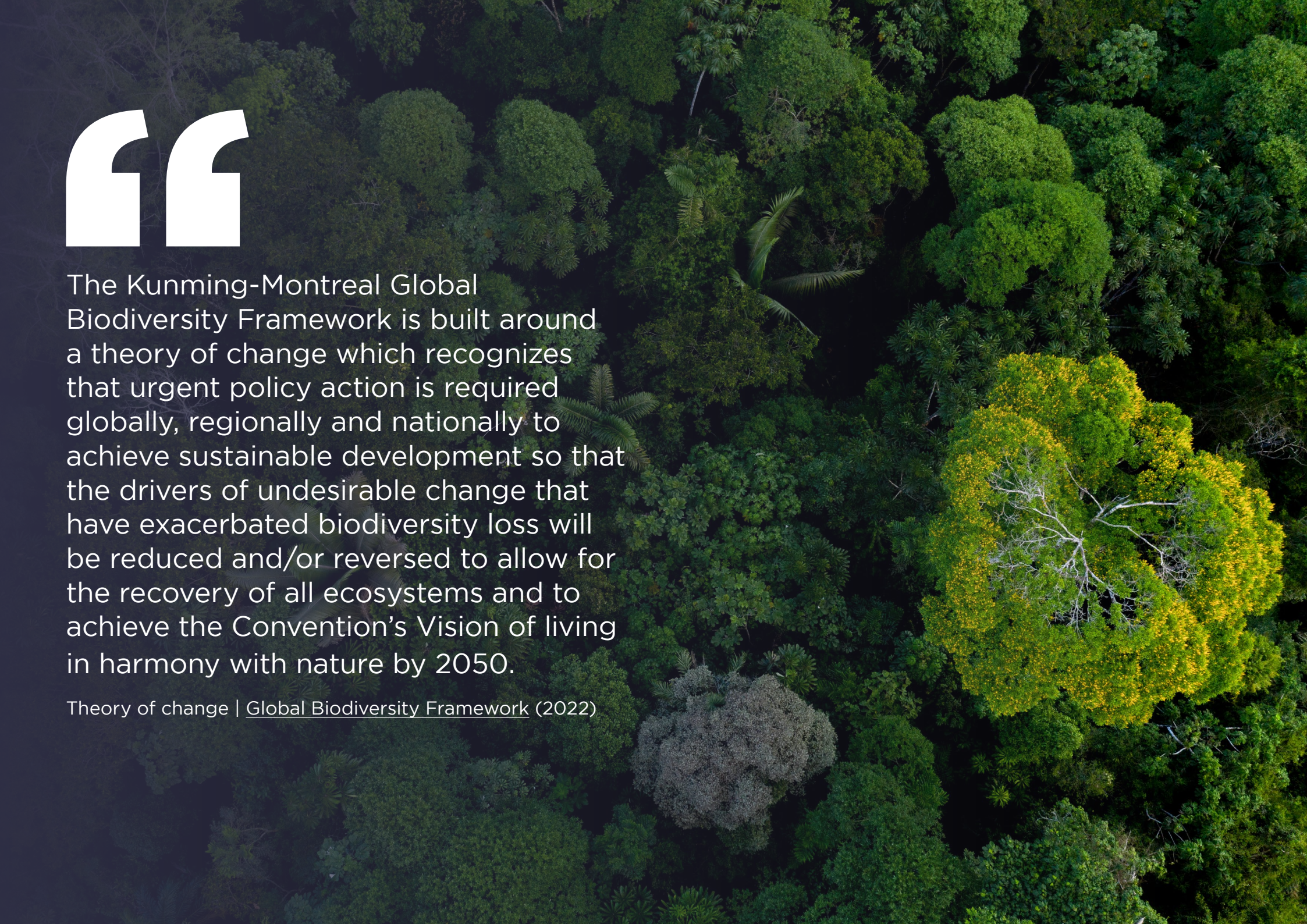
ELLEN MACARTHUR FOUNDATION

POLICY BRIEF

Scaling action for nature:

How the circular economy can help deliver the **Global Biodiversity Framework**



The Kunming-Montreal Global Biodiversity Framework is built around a theory of change which recognizes that urgent policy action is required globally, regionally and nationally to achieve sustainable development so that the drivers of undesirable change that have exacerbated biodiversity loss will be reduced and/or reversed to allow for the recovery of all ecosystems and to achieve the Convention's Vision of living in harmony with nature by 2050.

