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## Aligning policy and science: biodiversity accounting and accountability under the European Green Deal

### Executive summary

This study reveals a significant misalignment between the European Green Deal's (EGD) biodiversity policies and scientific understanding of loss drivers, finding an overemphasis on pollution control while insufficiently addressing crucial factors like land-use change. The EGD's effectiveness is further undermined by weak land-use policies, inconsistent enforcement, and divergent priorities among EU regulatory bodies. Additionally, measuring biodiversity in financial terms is challenging and EU policies predominantly adopt an anthropocentric (human-centred) view. Many ambitious EGD initiatives are also still in early stages, with their full legal impact yet to be seen.

### Policy recommendations

- **Re-evaluate and reform land-use policies to align with scientific evidence**, emphasizing habitat preservation, ecological connectivity, restoration, and reforestation
- **Integrate land-use policies with economic incentives**, such as carbon farming and payments for ecosystem services, to create synergy with climate mitigation efforts
- **Reform the Common Agricultural Policy (CAP)** to prioritize biodiversity conservation and include fiscal incentives for sustainable practices
- **Strengthen enforcement mechanisms** by implementing **stronger penalties for non-compliance** and utilizing **advanced monitoring technologies** (e.g., satellite imaging, AI) to detect illegal land-use
- **Integrate biodiversity considerations across broader policy frameworks** beyond just pollution control, adopting a holistic approach that targets multiple drivers simultaneously
- **Strengthen corporate biodiversity reporting requirements** under the Corporate Sustainability Reporting Directive (CSRD) to enhance accountability

### Lessons learnt

1. **Policy-Science Mismatch:** The European Green Deal (EGD) policies do not fully align with scientific consensus on the main drivers of biodiversity loss.
2. **Unbalanced:** The EGD overemphasizes pollution control while neglecting other critical drivers, such as land and sea use change.
3. **Inconsistent Enforcement:** Weak and inconsistent enforcement mechanisms significantly undermine the effectiveness of biodiversity regulations. Advanced monitoring technologies are needed.
4. **Integration Across Policies:** Biodiversity concerns need to be integrated more holistically into other policy areas, such as agriculture (e.g., Common Agricultural Policy reform) or financial regulations.
5. **Challenges in Financial Valuation:** While the EGD promotes transparency through biodiversity accounting, measuring biodiversity in financial terms is inherently difficult due to its complex and often intangible nature.
6. **Risk of Commodification:** Market-based conservation approaches, including some under the EGD, risk commodifying nature, which may obscure deeper ecological crises and fail to address the structural drivers of biodiversity loss.
7. **Predominantly Anthropocentric View:** EU policies largely adopt an anthropocentric stance, prioritizing human interests and benefits (like economic growth and job creation) over the intrinsic value of nature itself.



## Context/Introduction

Our planet is facing a major crisis with biodiversity loss, meaning the variety of life on Earth (from genes to ecosystems) is rapidly declining. This is a huge problem because biodiversity is essential for keeping nature balanced and resilient, providing countless benefits like clean water, food, and climate regulation, which are vital for human survival and well-being. Human activities such as land and sea-use changes, direct over-exploitation of living things, and pollution are the leading drivers of biodiversity loss, compounded by the escalating impacts of climate change and the spread of invasive species. These forces are collectively pushing us towards a potential sixth mass extinction. Recognizing this urgent issue, the European Union (EU) launched the European Green Deal (EGD) in 2019, a big plan to make its economy sustainable and climate-neutral by 2050, with a key goal of halting biodiversity loss (EU-Commission, 2019). However, even with many new regulations and strategies under the EGD, there is a pressing need to check if these policies are truly effective and if they match what scientists agree are the main causes of biodiversity loss. Therefore, this brief presents the results of an analysis of biodiversity accounting and accountability regimes under the European Green Deal (EGD), focusing on whether both regulations and actions align with the scientific consensus on biodiversity conservation. It also highlights actionable recommendations based on the findings.

## Key findings

The research found a significant disconnect between the EGD's existing regulations and actions and the scientific consensus on the main drivers of biodiversity loss, particularly as identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2018). While the EGD aims to halt biodiversity loss, it overemphasizes pollution control as a primary driver, as seen in initiatives like the Zero Pollution Action Plan. This focus means that other critical causes of biodiversity decline, such as changes in land and sea-use, the direct exploitation of organisms, and climate change, are comparatively underrepresented in EGD policies and actions. The study highlights that current land-use policies are weak and their enforcement is inconsistent, which reduces the effectiveness of biodiversity regulations.

Furthermore, the study identified operational differences and divergent priorities among various European Union (EU) regulatory bodies. For example, the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA) often has different priorities from Directorates-General focused on environment (DG ENV), maritime affairs and fisheries (DG MARE), and agriculture and rural development (DG AGRI).



While the EGD has introduced numerous new policies and legislative initiatives, some of them are still in strategic consultation or have only been adopted recently. This means their full legal impact and completion are yet to be realized, indicating that much of the EGD's work on biodiversity is still in progress and not fully established.

This makes it challenging to integrate biodiversity concerns effectively into various policy areas, leading to a gap between the initial policy goals and what actually occurs. The research also points to challenges with financial reporting related to biodiversity, as measuring biodiversity in monetary terms is inherently difficult due to its complex and often intangible nature (Hermoso et al., 2022).

Finally, a consistent finding is that EU biodiversity policies largely adopt an anthropocentric perspective, meaning they tend to prioritize human benefits, such as economic growth and job creation, over the intrinsic value of nature itself.

Future research should explore how EU biodiversity policies often favour human and economic interests over nature's own value, and how this shapes corporate behaviour. It should also address the difficulties in putting a financial value on biodiversity, including clearer reporting methods like ESRS E4 and resolving conflicts between EU agencies on valuation standards. Research must also improve the EU's understanding of "telecoupling"- how social, economic, and environmental systems interact across long distances (Liu et al., 2013) -while recognizing the vital role of local and Indigenous communities in protecting nature. Lastly, studies should aim to align the EU Green Deal's environmental and economic goals, evaluate the real impact of biodiversity-related financial tools, and improve enforcement so policies lead to real conservation outcomes.

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