

Company Approaches to the Protection of Nature and Biodiversity

The conservation and protection of nature is attracting increasing attention in the business world, and this reflects the growing explicit corporate recognition that many businesses depend on nature and natural resources. However, company initiatives to protect nature and biodiversity have received very limited attention in the business and management literature, and this represents a gap in that literature. With this in mind, this paper looks to explore and illustrate, why, and how, a number of major companies have publicly claimed to be protecting nature and biodiversity. The paper identifies five themes, namely an ambitious approach, a business led rationale, forest regeneration, collaborative endeavours, and a focus on the supply chain, which collectively capture the companies' approach to protecting nature and biodiversity. The author also argued that a number of wider issues were also important in exploring the role of businesses in protecting and restoring nature and biodiversity.

Keywords: *business; nature; biodiversity; nature positive; sustainability*

Introduction

The conservation and protection of nature is attracting increasing attention in the business world. McKinsey and Company (2023), for example, argued that 'global companies are paying more attention to nature and natural capital', while S&P Global (2022), acknowledged that protecting biodiversity was 'capturing more attention in the corporate world.' Taking an academic perspective, Krause et al. (2020), claimed that 'while climate change has been a comparatively prominent topic for some time, issues around biodiversity protection and nature conservation are starting to gain attention from the global business community as well.'

In part the growing business interest in, and commitment to, nature and biodiversity protection, can be seen to reflect the growing explicit corporate recognition that many businesses depend on nature and natural resources, though Hahn and Tampe (2020) acknowledged that many 'business activities rely on functioning social-ecological systems but tend to take these for granted.' In a similar vein, S&P Global (2022), argued that 'businesses have long harnessed nature's resources without having to pay a full price for the privilege', that 'there is now a growing realization that the real-world cost of exploited natural capital — everything from bees and fish stocks to the carbon-storing capacity of trees — ought to be properly tallied on corporate balance sheets', and that 'such an accounting could spur companies to make and sell goods and services in a way that causes no net loss of natural capital or, better yet, yields a gain — thus helping to restore a small part of the natural world.' In part the increasing corporate interest in protecting biodiversity also reflects growing and widespread concerns about the global nature crisis, which has seen the planet 'experiencing a

1 *dangerous decline in nature*, in which *'one million species are threatened with*
 2 *extinction, soils are turning infertile, and water sources are drying up'* (United
 3 Nations Environment Programme 2023).

4 However, specific commitments and initiatives pursued by companies to
 5 protect nature and biodiversity have received very limited attention in the business
 6 and management literature, and this represents a gap in that literature. With this in
 7 mind, this paper looks to employ an opportunistic approach to explore and
 8 illustrate, why, and how, a number of major companies have publicly claimed to
 9 be protecting nature and biodiversity, and as such to contribute to helping to fill
 10 the gap in the literature identified above. The paper includes a personal summary
 11 of the changing relationship between businesses and nature, a brief literature
 12 review, an outline of the frame of reference and method of enquiry, an exploratory
 13 review a number of large companies' reported commitments and initiatives to
 14 protect nature and biodiversity, some reflections on these commitments, and a
 15 brief conclusion.

18 **The Changing Relationship between Businesses and Nature**

20 The relationship between people and nature has changed over time. Looking
 21 back into history, there is a broad consensus, that for a long period of time, human
 22 beings predominantly lived in harmony with nature. Here a hunting and gathering
 23 culture, which relied on hunting, fishing and foraging wild vegetation, saw human
 24 beings as very much an integral part of the natural world in which they lived. With
 25 the gradual emergence of sedentary agriculture, the domestication of plants and
 26 animals, and permanent settlement, nature provided a sufficiently rich and reliable
 27 variety of food and resources at fixed locations. Over time agriculture's
 28 relationship with nature evolved, and human agency became increasingly active,
 29 epitomised, for example, by the clearance of natural woodlands and forest, with
 30 the land being turned over to grazing for sheep and cattle.