Theory of change | Global Biodiversity Framework (2022)

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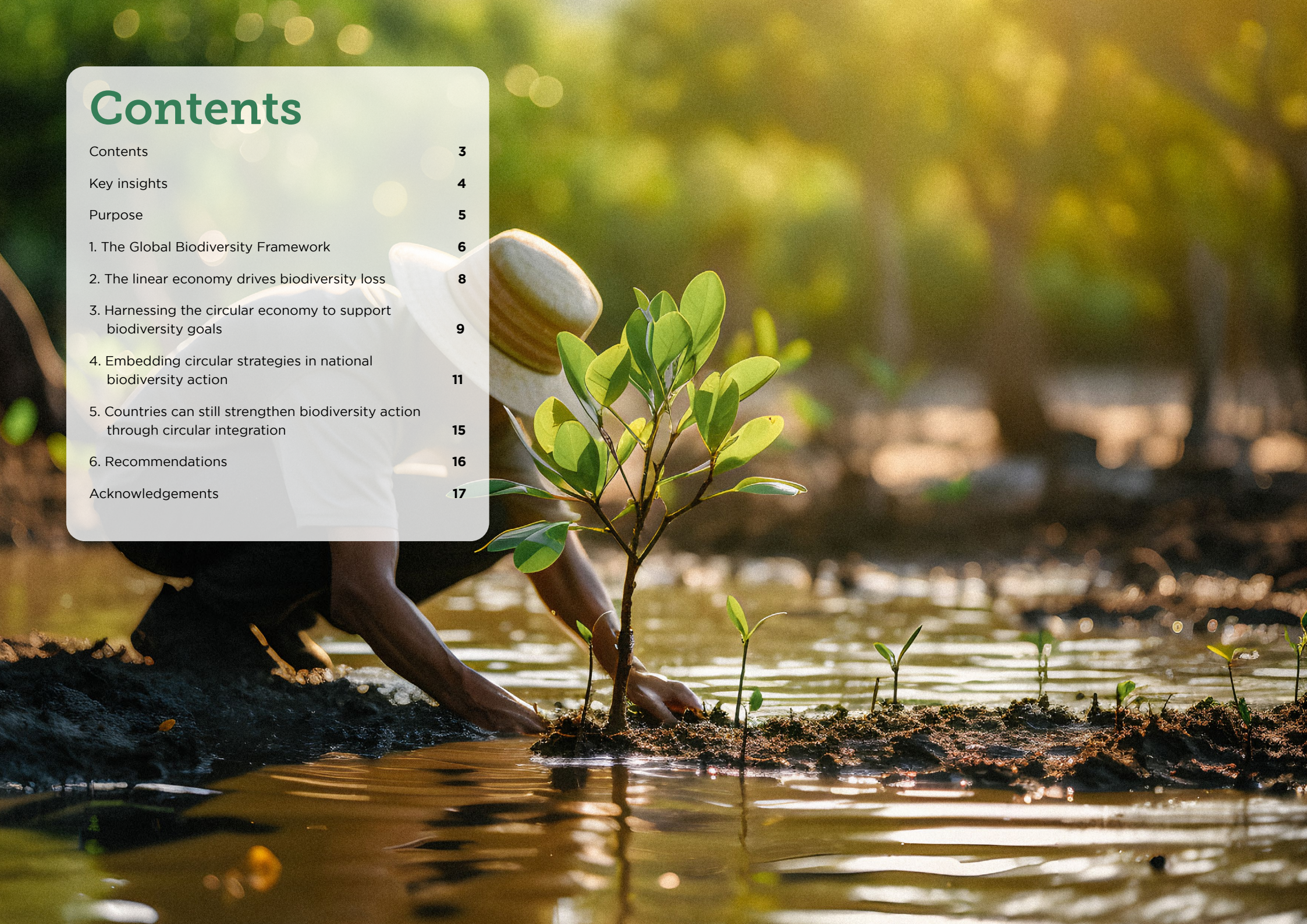


