



HAL
open science

Biodiversity management in contemporary organisations: analysis of sustainability reports to understand corporate biodiversity practices in light of the dispositive in which they operate

Astrid Le Chippey, Helle Alsted Søndergaard, Mai Skjøtt Linneberg, Rémi
Beulque, Franck Aggeri, Emmanuel Garbolino

► To cite this version:

Astrid Le Chippey, Helle Alsted Søndergaard, Mai Skjøtt Linneberg, Rémi Beulque, Franck Aggeri, et al.. Biodiversity management in contemporary organisations: analysis of sustainability reports to understand corporate biodiversity practices in light of the dispositive in which they operate. *New Business Model*, Jun 2026, Toulouse, France. <hal-05600468>

HAL Id: hal-05600468

<https://hal.science/hal-05600468v1>

Submitted on 23 Apr 2026

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Copyright - All rights reserved

Biodiversity management in contemporary organisations: analysis of sustainability reports to understand corporate biodiversity practices in light of the dispositive in which they operate.

Astrid Le Chippey^{1,2,3,*}, Helle Alsted Søndergaard⁴, Mai Skjøtt Linneberg⁴, Emmanuel Garbolino², Rémi Beulque⁵, Franck Aggeri¹

Centre de Gestion Scientifique, Mines Paris – PSL¹; ISIGE, Mines Paris – PSL²; Transition Institute 1.5, Mines Paris – PSL³; Aarhus University – Denmark⁴; TBS – Toulouse Business School⁵

*astrid.le_chippey@minesparis.psl.eu

Extended abstract

Introduction & research questions

The erosion of biodiversity (Barnosky et al., 2011; Ceballos et al., 2015) has raised significant concerns about the long-term sustainability of ecosystems and the services they provide to human well-being (MEA, 2001–2005; Mace et al., 2011; Cardinale et al., 2012). In response, public policies (GBF, 2022; CSRD, 2022) have called upon businesses to adopt measures to halt or reverse biodiversity loss. Supporting the development of corporate strategies and action plans to meet regulatory requirements, a wide range of tools and instruments has been developed, starting with measuring, disclosing and mitigating the businesses biodiversity impacts, dependencies, risks, and opportunities through a double materiality approach (WWF, 2019; Asselin et al., 2020; Bull et al., 2022; CDC Biodiversité, 2022; Féger & Mermet, 2022). These tools and methodologies have thus guided companies in developing their public commitments and sustainability reporting.

While there is growing awareness of the negative impact of economic growth on biodiversity (IPBES, 2019), numerous scientific articles directly analyse companies' sustainability discourse to study the corporate biodiversity practices including the abundant literature on organisations' sustainability reports (Addison et al., 2019; Zu Ermgassen et al., 2022; Giglio et al., 2023). These contributions, however, are partial and remain disconnected from one another and provides no answer to how these discursive elements are linked to the range of resources mobilised by companies to guide their

biodiversity practices (tools, methodologies, expertise, etc.), but this is essential for assessing whether companies' actions are performative and help to mitigate biodiversity loss (Foucault, 1977/1994; Aggeri and Labatut, 2010; Raffnsøe et al., 2016; Raffnsøe et al., 2019; Aggeri, 2021/2025).

Therefore, sustainability reports must be studied through a broader dispositional perspective (Foucault, 1977; Aggeri and Labatut, 2010; Raffnsøe et al., 2016; Raffnsøe et al., 2019; Aggeri, 2021). **They must be seen as part of a biodiversity dispositive, comprised of heterogeneous human and non-human elements (discourse, regulations, CSR reports, stakeholders, individuals, expertise, practices, etc.) with a strategic purpose.**

While dispositives provide a very useful framework for studying organisational and management processes, this is particularly true for the study of multi-stakeholder and multi-level management issues that transcend organisational boundaries, such as 'grand challenges' or 'wicked problems' (Ferraro et al., 2015), those involving biodiversity and environmental issues as a whole. Literature has referred to CSR as an area of collective action for several years (Acquier, 2007) and the Foucauldian approach to dispositive has been used in particular to study some organisations and collective actions in the environmental field (Le Breton and Aggeri, 2018; Charrier et al., 2024). However, these studies do not specifically focus on biodiversity as dispositive, which therefore appears to be a blind spot in the literature. Thus, our research aims to explore the organisational dimensions of contemporary biodiversity management in light of the concept of dispositive and its formation in time and space, i.e. the formation of the dispositive, taking corporate sustainability reports as the starting point for this dispositional analysis (Aggeri and Gand, 2025).