31 However, it was the origins, and spread of the so-called Industrial Revolution,
 32 from the late eighteenth century onwards, that brought about dramatic changes in
 33 the relationship between people and nature. On the one hand industrialisation has
 34 seen the exploitation of a seemingly ever wider range of the earth's natural
 35 resources, including timber, coal, oil, gas, mineral ores, and water. On the other
 36 hand, industrialisation has also often brought a number of damaging
 37 environmental consequences, including air and water pollution, increases in
 38 carbon dioxide and greenhouse gas emissions, the depletion of ozone levels in the
 39 atmosphere, and the loss of biodiversity. All these changes served to increasingly
 40 sever the once harmonic relationship between people and nature, and led to the
 41 dysfunction and destruction of a growing number of ecological systems.

42 Individual, and often isolated, fears about the damage people and industries
 43 were inflicting upon nature and the natural environment have a long pedigree, but
 44 during the last half century or so, the majority of concerns about nature, and its
 45 conservation have crystallised around the environmental movement. Rachel
 46 Carson's (1962) book *Silent Spring* is often cited as the spark for the movement,

that now embraces sustainable development, the United Nations Sustainable Development Goals, the climate movement, and the Global Biodiversity Framework. More recently, the concept of nature positive, where nature is being restored and is regenerating, rather than declining, has attracted prominence as a result of widespread recognition of the global scale at which nature is being lost, the threat this poses to the collective survival of the human race, and the urgent need not only to conserve, but also to restore, nature.

Literature Review

The role of business in protecting nature and biodiversity has received limited attention in the business and management literature though a number of themes can be identified. In looking to stimulate business research into the protection of biodiversity, Panwar et al. (2023) recognised that while there was growing academic interest in understanding and enhancing corporate engagement in protecting biodiversity, this research had a narrow focus on corporate sustainability. The paper looked to facilitate future research on corporate biodiversity protection strategies. Here the argument was that there are multiple pathways to biodiversity loss, and that this, in turn, raises questions about the reasons for an apparent lack of attention to biodiversity in the business community outside the highly visible industries such as food, forestry and mining. In conclusion, Panwar et al. (2022) emphasised not only that global targets set by governments cannot be achieved without the full engagement of the private sector, but they also suggested that their work would inspire researchers to examine how companies can enhance, rather than destroy, biodiversity.

Wagner (2022) analysed corporate action to support biodiversity and ecosystem services by a wide range of manufacturing companies in Germany. This analysis was premised on the recognition that businesses rely on resources sourced from nature, that their operations were also a major contributor to biodiversity loss, and the paper focused directly on activities directly designed to protect biodiversity and ecosystem services, rather than on wider environmental protection activities. The findings revealed tensions between risk perception and activities pursued for the protection of biodiversity, not least because companies shied away from substantive action. The findings also revealed that small and medium sized firms are less active in focusing on nature and biodiversity, and that their environmental management systems are not conducive to corporate activities to support biodiversity and ecosystem services.

In recognising that businesses now regularly face calls to contribute to the protection of biodiversity and natural capital, Fegger and Mermet (2022) presented the results of an action research project with a major French company in the environmental sector that had been experimenting with innovative services dedicated to ecosystem management. More specifically, the authors introduced a new theoretical framework, centred on the development of four business models for ecosystem management services. These models, defined by the centrality they gave to measurable diversity performances, looked to combine corporate value

1 creation with ecological value at the ecosystem level. Looking to future research
 2 Fegger and Mermet (2022) suggested that the development of ecological
 3 accounting innovations will be vital in working with client companies who expect,
 4 and pay for, measurable results in the improvement of biodiversity and natural
 5 capital.

6 Prue et al. (2020) recognised that companies are beginning to look for ways
 7 to assess their biodiversity performance, but suggested that, to date, the focus has
 8 been on developing indicators for specific business contexts. However, the authors
 9 claimed that many of these indicators are not widely transferable across different
 10 contexts, which makes it difficult for many businesses to manage their biodiversity
 11 performance. More positively, Prue et al. (2020) proposed a framework to support
 12 the more comprehensive development of quantitative biodiversity indicators for a
 13 range of business contexts, and the authors illustrated how the framework offers a
 14 pathway for businesses to assess their biodiversity performance by mitigating their
 15 biodiversity impacts, thus enabling them to demonstrate their contribution to
 16 global biodiversity targets.