Key insights

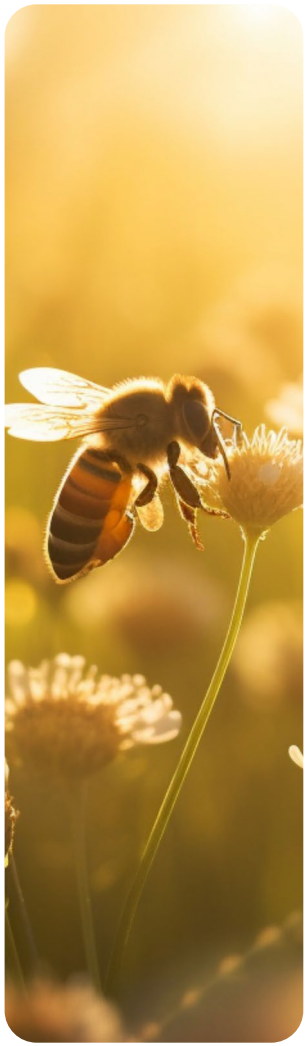
- The circular economy helps tackle the underlying cause of biodiversity loss by generating economic value in ways that not only prevent further decline but also rebuild biodiversity. Circular approaches should form an essential part of the economic changes advocated for in biodiversity discussions, including those involving the implementation of the Kunming-Montreal Global Biodiversity Framework (GBF).
- The circular economy can strengthen the delivery of all 23 GBF targets. Integrating circular approaches into national implementation of Targets 14, 15, 16, 18, and 19 can create a positive cascade across the whole GBF agenda, supporting both biodiversity mainstreaming and resource mobilisation.
- There remains untapped potential to embed circular economy approaches in the National Biodiversity Strategies and Actions Plans (NBSAPs) to reinforce the delivery of biodiversity targets. While the updated NBSAPs do not yet provide a blueprint for how the circular economy can contribute to implementation at national levels, the process offers a springboard for partnerships, including with the business sector to harness interest, stimulate investment, and drive uptake of circular business models.
- Because agriculture, forestry, and other bio-based sectors are major drivers of biodiversity loss, countries should prioritise greater coherence across biodiversity, bioeconomy, and circular economy policies. Embedding circular approaches into these sectors can position them to more effectively deliver against the biodiversity targets, with agriculture and food systems offering a particularly high-impact entry point.
- The upcoming seventh national reports to the Convention of Biological Diversity (CBD), due by February 2026, mark an opportune moment for countries to identify concrete synergies between the implementation of the circular economy and biodiversity agendas, with a view to showcasing best practice at the seventeenth Conference of the Parties to the CBD (COP17) at the end of that year.

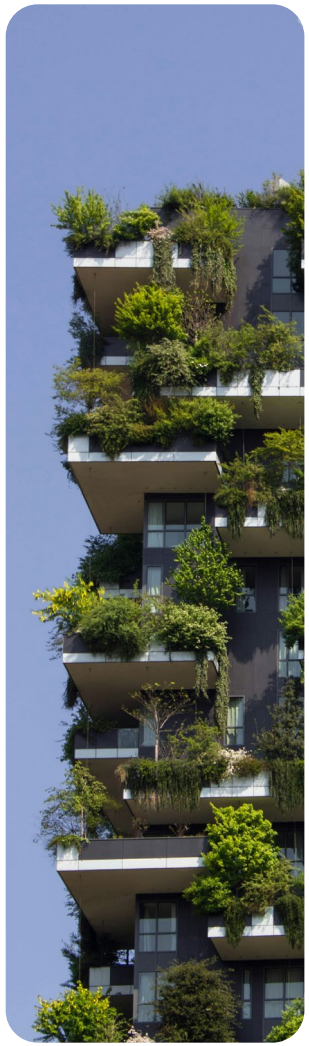
Purpose

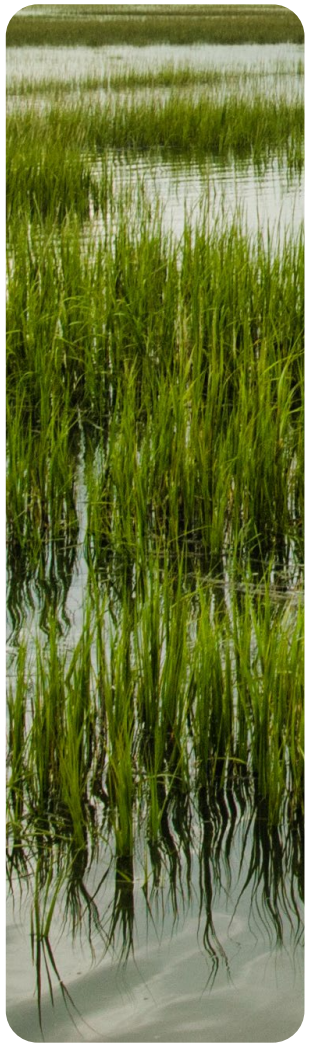
This policy brief aims to shed light on the circular economy's role as a systems approach to delivering the Kunming-Montreal Global Biodiversity Framework (GBF) and addressing the global biodiversity crisis.

