



Grantham
Research Institute
on Climate Change
and the Environment

Submission to the Secretariat of the Convention on Biological Diversity Notification 2024-114

Financial mechanisms to facilitate monetary
contributions to the Cali Fund

Lea Reitmeier, Agata Makowska-Curran and
Jasmine Kindness

June 2025



Grantham Foundation
for the Protection of the Environment

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and the Environment at Imperial College London.

www.lse.ac.uk/granthaminstitute

About this submission

This report consists of a submission made in response to a notification by the Secretariat of the Convention on Biological Diversity (SCBD) requesting views on additional modalities for the multilateral mechanism for the fair and equitable sharing of benefits from the use of digital sequence information (DSI) on genetic resources, as adopted in Decision 16/2 of the Conference of the Parties in Cali, Colombia in 2024. The submission was made on 21 March 2025. The version presented here has been lightly edited since submission.

About the authors

Lea Reitmeier is a Policy Analyst at the Centre for Economic Transformation Expertise (CETEx) and the Grantham Research Institute on Climate Change and the Environment.

Agata Makowska-Curran is a PhD Candidate in Environmental Economics in the Department of Geography and Environment at the London School of Economics and Political Science and the Grantham Research Institute on Climate Change and the Environment.

Jasmine Kindness is a Senior Researcher at One World Analytics.

Acknowledgements

The authors would like to thank participants of the Global Biodiversity Finance Roundtable held at the London School of Economics and Political Science in September 2024 and those of the Convention on Biological Diversity COP 16 held in October 2024 for their insights and expertise which have helped the development of this document. The LSE roundtable was conducted by experts from several departments including LSE Law School, the Grantham Research Institute and the Department of Accounting, along with external members of the LSE-funded Ocean Biodiversity Collective, notably One World Analytics.

Disclaimer

The authors declare no conflict of interest in the preparation of this submission. The views in this submission are those of the authors and do not necessarily represent those of the host institutions or the Ocean Biodiversity Collective.

This paper was first published in June 2025 by the Grantham Research Institute on Climate Change and the Environment.

© The authors, 2025

Licensed under [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/). Commercial permissions requests should be directed to gri@lse.ac.uk.

Suggested citation: Reitmeier L, Makowska-Curran A and Kindness J (2025) *Submission to the Secretariat of the Convention on Biological Diversity Notification 2024-114. Financial mechanisms to facilitate monetary contributions to the Cali Fund*. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

General remarks

We sincerely appreciate the leadership of the Executive Secretary of the Convention on Biological Diversity (CBD) in advancing this crucial topic and welcome Notification 2024-114, which provides a valuable opportunity for all stakeholders to share their views. This submission focuses attention on the potential role of biodiversity finance and financial instruments in contributing to the success of the Cali Fund.

The significance of the Cali Fund lies in its role as the key international mechanism that explicitly links the economic benefits industries derive from nature with its protection, reinforcing the principle that nature is not 'free' (Oldham and Kindness, 2022). By establishing this precedent, the Fund illustrates how commercial gains can be directly linked to biodiversity conservation, offering a valuable model for other initiatives to learn from and build upon.

It is important that industries continue to be able to use nature's valuable resources, such as digital sequence information (DSI), to drive innovation in a sustainable manner. Rather than reversing the progress achieved in Cali, stakeholders — including governments, corporations, DSI researchers, intergovernmental organisations, banks, asset managers, insurance firms and academia — must collaborate to implement this landmark agreement effectively. Each stakeholder has a distinct role in contributing to and ultimately ensuring the protection of ecosystems that are essential for economic prosperity. The progress achieved thus far has been driven by cooperation, and sustained collaboration will be essential for the effective implementation of the Cali Fund.

This submission outlines ways in which different stakeholders could be engaged in the conversation to foster a collaborative environment and, ultimately, build a supportive 'ecosystem' to incentivise contributions. It briefly highlights established mechanisms, existing tools, and current practices that could be further explored to engage additional key stakeholders.