17 Krause et al. (2020) applied a structural equation model, based on the theory
 18 of planned behaviour, to analyse how over 600 German companies might increase
 19 corporate action for conservation. Their findings revealed that a favourable
 20 attitude, driven by perceived business relevance and benefit prospects, fostered
 21 engagement, while perceived difficulties, notably a lack of finance and knowledge,
 22 hindered engagement. The authors also found that while customers, employees,
 23 and the general public were the only stakeholder groups driving corporate
 24 conservation expectations, the expectation levels of virtually all stakeholders were
 25 found to be low and certainly inadequate for the current ecological crisis. Looking
 26 more positively to the future, Krause et al. (2020) discussed how political will and
 27 goal setting can encourage greater business support for conservation and
 28 protection of nature.

29 Roberts et al. (2022) examined the intersections between biodiversity and the
 30 circular economy, arguing that both were crucial for the future of sustainable
 31 development, and focused on companies reporting practices on both the
 32 introduction of the circular economy and the corrective actions taken to repair
 33 biodiversity using a new disclosures index. Data was collected from some 28
 34 companies in the defence, motor vehicle and transport sectors, over four years.
 35 The overall scoring of disclosures was low, indicating that the majority of
 36 companies had a lack of knowledge of biodiversity and of the circular economy.
 37 The authors claimed that the paper had practical implications to help policy
 38 makers to provide guidelines to regulators about the importance of creating
 39 awareness of biodiversity and extinction accounting among the business
 40 community.

41 Kennedy et al. (2022) recognised that measuring biodiversity impact was
 42 attracting corporate attention as companies faced increasing scrutiny over the mass
 43 extinction of animals, but that many current approaches were seen to be in their
 44 infancy, and did not address the dynamic complexity that can bring about sudden
 45 ecosystem change. The authors argued that corporate biodiversity impact
 46 measurement could be advanced by incorporating resilience thinking from the

1 natural sciences, in that such an approach could refocus measurement on how
 2 biodiversity contributes to an ecosystem's capacity to adapt to disturbances and
 3 avoid abrupt transformative change. More specifically, Kennedy et al. (2022) put
 4 forward seven key mechanisms that they suggested could inform the development
 5 of measurements across three biodiversity attributes, namely abundance,
 6 composition and distribution.

7 A number of specific issues, which are relevant to business and nature can be
 8 identified within this brief literature review. These issues include the belief that
 9 targets on halting biodiversity loss cannot be achieved without the full engagement
 10 of the private sector; the need for researchers to examine how companies can
 11 enhance, rather than destroy biodiversity; a view that large companies, are likely to
 12 be more active, in protecting nature, than their small and medium sized
 13 counterparts; the relevance of protecting nature to specific businesses; the value of
 14 setting goals; the role of the circular economy; and the importance of metrics and
 15 measurement.

18 **Frame of Reference and Method of Enquiry**

19
 20 In looking to explore why, and how, major companies have claimed to be
 21 protecting nature and biodiversity, the author adopted what might best be
 22 described as a simple opportunistic approach. More specifically, a preliminary
 23 search on Google, using the words, nature and businesses, as key terms, revealed
 24 that Broderick (2023), writing under the banner of the Ramboll Consultancy,
 25 identified 14 major commercial companies, namely, Google, Unilever, Danone,
 26 GSK, Kering, Coca Cola, Nike, Ben and Jerry's, Ikea, Johnson and Johnson,
 27 PepsiCo, The Body Shop, Walmart and Boeing, that were described as '*leading
 28 the way on biodiversity.*' These companies provided the frame of reference for this
 29 paper.

30 The author conducted a series of Internet searches, firstly using nature
 31 protection, biodiversity protection, and secondly, using the names of the selected
 32 14 selected companies, as key terms, on Google in December 2023. This search
 33 revealed that though all 14 companies provided some information on their
 34 environmental policies, only 8 of them, namely, Danone, Google, Ikea, Johnson
 35 and Johnson, Kering, PepsiCo, Unilever, and Walmart posted specific information
 36 on their approach to protecting nature and biodiversity. Brief pen pictures of these
 37 companies are provided at the end of this section of the paper.