Adopting a dispositional perspective on biodiversity management will enable us to understand the extent to which organisations already have, or lack, the necessary elements to transform their business practices in the service of biodiversity. If a company's practices are not aligned with the elements of the dispositive to which it belongs, this calls into question the relevance of the dispositive and its ability to achieve its strategic objective. In other words, it calls into question the ability of the heterogeneous elements of the dispositive, whose arrangement is supposed to halt biodiversity loss, to produce the desired effects on biodiversity practices.

On this backdrop we ask the following question:

What are the heterogeneous elements of the biodiversity dispositive and how can corporate biodiversity practices be interpreted in light of these elements and their arrangement within the biodiversity dispositive?

Theoretical framework

The theoretical framework is founded on the concepts of dispositive and dispositive formation. *Dispositive* refers to the arrangement of heterogeneous elements in time and space with a view to achieving a strategic objective. The dispositive formation considers the arrangement in time and space between these different elements to ultimately understand the extent to which the conditions of the dispositive formation enable it, or not, to achieve its strategic purpose, in other words, to be performative (Aggeri, 2017; Aggeri and Gand,

2025). The contours of the dispositive and its heterogeneous elements must be defined by the researcher according to the specific subject of analysis (Aggeri and Gand, 2025).

Methodology

To answer the research questions, a two-stage methodology is employed: data collection and data analysis combining theoretical data and empirical data (see figure 1). The theoretical data is based on scientific articles, grey literature, corporate website, etc.

To study the biodiversity dispositive and identify its heterogeneous elements, we based our findings on the text analysis of the sustainability reports of 5–10 organisations. However, the discursive elements of sustainability reports, while providing a *starting point* for dispositional analysis, are insufficient for analysing an entire dispositive. We therefore supplemented our research with a study of scientific articles, grey literature (historical company documents, other corporate reports, etc.) and semi-structured interviews.

We conducted 22 semi-structured interviews with professionals from 17 international large and medium-sized companies based in France. They come from various sectors: manufacturing, extractive industries, pharmaceuticals, agri-food, consulting, etc. The interviewees are directly responsible for biodiversity issues and include biodiversity managers, sustainability partners, environmental directors or indirectly responsible (sourcing director, LCA analysis, industrial site biodiversity manager). The interviews, lasting between 30 and 90 minutes, took place between December 2024 and November 2025, either in person or online.

Eventually, our textual analysis reports on the biodiversity practices of the 5-10 organisations studied through the analysis of biodiversity-related information contained in their sustainability reports. So that they can be compared with the elements of the biodiversity framework identified beforehand.

We conduct a systematic coding of the sustainability reports and the semi-structured interviews which leads us to the comparison and organization of the codes to identify recurring patterns related to the biodiversity dispositive and its elements (Braun and Clarke, 2006). We use a combination of:

- Deductive coding derived from the reasoning of practitioners behind the issues observed in the grey and academic literature.
- Inductive coding leading to the identification of new insights.

