

MIPC

1st Round Proposal

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The BWF Asset Management Strategy was designed to deliver long-term returns while supporting Finland's carbon-neutral ambitions. However, the nation's timber industry—central to its economy—often conflicts with these goals, and ongoing deforestation has accelerated biodiversity loss. Addressing these challenges requires a balanced approach that integrates environmental restoration with economic sustainability.

The revised strategy seeks to achieve carbon neutrality through biodiversity, not despite it. BWF will invest in native forest restoration and reforestation projects that enhance long-term carbon capture and ecosystem health, generating returns through land value appreciation and future sustainable timber revenues.

To balance environmental and economic priorities, the fund will back companies and innovations that raise the value per unit of wood, enabling reduced harvest volumes without sacrificing profitability. While increasing domestic exposure to Finland's forests, BWF will maintain diversification through international equities and green infrastructure to manage risk.

The fund will also scale biodiversity-focused projects with lower immediate returns, offsetting them through strong performance in ESG-aligned equities, and will promote sustainable trade partnerships, advocating EU preferences for conservation-certified Finnish timber.

The \$10 billion portfolio allocates 50% to global ESG equities, 20% to forestry and land holdings, 15% to green infrastructure, 10% to green bonds, and 5% to cash. This balanced strategy positions BWF as a global model for nature-positive finance, demonstrating that economic prosperity, carbon neutrality, and biodiversity enhancement can reinforce—rather than compete with—one another.

Mandate Reframing

Finland's forests, which cover over 75% of the country's land area, have long served as both an ecological foundation and an economic engine. However, in 2021 these forests shifted from being a net carbon sink to a net carbon source, driven by intensive harvesting and peatland degradation. This reversal jeopardizes Finland's legally binding 2035 net-zero emissions target and threatens the economic stability of a sector responsible for nearly 4% of national GDP and 18% of exports.

The Borealis Wealth Fund (BWF), with €10 billion in assets under management and a recurring inflow of approximately €1 billion per year from forestry-linked tax revenues, has been tasked with realigning the country's natural capital strategy. Initially launched as a broad green investment vehicle, BWF must now address a dual mandate: to generate long-term, risk-adjusted returns while restoring the ecological resilience that underpins Finland's bioeconomy. This represents not merely a portfolio adjustment, but a systemic reframing of how national wealth and nature interact.

We propose repositioning BWF as Finland's **Natural Capital Sovereign Fund**—a platform that treats biodiversity as a core economic asset. Under this model, BWF channels forestry-derived revenues into investments that enhance ecosystem health, stabilize carbon sinks, and de-risk Finland's export base from future EU biodiversity and land-use regulations. The Fund's objective is to deliver sustainable financial returns (targeting 5–6% per annum) while achieving measurable biodiversity outcomes, including the restoration of over 200,000 hectares of degraded forest and peatland by 2035.

This reframing rests on a clear investment philosophy:

Biodiversity enhances asset durability and long-term value creation by improving ecosystem productivity, regulatory resilience, and social license to operate. Protecting nature is not a constraint on returns—it is a catalyst for enduring value.

BWF's redefined investment approach will be guided by three principles:

- 1. Integration:** Embed biodiversity risk and opportunity into every investment decision using frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD) and the EU Biodiversity Strategy for 2030.
- 2. Additionality:** Allocate at least 30% of annual new capital inflows to projects that deliver measurable ecological benefits—such as habitat restoration, peatland recovery, and native species protection—that exceed baseline market activity.
- 3. Resilience:** Diversify across asset classes and geographies to reduce overexposure to Finland's forestry cycle, ensuring long-term capital preservation and compliance with evolving EU nature restoration laws.

Through this mandate, BWF evolves from a conventional green finance fund into a global model for biodiversity-aligned sovereign investment. By quantifying and monetizing the value of natural capital, BWF will enable Finland to transform ecological preservation into a sustainable source of fiscal strength and international leadership.

Diagnostic: Legacy Portfolio & Gaps

Where We Are

Borealis Wealth Fund (BWF) manages **€10B** and has delivered an average **6.5%** annual return since launch. The legacy portfolio is diversified across public markets, fixed income, and real assets, but ESG screening has not explicitly targeted biodiversity outcomes.