38 This information provided the source material for this paper. This information
 39 was well clearly signposted, and the author took the considered view that a
 40 detailed content analysis would be unnecessary in an exploratory study. Rather, a
 41 close reading of the source material was undertaken and a number of major
 42 themes were identified. As the information was in the public domain, on the
 43 selected companies' websites, the author felt that it was not necessary to seek
 44 formal permission to use them. At times, the author explicitly quotes from the
 45 selected companies' websites, and here the aim is to add authenticity to the

narrative by exploring how the selected clothing retailers publicly expressed, and looked to evidence, their approaches to sustainability, in their own words.

Danone is a French multinational food company founded in 1919. The company specialises in nutritional supplements, both dairy and dairy-free products, coffee and bottled water. Google is a US multinational technology company, founded in 1989, and focused on artificial intelligence, online advertising, search engine technology, and computing, and it employs some 140,000 people. Ikea is a Swedish multinational company, founded in 1943, it designs and sells self-assembly furniture, kitchen appliance and home accessories, and trades from over 400 retail outlets. Johnson and Johnson is a multinational pharmaceutical and medical technologies company, founded in 1886, and it has a global workforce of 130,000 employees. Kering is a French global luxury goods company, and it has some 38,000 employees. PepsiCo is US multinational food and beverage company, founded in 1989, and it oversees the manufacturing, distribution and marketing of its products. Unilever, is a UK multinational fast-moving consumer goods company, founded in 1929, and it employs some 148,000 employees. Walmart is a US multinational retail corporation, it has 2.3 million employees, and trades from over 10,000 stores worldwide.

Findings

The information on the protection and restoration of nature and biodiversity posted by the eight companies varied in scope and content, but rather than looking to describe each company's approach in detail, the author looked to identify, and draw out, a number of general themes to provide a narrative account. More specifically, five interlinked themes were identified, namely an ambitious approach, a business led rationale, a commitment to the regeneration of forests, collaborative endeavours, and a focus on the supply chain, which collectively captured the selected companies' activities to protect and nature and biodiversity.

The selected companies' ambitious approaches to the protection of biodiversity and nature were articulated in a number of ways. Unilever (2023), for example, emphasised *'we have set out a range of ambitious targets to protect nature'*, and *'by increasing the scale of the action we're taking within our own business and in partnership with others, we can help to regenerate nature and build systems that protect biodiversity.'* Walmart (2023) claimed *'we aspire to become a regenerative company, one dedicated to placing nature and humanity at the center of our business practices. In support of this ambition, Walmart and the Walmart Foundation, have set a goal to help protect, more sustainably manage, or restore, at least 50 million acres of land and 1 million square miles of ocean by 2030.'*

Kering (2023a) reported launching a *'Biodiversity Strategy'* in 2020, and in so doing claimed to be *'creating a real paradigm shift.'* This strategy, is underwritten by a commitment *'to have a net positive impact on biodiversity by 2025, by regenerating and protecting an area about six times our total land footprint'* (Kering 2023b), and embraced three goals, namely stemming

biodiversity loss, restoring ecosystems and species, and triggering systemic change, and included four stages, namely *'Avoid'*; *'Reduce'*; *'Restore and Regenerate'*; and *'Transform.'* In the first stage the focus is on making decisions that do not have, or prevent, a negative impact on areas of high conservation, while in the third stage the aim is to restore ecosystems in areas where impact is unavoidable.

Many of the selected companies offered a business led rationale for protecting nature and biodiversity. Google (2023), for example, argued that *'investing in nature is an investment in our workers, our products, and our communities. We want nature and people to flourish together in the communities that Google calls home, as well as the ecosystems where we source food for the hundreds of cafes we operate.'* Johnson and Johnson (2023) recognised *'the importance of conserving biodiversity'* and *'believes it is an important shared responsibility'*, that *'nature has long played an integral role in the discovery of new medicines and ingredients'*, and that *'biological resources provide opportunities to develop lifesaving healthcare solutions and naturally derived product ingredients.'*

In his *'Foreword'* to Kering's (2023b) *'Biodiversity Strategy'*, Francoise-Henri Pinault, the company's Chief Executive Officer, claimed our *'products begin their lives in farms, fields, forests and other ecosystems around the world', and that 'the careful stewardship of these landscapes is fundamental to our continued success, and also linked to our responsibility on a broader global scale.'* In a similar vein, Marie-Claire Deveu, the company's Chief Sustainability Officer, argued *'biodiversity is intrinsically linked to our business, and the need for holistic integration with nature through a strategically-driven approach is critical for our entire industry, and beyond'* (Kering 2023b).