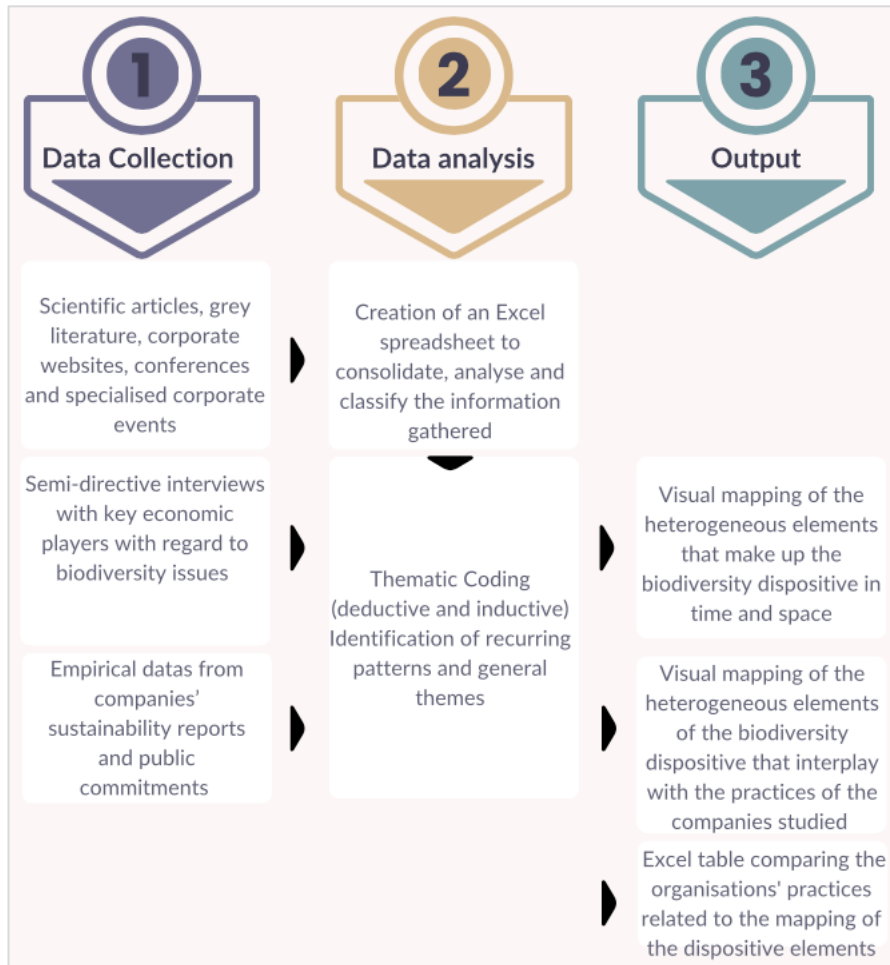


Figure 1: Data sources & the respective analytical method.

Expected results

To answer the research questions, we initially identify the heterogeneous elements of the biodiversity dispositive whose strategic purpose is to enable organisations to transform their business practices in favour of biodiversity. Overall, we find eight heterogeneous elements that are, *a priori*, making up this biodiversity dispositive: the driving forces, the strategic intents, the methods, the tools and public policies instruments, the actions, the action scales, expertise and key players.

Figure 2 provides the first eight heterogeneous elements identified with a brief description of each.

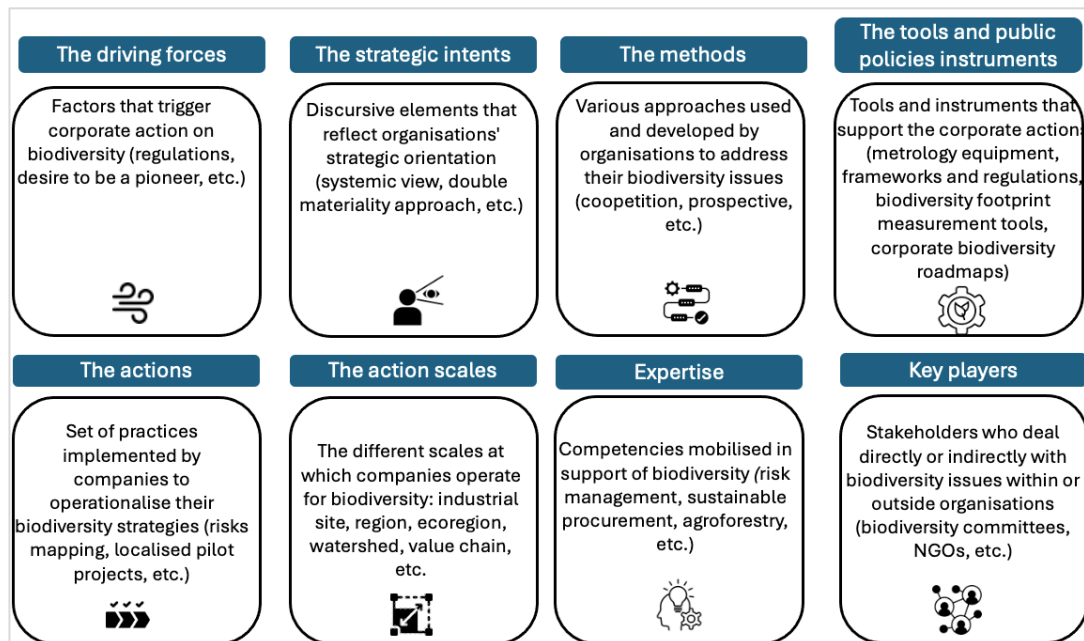


Figure 2: Heterogeneous elements of the biodiversity dispositive (authors own work)

In a second step, we draw on the analysis of corporate sustainability reports to identify the interrelationships between these elements and highlight how these relationships may differ from one company to another.

Finally, we conduct a comparative analysis of corporate sustainability reports, highlighting their biodiversity practices.

In juxtaposing the approaches of different companies, we will show the varied nature of biodiversity dispositive in different contexts and how companies interact with the heterogeneous elements of this dispositive. This allows us to put into perspective the differences between companies' biodiversity practices in light of the heterogeneous elements of the dispositive in which they operate and the arrangement of these elements. It also allows us to observe how biodiversity dispositive can vary from one company to another, depending on the heterogeneous elements mobilised and their arrangement. There may even be overlap between dispositives addressing the same issue, in this case biodiversity management within contemporary organisations.