Context for this document

In sustainable finance, much of the discussion revolves around obtaining high-quality, granular data on sustainability themes, as investors and institutions rely on robust information to assess risks, drive impact, and meet regulatory requirements. The same necessity applies here, better underlying data is crucial for the financial community to understand and engage with DSI-related themes. Therefore, this document first outlines, at a high level, potential pathways to improve the availability and quality of such information. The second part then explores how the financial community can actively engage with companies, encourage greater data disclosure, and integrate this information into their decision-making processes.

Disclosure and information

Challenges

- Contributions are voluntary, no global enforcement mechanism for entities is in place. Ideally an effective implementation would see new regulations, but some governments have explicitly stated they will not regulate compliance. Language around compliance is highly sensitive.
- There is a need for coherence with existing benefit-sharing agreements, such as national laws implementing the Nagoya Protocol.
- Existing reporting frameworks do not capture DSI-related information, leading to transparency gaps at both the entity and government levels regarding its usage.

- The lack of valuation mechanisms conceals the contribution of DSI to overall economic value creation, making it difficult to assess its financial and policy implications.¹

Sustainability reporting — entity level *(Dr Saipriya Kamath from the London School of Economics and Political Science's [LSE] Department of Accounting considers these issues in detail in her submission to the Secretariat of the Convention on Biological Diversity [SCBD])*

- Voluntary reporting standards like CDP (formerly the Carbon Disclosure Project) could help to significantly enhance disclosure, with over 24,000 organisations globally reporting through CDP alone. As a voluntary framework, defining metrics and methodologies and integrating them into existing standards could also be done faster than through regulation. It also provides the opportunity to consult companies and identify disclosure practices that align with and recognise their concerns (e.g. not disclosing information that is too granular).
- Existing mandatory reporting standards, such as the EU Corporate Sustainability Reporting Directive (e.g. European Sustainability Reporting Standard E4), could also provide insights into companies' dependencies on DSI in the future.
- The International Financial Reporting Standards' (IFRS) growing sustainability focus (through the International Sustainability Standards Board [ISSB]) could support mandatory global disclosure if DSI is recognised as a material financial factor for investors. Last year the ISSB announced it would commence research projects about risks and opportunities related to biodiversity, ecosystems and ecosystem services, which would provide a good opportunity to engage more on DSI.

Natural capital accounting — entity and government level

- DSI holds significant economic value, but its value remains largely unaccounted for in national statistics and corporate reporting. Natural capital accounting frameworks could more effectively capture the value of DSI (Thambisetty et al., 2024; Taylor, 2024).
- For example, DSI information could be incorporated into assessments following the approaches by the Taskforce on Nature-related Financial Disclosures (TNFD) and valuation approaches such as those by the Value Balancing Alliance.
- Integration into global economic reporting systems, such as the UN System of National Accounts, can then fill data gaps and increase transparency at the national level, while informing and guiding natural capital accounting for corporate entities.

Comply-or-explain approach

- All companies in scope should contribute or publicly explain why they do not comply, ensuring fairness and preventing an uneven playing field. This requires companies to demonstrate exemptions (i.e. that they do not use DSI) based on specific criteria, shifting the burden of proof to them. Comply-or-explain has been applied in regulatory contexts including the UK Corporate Governance Code.
- Transparency efforts (e.g. naming and shaming) driven by non-governmental organisations (NGOs), media, and other private actors can help to drive compliance, as seen in other sectors where NGOs track and assess corporate adherence to rules. Lists could be created to disclose DSI users and reported contributions in annual sustainability reports. Naming and shaming that relies on official intergovernmental actors has also been found effective in the climate space (Dannenberg et al., 2023).