A commitment to forestry regeneration is a feature of many of the selected companies' approaches to nature and biodiversity protection. IKEA (2023), for example, emphasised that the company had been working *'with responsible forest management practices, where biodiversity considerations have been an integral part'* for over 20 years, and that *'all wood used in IKEA products is sourced from responsibly managed forests which do not contribute to deforestation'*, and, looking to the future, the company claimed that its *'2030 Forest Positive Agenda'* enshrined its commitment to *'further ramping up the work to enhance biodiversity globally'* (Ikea 2023). In a similar vein, PepsiCo (2023) *'is committed to doing business the right way and strives to realize deforestation-free sourcing in our company owned and-operated activities'* by 2025.

Danone (2022) claimed to recognise *'the urgent need to continue and amplify our effort in protecting and restoring forests'*, that this was *'not only a moral imperative but a business imperative as well'*, because *'as a global food business, we depend on healthy ecosystems and thriving communities where we source our raw materials'*, that *'combatting deforestation and conversion will strengthen our supply resilience and help pave the way for sustainable growth'*, and that *'our vision is to shift toward a forest-positive future, through protecting our remaining forests and regenerating what has been lost.'* The focus of this forest-positive

1 vision is to be on *‘forging new alliances to protect and restore land and support*
 2 *livelihoods of smallholders and local communities’* (Danone 2022).

3 A variety of collaboration partnership were also was also seen as important in
 4 tackling the problems of biodiversity and nature loss. Danone (2022), for example,
 5 emphasised *‘that collaboration sits at the heart of how we operate’*, that *‘our*
 6 *commitments extend beyond our own operations to cover our suppliers and*
 7 *manufacturers, so we will work closely to drive action and report progress along*
 8 *the value chain’*, and that *‘our forest positive vision means forging new alliances*
 9 *to protect and restore land and support livelihoods of smallholders and local*
 10 *communities.’* The company illustrated its collaborative commitments linked to
 11 soy production in Europe and South America, where it claimed to be preventing
 12 indirect land use change by supporting the expansion of production only on
 13 existing agricultural land, and by supporting financial incentives for landowners to
 14 protect native vegetation and forests. More generally, Danone reported
 15 contributing to a number of initiatives designed to protect and expand native
 16 forests.

17 Google claimed to be building tools and technologies that enabled a range of
 18 partners, including governments, non-governmental organisations and academics
 19 to help address nature and biodiversity loss. More specifically, Google reported on
 20 teaming up with Australia’s Commonwealth Scientific and Industrial Organisation
 21 to protect coral reefs, and on the development of a machine learning solution to
 22 analyse underwater images of some species of starfish which feed on living coral.
 23 Further illustrations of Google’s partnership activities focused on the collaboration
 24 with the Crowther Lab in Zurich designed to develop transparency, as well as
 25 connectivity to the biodiversity movement, and with Wildlife Insights to
 26 streamline biodiversity monitoring with the help of artificial intelligence, and to
 27 make it easier to collect and analyse data from remote cameras.

28 The selected companies looked to include their supply chains within their
 29 approach to the protection of nature and biodiversity. Unilever (2023), for
 30 example, emphasised that that the company was committed to a *‘deforestation-*
 31 *free supply chain by 2023’*, which meant that all the company’s palm oil, paper
 32 and board, tea, soya and coffee would come from *‘places verified as deforestation*
 33 *and conversion free, by which we mean that natural ecosystems haven’t been*
 34 *converted to farmland’*, that *‘we believe that, to make our greatest impact, we*
 35 *must focus first on generating change’*, and *‘that’s why we are concentrating on*
 36 *the first critical mile – from where our commodities are sourced, to where they are*
 37 *first processed.’*

