Lajisto hyvin muuttunut

Interpretation guide

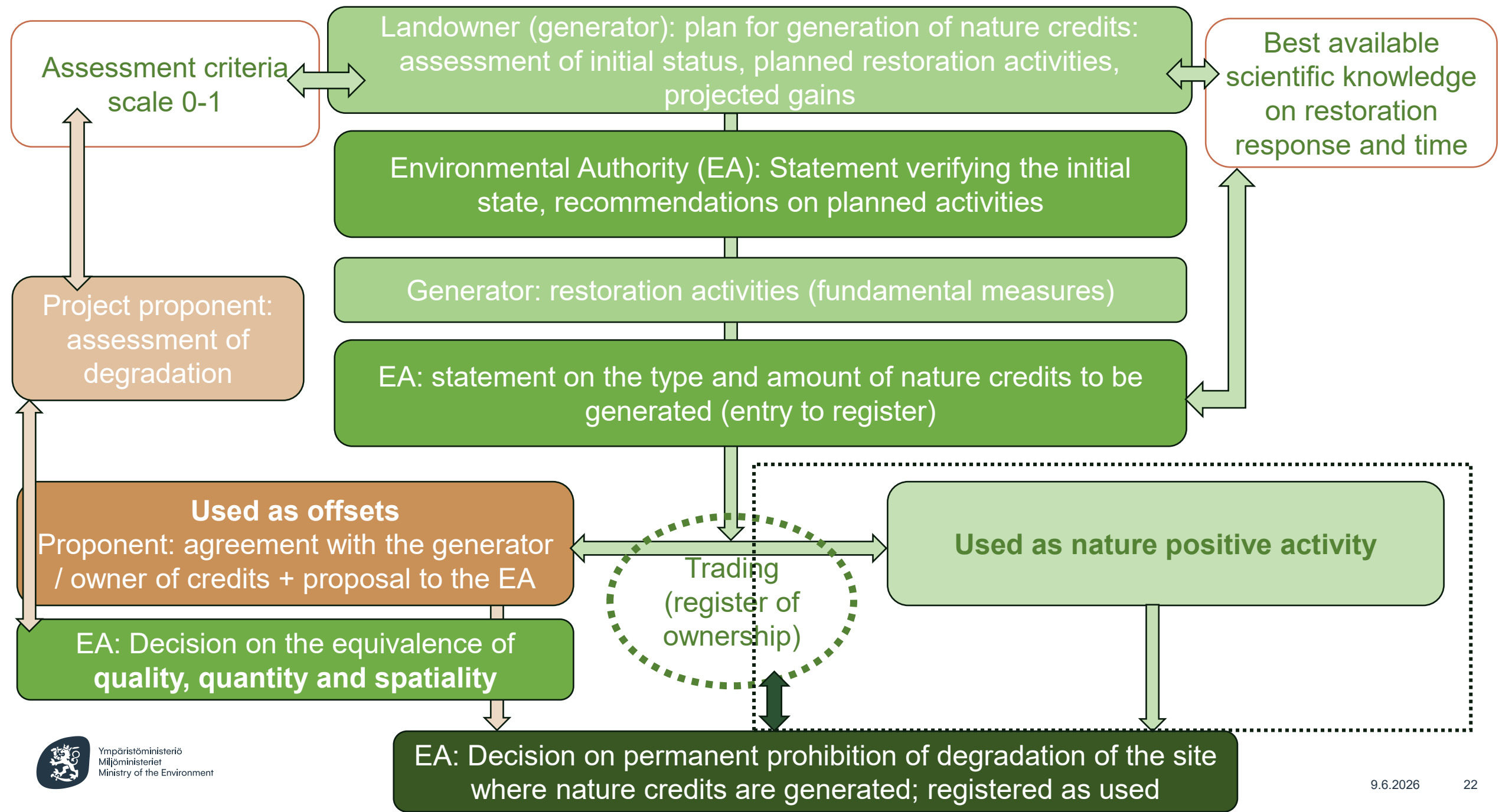
4.2.1.6. Lähimyrskön tilaan vaikuttava ilmastomuutos
 Mittattuna arvioidaan lähimyrskön rantavyöhykkeen ja viittimien lähiseuran muuttuneisuutta ilmastomuutos vuoksi. Lähimyrsköstä tarkoitetaan aluetta, joka vaikuttaa lähimyrskön merialueeseen (esim. suojaava puustot) ja lähimyrskövyöhykkeeseen laajassa vaikeassa tapauksissa: esimerkiksi ympäröivien luontotyyppien (esim. metsä, niemi, niitty) ja pinnoitusmuotojen perusteella. Lisäksi rantavyöhyke vaikuttaa veden laatuun esim. kiintoainetta sisältämällä. Kasvivyöhykkeellä kertyvä kirkas ja lämpövesivesi voi myös olla tärkeä lähimyrskövyöhykkeen elinympäristö. Lähimyrskön ranta- ja lähimyrsköstä heikentävät tekijät ovat mm. metsätalous (hakkuut, ojitukset, auraukset tai aisty), metsätalouden sivutuotteita (tallaus, rakentaminen, maan- ja metsäalustien osto, jätteenkäsitys ja kierrätys) ja niiden aiheuttama hulevesi. Ilmastovaihtelut voivat heikentää luontotyyppien rakentumista, toimintaa ja/tai laatuun. Tästä yhteydestä tulee luontotyyppiä määrittäviksi tekijöiksi ja ne vaikuttavat voimakkaasti. Ilmastovaihtelu arvioidaan sellaisena kuin se kohteella näyttäytyy karttohuhtelilla. Kohteen tulevaisuutta ei tarvita päähästä sen sijaan, tällöin saadaan kohteen tulevaisuuden/yläluokan ennustaminen ja kuluu ilmastotietojen toimesta. Ennalitsemistä tai luontotyyppiä johtava ilmastomuutos ilmiöt eivät olekaan mittareita tilaluokkaa.