¹ Some of these questions were explored in a Roundtable at LSE in September 2024 (the materials are available here: <https://oneworldanalytics.com/biodiversity-finance-dsi/>). Dr Saipriya Kamath's presentation, 'Unlocking Private Capital: Navigating Regulation, Metrics and Investor Motivations', and Sarah Taylor's presentation on natural capital accounting, 'The Value of DSI and DSI Datasets', are particularly relevant).

- Although not mandatory, the proposed annual contributions and sector identification in Decision 16/2 and its Annex establish a valuable benchmark, setting a precedent for industry accountability in biodiversity finance. The sectoral approach serves as essential guidance for external parties less familiar with DSI, such as NGOs, banks and investors, by clarifying which firms may be benefiting from DSI. Maintaining the sectoral approach is crucial to guide external stakeholders — who will play a vital role in building an ecosystem that facilitates contributions.

Incentivising contributions

Challenges

- A voluntary mechanism means some entities may contribute while others opt out. Without accountability, this creates an uneven playing field, weakening incentives for fair participation.
- If contributions seem like a financial burden rather than a strategic investment, companies may resist, slowing progress on implementation or seeking loopholes to avoid payments. Hence, there needs to be a compelling business case for DSI users, whether through financial incentives, reputational benefits or investor pressure to ensure contributions are made.²

Investor stewardship

- DSI holds immense value for driving innovation in a range of sectors involving drug discovery, proteins and other compounds, with its volume and user base expanding rapidly. As the world shifts from fossil fuel-based products (e.g. nitrogen fertiliser) towards circularity and nature-based solutions, DSI will be crucial in enabling companies to adapt. It can train generative artificial intelligence (AI) platforms, while AI, in turn, accelerates the exploration of existing and new genomes, viruses and enzymes (Thomas, 2024).
- Meanwhile, new species and ecosystems are being explored. For example, since the peace agreement between guerrilla groups and the Colombian government in 2016, vast tracts of previously inaccessible forests, caves and mountains have been studied, increasing recorded species from 53,000 to 81,236 — 200 of which are entirely new to science (Irwin, 2023). This unlocks an enormous range of potential opportunities.
- Economic studies assessing potential financial gains of leveraging DSI could encourage investors to proactively engage with firms on their use of DSI to encourage transparency and innovation. This may encourage investors to request transparency around the use of DSI and Fund contributions as part of their stewardship activities, leveraging them to enhance corporate accountability and long-term value creation (e.g. reducing reputational risks that might be associated with no Fund contributions).