38 PepsiCo (2023), emphasised its commitment to *‘doing business the right*
 39 *way’*, to striving *‘to realize deforestation free sourcing by 2030’*, and its
 40 recognition that the company had the opportunity to ensure that *‘we and our*
 41 *suppliers operate in accordance with applicable legal requirements, and practice*
 42 *responsible forest and natural ecosystem stewardship.’* More specifically, PepsiCo
 43 (2023) emphasised that the company will source from suppliers that strive to *‘use*
 44 *sustainable forest and natural ecosystem management practices in lands they own,*
 45 *lease, or manage to provide fiber, timber, and other ingredients’*, that it will
 46 *‘implement sustainable and regenerative agriculture practices, support resilient*

1 *livelihoods and communities, and support landscape approaches that enable*
 2 *sustainable agriculture production and thriving natural ecosystems to co-exist*,
 3 *and that it will ‘preserve biodiversity and cultural values and optimize the social,*
 4 *environmental, and economic benefits of managed forests and other natural*
 5 *ecosystems.’*

6 Ikea claimed to encourage its suppliers to include biodiversity in its plans,
 7 and in 2021 the company included biodiversity considerations in its updated
 8 supplier code of conduct, which looks to restrict business activities in areas of high
 9 conservation value. Google (2023, webpage) emphasised *‘we are focused on*
 10 *sourcing responsibly across our supply chain by procuring sustainable building*
 11 *and hardware materials and supporting biodiverse food systems’*, that *‘we*
 12 *procure building materials for development projects and hardware materials for*
 13 *products, while aiming to minimize negative impacts on global biodiversity’*, that
 14 *‘we work to ensure our food operations contribute positively to global*
 15 *biodiversity, and that ‘we leverage procurement practices and menu design to*
 16 *replace monocrop commodities with climate-resilient crops, and jumpstart local*
 17 *markets to support agrobiodiversity.’*

20 **Reflections**

21
 22 The findings revealed that the selected companies publicly claimed to be
 23 pursuing a variety of approaches designed to protect and restore nature and
 24 biodiversity, but five wider issues, namely, measurement, greenwashing, the
 25 concept of nature positive, unsustainable consumption, and a change in the
 26 dominant capitalism system, merit reflection and discussion. Although the selected
 27 companies publicly looked to address why, and how, they are addressing the
 28 protection of nature and biodiversity, while many are not: greenwashing, the
 29 process of providing misleading or false information, about the environmental
 30 impact of a company’s products or activities, must be seen as a potential problem.
 31 Here, there are three issues. Firstly, few, if any, of the selected companies’ claims
 32 are part of a rigorous analysis of their impact on nature and biodiversity, and are
 33 not subject to verification as part of an independent external assurance process.
 34 Secondly, while some of the selected companies draw attention to their initiatives
 35 designed to protect and restore nature and biodiversity, there is no evidence that
 36 such an approach characterises all their business activities. Thirdly, many of the
 37 selected companies rely heavily on their supply chains, and while they might
 38 emphasise the importance of suppliers setting nature protection and restoration
 39 policies in train, they had limited power to enforce such policies, without
 40 damaging their, often cheap, sources of supply.

41 Measurement is a key issue, not least in that the complexity of nature means
 42 that the development of an agreed set of metrics, and a methodology, to measure
 43 changes in nature and biodiversity, are difficult tasks. That said, some companies,
 44 do specialise in providing biodiversity assessment and measurement services to
 45 companies. NatureMetrics (2023), for example, claim to offer businesses the
 46 ability to *‘measure and report on nature with scalable biodiversity monitoring’*,

1 and *'to set meaningful goals aligned to science-based targets, build a roadmap for*
 2 *implementation, and mainstream nature in their organization.'* NatureMetrics
 3 claims to have worked with over 500 companies, including Tesco, Anglo
 4 American, MSC Cruises, Jacobs, and Nestlé, in over 100 countries. However, in
 5 reviewing some of the tools that help businesses to measure their performance on
 6 biodiversity issues, Katic et al. (2023) revealed that understanding the strengths
 7 and limitations of each of these tools, and of how they might respond to a
 8 business's needs, was not straightforward for companies, and that while *'these*
 9 *tools contained significant requirements related to biodiversity conservation, their*
 10 *implementation, being driven by market forces, is, at best, only partially aligned*
 11 *with global targets for biodiversity protection.'* This led Katic et al. (2023) to
 12 conclude *'there is a growing need to develop a common view among key*
 13 *stakeholders on the measurement, monitoring, and disclosure of corporate*
 14 *biodiversity impact and dependencies to help integrate more credible and*
 15 *comprehensive indicators of corporate contribution to global biodiversity goals*
 16 *into corporate reporting and global policy frameworks.'*