- Ennenmääritetty tilaluokassa (1,0)** ranta- ja lähimyrsköstä on luontotyyppien tai sen kahden ja lähimyrskön olemassa olemassa. Lähimyrsköstä ei ole rakentamatta tai kulumista (voi olla korkeintaan yksittäisiä kappaleita polkuihin) eikä maata ole muokattu. Ei metsätalouden uria. Mitä lähimyrsköstä on talousmäärä, on metsätaloutta ja kuluu pöytä, ja puuston voimakkaasti tai sen ylläpidetty.
- Hyvässä tilaluokassa (0,7)** ranta- ja lähimyrsköstä on vähäinen muokattu, ja lähimyrskön olemassa on korkeintaan vähäinen muokattu. Mitä lähimyrsköstä on talousmäärä, on puuston vähintään vaurioitunut ja puuston voimakkaasti kulumista on kuluu jonkin verran aika.
- Kuhaluokassa (0,5)** ranta- ja lähimyrsköstä on selvästi muokattu ja merialue muuttunut. Voi olla jonkin verran kulumista, vähäistä määrin metsätyyppiä. Mitä lähimyrsköstä on talousmäärä, on puuston vähintään muuta.

(Ahola 2025)

Example: Forest indicators set 1 (heath forests)

	Age class	Stand structural characteristics	Amount and quality of dead wood	Vegetation representativeness	Number of large trees	Invasive alien species	Other human influence
1.0 (excellent)	Old-growth forest, or natural young succession stage	All naturally occurring characteristics of the tree stand are present	Natural amount of dead wood and all natural characteristics of dead wood are present	Representative vegetation. Species composition and structure are natural and representative to the region and succession stage	Natural amount of large trees, considering the region and succession stage	No invasive alien plant species	No or very weak signs of human activity (e.g. single trails)
0.9							
0.8							
0.7 (good)	Harvest age reached	At least three naturally occurring characteristics	At least moderate amount of natural dead wood, and two characteristics	Slightly decreased representativeness. The natural species composition is present but not totally natural	Somewhat less large trees than natural		Minor human activity (e.g. minor ditches)
0.6							
0.5 (moderate)	Young or mid-aged managed fores	Two characteristics	Small amount of natural / moderate amount of human-made dead wood	Clearly decreased representativeness. Clear changes in species composition and structure, but some typical species present	Individual large trees	Individual invasive alien plant species	Moderate human activity (e.g. erosion of forest vegetation, trash, ditches)
0.4							
0.3 (poor)	Sapling stage	One characteristic	Only individual dead trees, no natural characteristics			Invasive alien species occur commonly	
0.2							
0.1 (very poor)	Clearcut	No natural characteristics, or a monoculture of alien tree species	No dead wood	Not at all representative. Species composition severely altered, almost no typical species	No large trees	Area largely occupied by invasive species	Heavy human activity (e.g. largely eroded vegetation, heavy ditching or plowing)
0.0	(not a habitat type)						



Thank you
Additional information:
<https://ym.fi/en/ecological-compensation>

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