Limitations

One limitation of this study is its analysis of corporate biodiversity practices through sustainability reports as it often relies on discursive elements - what companies say about their actions rather than what they do in practice (Trim et al., 2015). While discursive analysis can provide valuable insights into corporate intentions, a more comprehensive approach would involve field-level observations, to better understand how companies implement their biodiversity commitments in practice.

Another limitation is the partially investigation of the formation of the biodiversity dispositive over time and space. It only reports on the heterogeneous elements that make

up this dispositive and provides a brief initial overview of how these elements are arranged in relation to the biodiversity practices of the companies studied. Biodiversity relies on long time horizons (Tregidga and Laine, 2022), and an in-depth historical and longitudinal analysis of the biodiversity dispositive, both dispositional and processual, enables the assessment of the extent to which the dispositive can, *in principle*, transform companies' biodiversity practices from an organisational perspective.

Conclusion

This study will highlight the relationships between companies' biodiversity practices and the broader biodiversity dispositive in which they operate.

While companies are increasingly reporting on their impacts, dependencies, risks, and opportunities in relation to biodiversity by using a double materiality approach, the transformational power of their actions from an organisational perspective remains dependent on the biodiversity dispositive in which they operate and the arrangement, in time and space, of the heterogeneous elements that make it up.

Future research should focus more on the historical formation of the biodiversity dispositive through in-depth process and dispositional analysis. This analysis should be compared with the practices of organisations identified not through discursive analysis but through interventionist field research.

Keywords

Biodiversity, Organisations, Practices, Reporting, Dispositive, Dispositive formation

References

Acquier, A. (2007). RSE et outils de gestion: Perspectives pour l'analyse des marchés de l'évaluation extra financière. *Revue de l'organisation responsable*, 2(2), 5. <https://doi.org/10.3917/ror.022.0005>

Addison, P. F. E., Bull, J. W., & Milner-Gulland, E. J. (2019). Using conservation science to advance corporate biodiversity accountability. *Conservation Biology*, 33(2), 307–318. <https://doi.org/10.1111/cobi.13190>

Aggeri, F. (2017). Qu'est-ce que la performativité peut apporter aux recherches en management et sur les organisations: Mise en perspective théorique et cadre d'analyse. *M@n@gement*, 20(1), 28. <https://doi.org/10.3917/mana.201.0028>

Aggeri, F. (2021). La gouvernementalité chez Foucault: Une perspective sur l'instrumentation de gestion. In *Philosophie et outils de gestion* (pp. 68–94). EMS Editions. <https://doi.org/10.3917/ems.gilbe.2021.02.0068>

Aggeri, F., & Gand, S. (n.d.). La mise en dispositif comme cadre d'analyse de l'action collective finalisée: Conceptualisation et méthodologie.