17 For some conservationists, the ultimate goal of initiatives designed to turn the
 18 tide of nature and biodiversity loss is seen to be crystallised around the concept of
 19 nature positive. The World Wildlife Fund (2023) defined nature positive *'as*
 20 *halting nature loss, measured from 2020 levels, by increasing the health,*
 21 *abundance, diversity, and resilience of species, populations, and ecosystems, so*
 22 *that by 2030 nature is visibly and measurably on the path of recovery.'* However,
 23 while the concept of nature positive might seem to be an attractive goal, there are
 24 concerns that it may be captured by businesses for their own ends, or that it may
 25 pose unacceptable challenges for businesses. On the one hand, Silva (2022),
 26 writing under the Greenpeace banner, argued that *'the nature positive agenda*
 27 *promotes the financialisation of nature'*, that *'nature positive is more focused on*
 28 *saving a failed economic model than on protecting biodiversity'*, and that nature
 29 positive could enable corporate decision makers, and potentially governments, to
 30 *'distract, defer and obscure their harm for nature.'* On the other hand, while many
 31 companies might express their support for, and commitment to, a number of nature
 32 positive initiatives, it may pose unacceptable challenges for businesses.

33 Initiatives designed to reduce the loss of nature and biodiversity, to introduce
 34 restorative programmes, and to move towards a nature positive business future, are
 35 seen to be important in contributing to sustainable development, and ultimately to
 36 a transition to a more sustainable future. However, current levels of consumption,
 37 principally in western societies, which are largely responsible, for example, for
 38 increases in the land given over to food production, and for new tourism
 39 developments, are one of the principal drivers of the continuing loss of
 40 biodiversity and nature, and are ultimately unsustainable in a world of finite
 41 natural resources. That said, changing consumption behaviour, and curbing
 42 consumption, poses major challenges, not least in that many consumers are
 43 unlikely to reduce their consumption levels voluntarily, in part because
 44 consumption has become an important element of many people's identity, and in
 45 part such a change could be seen as a retrograde step in societies, where what are
 46 seen as continuing improvements in lifestyles, have become the norm.

More fundamentally, there are arguments, rooted in Marxist political economy, that under capitalism, nature and biodiversity are commodities, feeding continuing economic growth, and that it is the workings of the capitalist system, that is the underlying cause of the global nature crisis. As such, the only genuine solution to problems attendant upon the loss of nature and biodiversity must be grounded in a radical change in the dominant global economic system, and in confronting capitalism. In theory, the development of a new alternative global economic model, centred on abandoning economic growth and prioritising the welfare of the planet, offers a way forward, but such a model currently seems unlikely, at best, to find more than token support in political and business communities.

Conclusions

This paper looks to explore why, and how, eight large companies have publicly claimed to be protecting nature and biodiversity. By way of a summary, the findings revealed that five interlinked themes, namely an ambitious approach, a business led rationale, a commitment to the regeneration of forests, collaborative endeavours, and a focus on the supply chain, effectively captured the selected companies' activities to protect nature and biodiversity. While a number of the issues identified in the literature review were reflected in the selected companies' approaches to the protection of nature and biodiversity, the companies did not report on how either the circular economy was facilitating this process or on metrics and measurement. At the same time, the author argued that measurement, greenwashing, the concept of nature positive, unsustainable consumption, and a change in the dominant capitalism system, were all important wider issues in exploring the role of companies in protecting and restoring nature and biodiversity.

The paper has a number of limitations, not least that it draws its empirical information from the corporate websites of a limited number of companies, and in that it involves the author's selection of material from these websites. That said, the author believes it makes a modest contribution to helping to fill the gap in business and management literature identified earlier, on how companies are addressing the protection of nature and biodiversity, and that it may provide a platform for future research agendas. Such research agendas might, for example, include more detailed empirical investigations, into why, and how, companies develop programmes designed to protect and restore nature and biodiversity; how they look to measure reductions and improvements in nature and biodiversity associated with their activities; and the extent to which a company's approach to nature and biodiversity protection influences customers' patronage and buying behaviour.

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