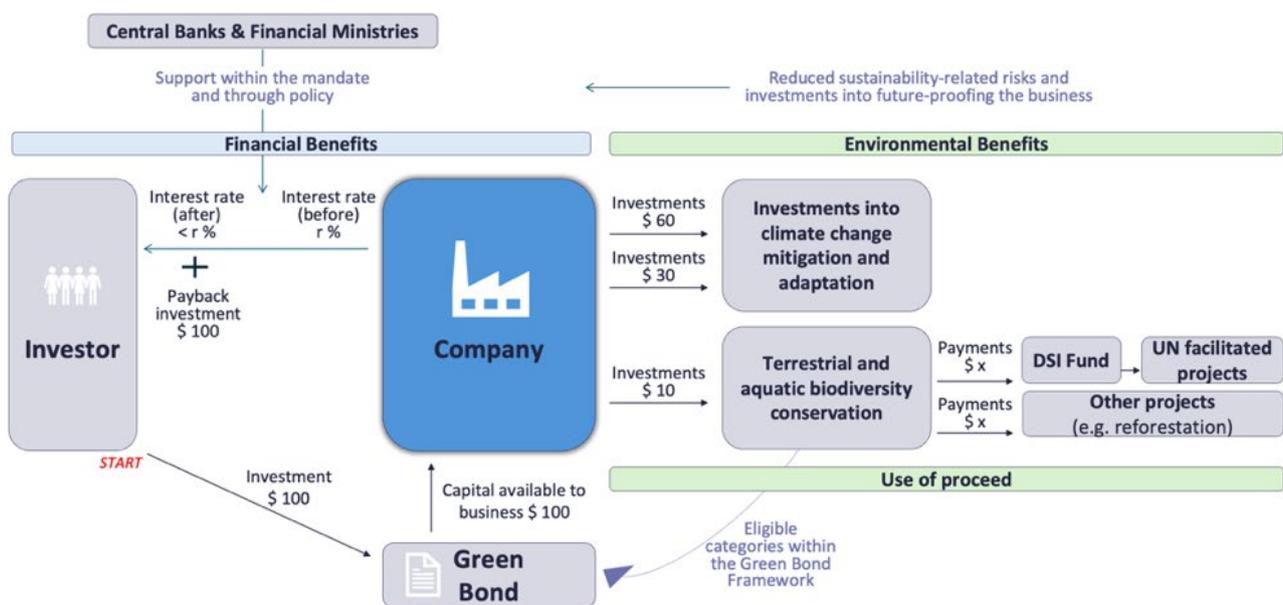
Sustainable finance instruments

- Entities could tie Fund contributions to sustainable finance instruments (see Figure 1) such as green bonds, which could lead to:
 - Access to a broader investor base
 - Better re-financing costs (especially when supported via central bank or finance ministry tools: e.g. favourable prudential treatment)

² Commentary with the initial ideas on how to unlock industry contributions for the Cali Fund is available here: <https://www.lse.ac.uk/granthaminstitute/news/the-cali-fund-unlocking-industry-contributions-to-finance-biodiversity-conservation/>. The LSE COP 16 team's proposed text option based on the tiered sales-based approach is available in Kamath (2024).

- Reputational benefits, as it shows the financial commitment to protect biodiversity to the public and investors.
- Globally, it is market best practice to issue green bonds based on the principles set out by the International Capital Market Association (ICMA), which includes a category for 'terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments)' under which Cali Fund contributions may be allocated.
- It is best market practice to obtain a Second Party Opinion (SPO) from an independent third party (such as Sustainalytics, S&P Global or ISS-Corporate). SPO providers determine whether a bond framework meets market standards and investor expectations; therefore, raising awareness about the Cali Fund among them is important.
- The Fund, administered transparently by the UN and governments, offers a credible mechanism for biodiversity conservation financing, providing investors with greater certainty that contributions support impactful projects while mitigating reputational risks.

Figure 1. Exemplary green bond structure including Cali Fund contributions



Source: Authors

References

- Dannenberg A, Lumkowsky M, Carlton EK, Victor DG (2023) Naming and shaming as a strategy for enforcing the Paris Agreement: The role of political institutions and public concern. *PNAS* 120(4). <https://www.pnas.org/doi/10.1073/pnas.2305075120>
- Irwin A (2023) Colombia's ecological treasure trove. *Nature*, 19 July. <https://www.nature.com/immersive/d41586-023-02300-6/index.html>
- Kamath S (2024) *A tiered sales-based approach: Digital sequence information and monetary contributions from industry*. <https://doi.org/10.5281/zenodo.13958364>
- Oldham P and Kindness J (2022) *Sharing digital sequence information. Study for the European Commission*. <https://doi.org/10.5281/zenodo.6557191>
- Taylor S (2024) *The value of DSI and DSI data sets*. <https://oneworldanalytics.com/biodiversity-finance-dsi/presentations.html#the-value-of-dsi-and-dsi-data-sets~:text=The%20Value%20of%20DSI%20and%20DSI%20Data%20Sets>
- Thambisetty S, Oldham P, Reitmeier L, Kamath, S, Makowska-Curran A, Kindness, J et al. (2024) *Identifying ways forward: The LSE Roundtable on Global Biodiversity and Digital Sequence Information*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5038854
- Thomas J (2024) UN puts AI Titans on the hook for billions of dollars of biopiracy payments. Blog post, 19 November. *Scan The Horizon*. <https://www.scanthehorizon.org/p/un-puts-ai-titans-on-the-hook-for>