Asset Class	Share of AUM (%)	Role Today	Biodiversity Link
Public Equities (ESG-screened)	~40	Growth & liquidity	Indirect / weak
Green Bonds & Thematic Credit	~15	Income & duration	Mixed / label-driven
Green Infrastructure (wind/solar/transit)	~20	Inflation hedge, stable cash	Indirect (climate-first)
Forestry & Land Holdings	~15	Real-asset beta	Direct, but unmanaged
Cash & Liquidity	~10	Dry powder	None

Table 1: Legacy portfolio overview by strategic sleeve (percent shares inferred from case totals).

Geography: ~55% Finland, 30% EU ex-Finland, 10% North America, 5% EM.

What Works

- **Solid core beta:** Low-cost public equity exposure and green infrastructure provide diversified return drivers and partial inflation protection.
- **Policy alignment (climate):** Green infrastructure and thematic credit align with climate transition risks and EU taxonomy to a degree.
- **Liquidity balance:** A meaningful liquid sleeve (equities, credit, cash) supports rebalancing and new program launches.

Binding Constraints (Context)

- **2035 net-zero pathway:** Finland's forests flipped from a carbon sink to a source (2021), compressing the national carbon budget and elevating land-use scrutiny.
- **EU nature regulation:** The EU Biodiversity Strategy & Nature Restoration Law increase the risk of stranded or down-classified forestry assets without measurable biodiversity outcomes.
- **Trade & competitiveness:** Export partners increasingly demand traceable, biodiversity-positive supply chains; volume-only growth is fragile.

Identified Gaps

1. **ESG \neq Biodiversity:** Current ESG screens do not capture habitat integrity, species abundance, deadwood density, or landscape connectivity. Result: *impact dilution*.
2. **Unpriced Nature Risk:** Valuation models omit biodiversity loss channels (soil health, pest risk, water regulation) and *regulatory repricing*. Result: *beta drag & stranded-asset risk*.
3. **Concentration Risk (Domestic Forestry):** Large home bias to Finland's forestry cycle without explicit biodiversity management. Result: *correlated downside under policy or ecological shocks*.
4. **Impact Additionality & Traceability:** The portfolio lacks auditable, decision-useful nature KPIs (e.g., hectares restored, species richness, peatland water-table recovery). Result: *weak accountability*.

5. **Liquidity Mismatch:** Real-asset sleeves (forestry, infrastructure) are illiquid relative to mandate agility; no dedicated *impact working capital* to fund restoration ramps. Result: *slow pivot*.
6. **Revenue–Nature Feedback Loop Missing:** Forestry-linked inflows are not programmatically recycled into biodiversity restoration at scale. Result: *mission drift*.

Risk Map (Now)

Risk	Mechanism	Current Exposure
Regulatory / Policy	Tightening EU nature rules; taxonomy eligibility; disclosure mandates	High (forestry, land)
Physical / Ecological	Carbon sink reversal; species decline; soil/water degradation	Medium–High (domestic)
Market / Reputation	Buyer standards for biodiversity; risk of greenwashing claims	Medium (public equities, bonds)
Liquidity / Funding	Illiquid real assets vs. need for rapid reallocation to restoration	Medium
Concentration / Home Bias	Finland forestry cycle, export cyclicality	High

Table 2: Principal risk channels and qualitative exposure assessment.

Root Cause Synthesis

- Portfolio construction optimized for *climate mitigation labels*, not *biodiversity outcomes*.
- Absence of a **biodiversity-adjusted return** lens limits capital rotation toward nature-positive assets.
- Governance and data pipelines do not yet support *TNFD-aligned* measurement or auditability.

Strategic Need (So What)

Shift from green finance to natural capital finance. Embed biodiversity as a priced risk factor and investable outcome, rebalancing toward assets with measurable ecological restoration while preserving the Fund’s long-run 5–6% return target.

Implications for Strategy (Bridge to Next Section)

- Establish a *Biodiversity Investment Loop* (Screen → Select → Transform → Report) with TNFD-aligned KPIs.
- Introduce a **Biodiversity-Adjusted Return (BAR)** framework to evaluate all assets.
- Carve out liquid *transition capital* to accelerate peatland/old-growth restoration and biodiversity-linked instruments.
- Reduce home-bias risk via diversified natural capital allocations (geography, instruments), maintaining mission-critical domestic programs.