- Aggeri, F., & Labatut, J. (2010). La gestion au prisme de ses instruments. Une analyse généalogique des approches théoriques fondées sur les instruments de gestion. *Finance Contrôle Stratégie*, 13(3), 5–37. <https://hal.inrae.fr/hal-02659906v1>
- Asselin, A., Rabaud, S., Catalan, C., Leveque, B., L'Haridon, J., Martz, P., & Neveux, G. (2020). Product Biodiversity Footprint – A novel approach to compare the impact of products on biodiversity combining Life Cycle Assessment and Ecology. *Journal of Cleaner Production*, 248. <https://doi.org/10.1016/j.jclepro.2019.119262>
- Barnosky, A. D., Matzke, N., Tomiya, S., Wogan, G. O. U., Swartz, B., Quental, T. B., Marshall, C., McGuire, J. L., Lindsey, E. L., Maguire, K. C., Mersey, B., & Ferrer, E. A. (2011). Has the Earth's sixth mass extinction already arrived? *Nature*, 471(7336), 51–57. <https://doi.org/10.1038/nature09678>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bull, J. W., Sonter, L. J., Gordon, A., Maron, M., Narain, D., Reside, A. E., Sánchez, L. E., Shumway, N., Von Hase, A., & Quétier, F. (2022). Quantifying the “avoided” biodiversity impacts associated with economic development. *Frontiers in Ecology and the Environment*, 20(6), 370–378. <https://doi.org/10.1002/fee.2496>
- Cardinale, B. J., Duffy, J. E., Gonzalez, A., Hooper, D. U., Perrings, C., Venail, P., Narwani, A., Mace, G. M., Tilman, D., Wardle, D. A., Kinzig, A. P., Daily, G. C., Loreau, M., Grace, J. B., Larigauderie, A., Srivastava, D. S., & Naeem, S. (2012). Biodiversity loss and its impact on humanity. *Nature*, 486(7401), 59–67. <https://doi.org/10.1038/nature11148>
- Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M., & Palmer, T. M. (2015). Accelerated modern human-induced species losses: Entering the sixth mass extinction. *Science Advances*, 1(5). <https://doi.org/10.1126/sciadv.1400253>
- Charrier, F., Barbier, M., & Raulet-Croset, N. (2024). How Management Situations Change Dispositives: Public Management in the case of Animal Epidemics. *M@n@gement*, 80–102. <https://doi.org/10.37725/mgmt.2024.7930>
- Conference of Parties (COP 15). (2022). Kunming-Montreal Global Biodiversity Framework.
- Directive (UE) 2022/2464 Du Parlement Européen et Du Conseil Du 14 Décembre 2022 Modifiant Le Règlement (UE) No 537/2014 et Les Directives 2004/109/CE, 2006/43/CE et 2013/34/UE En Ce Qui Concerne La Publication d'informations En Matière de Durabilité Par Les Entreprises (2022).
- Féger, C., & Mermet, L. (2022). New Business Models for Biodiversity and Ecosystem Management Services: Action Research With a Large Environmental Sector Company. *Organization & Environment*, 35(2), 252–281. <https://doi.org/10.1177/1086026620947145>
- Ferraro, F., Etzion, D., & Gehman, J. (2015). Tackling Grand Challenges Pragmatically: Robust Action Revisited. *Organization Studies*, 36(3), 363–390. <https://doi.org/10.1177/0170840614563742>

Foucault, M. (2004). *Sécurité, territoire, population: Cours au Collège de France (1977-1978)* (Éditions Gallimard et Éditions du Seuil).

Giglio, S., Kuchler, T., Stroebe, J., & Zeng, X. (2023). *Biodiversity Risk*. NBER WORKING PAPER SERIES.

IPBES. (2019). *Le rapport de l'évaluation mondiale de la biodiversité et des services écosystémiques*.

Le Breton, M., & Aggeri, F. (2018). *Compter pour agir ? La performativité de la comptabilité carbone en question - Actes de calcul et mise en dispositif dans une grande entreprise française du secteur de la construction*. *Management*, 21(2), 834. <https://doi.org/10.3917/mana.212.0834>

Mace, G. M., Norris, K., & Fitter, A. H. (2012). *Biodiversity and ecosystem services: A multilayered relationship*. *Trends in Ecology & Evolution*, 27(1), 19–26. <https://doi.org/10.1016/j.tree.2011.08.006>

Millennium Ecosystem Assessment (Ed.). (2005). *Ecosystems and human well-being: Synthesis*. Island Press.

Mission Economie de la Biodiversité. (2023). *Global Biodiversity Score, Accounting for positive and negative impacts throughout the value chain (No. 49; MEB'S REPORT)*.

Raffnsøe, S., Gudmand-Høyer, M., & Thaning, M. S. (2016). *Foucault's dispositive: The perspicacity of dispositive analytics in organizational research*. *Organization*, 23(2), 272–298. <https://doi.org/10.1177/1350508414549885>

Raffnsøe, S., Mennicken, A., & Miller, P. (2019). *The Foucault Effect in Organization Studies*. *Organization Studies*, 40(2), 155–182. <https://doi.org/10.1177/0170840617745110>

Tregidga, H., & Laine, M. (2022). *On crisis and emergency: Is it time to rethink long-term environmental accounting?* *Critical Perspectives on Accounting*, 82, 102311. <https://doi.org/10.1016/j.cpa.2021.102311>

Trim, I., & Jones, A. (2025). *Do the world's largest companies integrate natural capital risks and opportunities into their operations in a meaningful way?* *Biological Conservation*, 302, 110916. <https://doi.org/10.1016/j.biocon.2024.110916>

WWF. (2019). *Capital Naturel et Stratégies des Organisations: Une visite guidée des outils*.

Zu Ermgassen, S. O. S. E., Howard, M., Bennun, L., Addison, P. F. E., Bull, J. W., Loveridge, R., Pollard, E., & Starkey, M. (2022). *Are corporate biodiversity commitments consistent with delivering 'nature-positive' outcomes? A review of 'nature-positive' definitions, company progress and challenges*. *Journal of Cleaner Production*, 379. <https://doi.org/10.1016/j.jclepro.2022.134798>