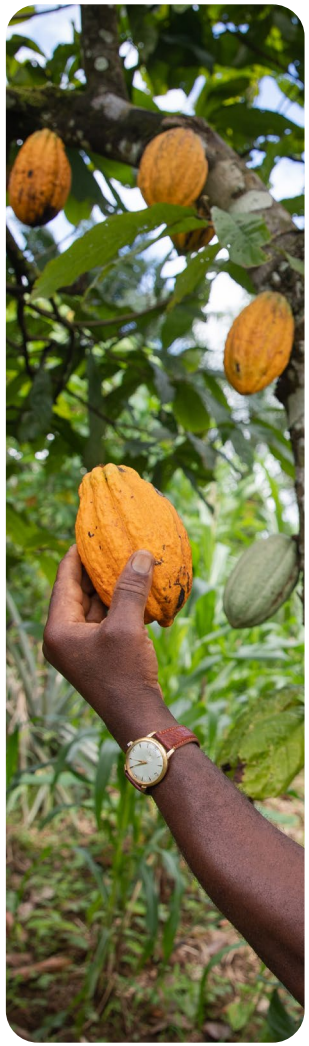
The circular economy does not explicitly feature in the GBF. As a concept, it is not firmly understood within the biodiversity community, and is often narrowly associated with waste reduction, particularly in the plastics sector. This risks obscuring the broad potential of circular approaches across sectors to help achieve biodiversity objectives, including through improved resource use, sustainable land management, and funding mobilisation.

The brief outlines how such approaches can support the delivery of GBF targets and how countries can incorporate them into national-level implementation. It also underscores the circular economy's potential to transform the whole economic system into one that values, preserves, and regenerates nature – a transformation essential to the GBF's long-term success.