1 Portfolio Allocation

1.1 ESG focused equities

We propose allocating 50% of the portfolio to ESG-focused global equities. This represents an increase compared to the legacy allocation and serves to balance lower-yield, sustainability-driven investments in forestry and land. The structure and philosophy of this equity allocation will mirror that of the Norwegian Government Pension Fund Global (GPFGB)—commonly

known as the Norwegian Oil Fund—due to its strong ESG orientation, diversified exposure, and proven track record of long-term performance.

The GPFG’s historical returns provide a benchmark for our expectations. Over the past 15 years, the fund has averaged between 10–13% annual returns, with a recent five-year average of 13.83%, as shown below:

Norwegian Fund Returns table			
	Since 2019	Since 2014	Since 2009
Returns	13.83%	10.31%	12.28%

We therefore estimate an annualized return of approximately 12% for this portion of the portfolio, justified by the fund’s global diversification and exposure to ESG sectors poised for structural growth, such as renewable energy, sustainable technology, and low-carbon infrastructure.

1.2 Forestry and Land investments

As stated above, the core mission of this strategy is to achieve carbon neutrality while addressing biodiversity loss that is incurred through deforestation. The solution to this problem is two-fold. First, increase the investment in forested lands and lands that can be reforested to 20%. Second, slow deforestation by shifting focus from quantity to quality (discussed in the next section). Although it is somewhat difficult to measure the returns on this type of land, over the past eight years the value of this land has increased by 54% in Finland (roughly 5.5% year over year). For this part of the portfolio, we estimate an annual

return of 6%. This is based on the expected increase in the value of the land itself and the annual return of forestland. This estimate is somewhat conservative, based on the fact that we do not expect to see the same return as private forest investments (do to our conservation efforts).

1.3 Green Infrastructure and Venture Capitalism

The second part of our solution is to invest in companies that will make the forestry industry more efficient and have climate focused infrastructure. 15% of the portfolio will be invested in green infrastructure and forestry-related venture capital. These investments will target companies and projects that increase the value per unit of wood, improve processing efficiency, and expand the use of sustainable materials across industries. Benchmark data from the Norwegian GPFG's unlisted infrastructure portfolio shows 2.8% annualized returns over 4.5 years. However, given the higher uncertainty and illiquidity associated with venture-stage investments, we adopt a 2% expected return for this category. These investments, though relatively low-yielding in the short term, are critical to achieving long-term sustainability and technological leadership within Finland's forestry sector.

1.4 Green Bonds

10% of the portfolio will be allocated to green bonds, including both sovereign and corporate issues. These instruments provide stable, low-volatility returns while reinforcing the fund's ESG commitments. Historically, global green bond yields have ranged between 2–2.5%, though certain emerging-market and municipal green bonds (e.g., India's 2024 issuance) offer yields of up to 7%. Given increasing issuance volume and yield diversification in the green bond market, we estimate a 4% average annual return for this asset class. Beyond return

considerations, this allocation enhances liquidity and serves as a stabilizing anchor within the broader portfolio.

1.5 Cash

The remaining 5% of the portfolio will be held in cash and short-term liquidity instruments. This position serves multiple purposes:

- To provide flexibility for opportunistic investments, particularly in forestry and infrastructure;
- To act as a risk buffer in volatile markets; and
- To cover operational and rebalancing needs without forced asset sales.

Given current short-term interest rate levels, we estimate a 2% return on cash holdings.

1.6 Total Portfolio Expected Returns

The overall portfolio is designed to balance long-term growth with sustainability and resilience. Using the weighted average of expected returns from each asset class, the portfolio's total expected annual return is approximately 8.4%. This estimate aligns with the performance range of major sovereign and ESG-focused institutional funds while embedding stronger environmental impact metrics.

Expected Portfolio Performance Summary		
Asset Class	Allocation	Est. Annual Return
ESG Equities	50%	12%
Forestry & Land	20%	6%
Green Infrastructure & VC	15%	2%
Green Bonds	10%	4%
Cash	5%	2%
Weighted Average Return	100%	8.4%

This portfolio positions BWF as a leader in nature-positive finance—demonstrating that environmental restoration and economic performance can be mutually reinforcing goals.