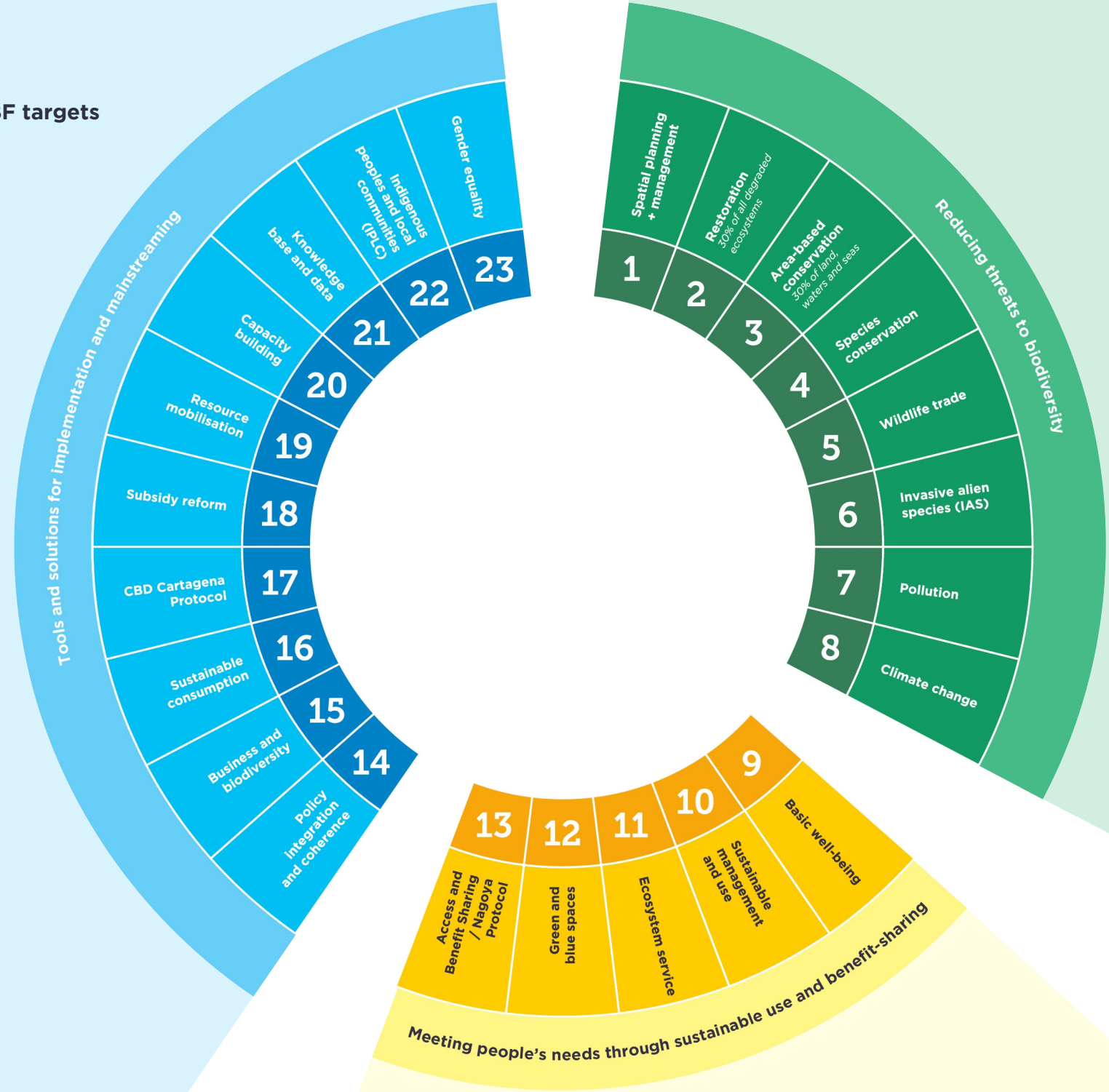
1 The Global Biodiversity Framework

The GBF was adopted in December 2022 at the fifteenth meeting of the Conference of Parties (COP15) to the Convention on Biological Diversity (CBD) in Montreal, Canada. With the global biodiversity from ecosystems to species continuing an unprecedented decline,[1] the GBF sets a common vision for 2050 and a detailed action plan for 2030 for countries to halt and reverse biodiversity loss – for the benefit of people and the planet.

Consisting of four goals and 23 targets, the GBF focuses on creating action on three specific fronts: reducing threats to biodiversity including through conservation and restoration (Targets 1–8), ensuring sustainable and equitable use of biodiversity resources (Targets 9–13), and creating overall enabling conditions for the GBF implementation (Targets 14–23) (Figure 1). The targets are interdependent: progress in conservation, restoration, and sustainable use relies on the effective mainstreaming of biodiversity considerations into economic sectors, consumption behaviours, business practices, and financial systems.

Countries implement the GBF through their National Biodiversity Strategies and Action Plans (NBSAPs), which translate the global framework into actionable, country-specific targets and measures. One of the key roles of NBSAPs is to help governments plan and secure the financial, technical, and human resources needed, and to provide a platform for stakeholders to participate in biodiversity-related decision-making and implementation. The GBF implementation process leaves countries ample room to establish approaches and measures for delivering the targets in the national contexts, including establishing necessary partnerships and identifying means for finance. While the progress of updating NBSAPs to reflect the GBF objectives has been slow, the majority of countries have by now submitted their NBSAPs or national targets to the CBD (Box 1). Yet with broad flexibility in how each country delivers the GBF, there is a risk that the most transformative approaches go ignored.

Figure 1. The GBF targets



2 The linear economy drives biodiversity loss

There is an evidence-based consensus that biodiversity loss and ecosystem degradation are primarily driven by resource-intensive, emission-heavy, and polluting provisioning systems that have supported economic development to date. While this economic development has brought greater prosperity for many, it relies on a predominantly linear 'take-make-waste' system that places a huge burden on nature.[2]

This extractive and wasteful mode of production and consumption underpins the key drivers for biodiversity loss, from direct overexploitation and changes in land and sea use to climate change and pollution.[3] Over 90% of the world's total land-related biodiversity loss and water stress, as well as one third of greenhouse gas (GHG) emissions, can be attributed to the extraction and processing of biomass including food, timber, bioenergy, and fisheries.[4]

Accordingly, the GBF calls for the transformation of key economic sectors to address biodiversity loss at its root, namely unsustainable production and consumption patterns. This focus stems from two consecutive decades of countries failing to meet the global biodiversity objectives.

3 Harnessing the circular economy to support biodiversity goals

"The circular economy is a systems solution framework that tackles global challenges like climate change, biodiversity loss, waste, and pollution. It is based on three principles, driven by design: eliminate waste and pollution, circulate products and materials (at their highest value), and regenerate nature."

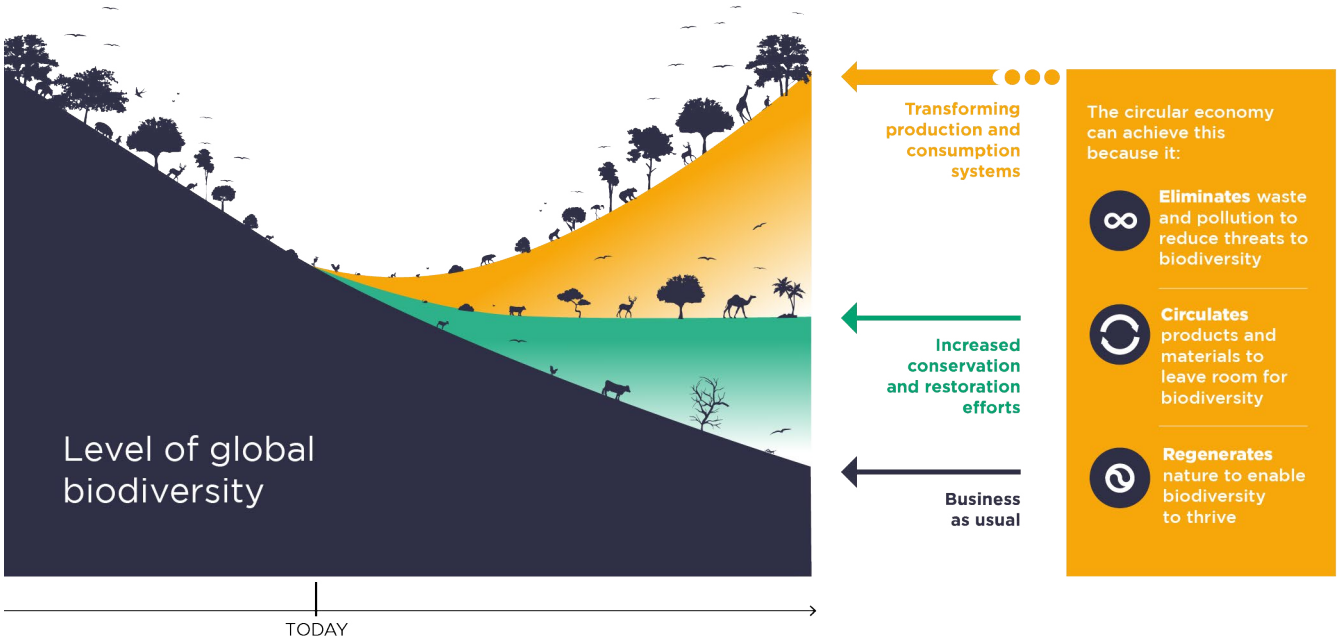
Ellen MacArthur Foundation

As a system-level transformation, the circular economy offers a delivery mechanism to tackle the underlying causes of biodiversity loss by generating economic value in ways that not only prevent further decline but also rebuild biodiversity. Unlike the linear economy, which creates value by depleting and consuming natural resources, the circular economy keeps products and materials in use at their highest value or returns them to the environment to support ecosystem health. The three core principles of the circular economy cohesively deployed can help achieve global biodiversity targets and reduce threats to biodiversity, ease pressures exerted on ecosystems by resource use and land conversion, and create opportunities for the uptake of nature-based solutions and regenerative approaches (Figure 2). As a solution framework, the circular economy can help secure the functioning of ecosystems and the long-term provision of ecosystem services.

Applying circular economy principles helps meet several core GBF targets. Circulating products and materials at their highest value reduces needs for land and (primary) resource use, leaving more space for conservation and restoration (**Targets 2, 3, and 4**). Designing out waste reduces threats to biodiversity and supports sustainable use by eliminating pollution and lowering emissions, while opportunities related to nature-based solutions strengthen climate mitigation and adaptation efforts (**Targets 7 and 8**). Applying regenerative approaches to production supports the sustainable management and use of resources, and the maintenance and restoration of ecosystems and ecosystem services (**Targets 10 and 11**). Designing cities to be nature-positive and circular increases the sustainability and resilience of built environments and urban planning approaches (**Target 12**)**.**

The biodiversity benefits of the circular economy can be demonstrated across sectors. A transition to a circular economy approach across sectors globally could, by 2050, reduce the area of agricultural land by 640 million hectares and save 280 million hectares of forest habitats.[5] In addition, applying circular economy measures to five key materials (cement, plastics, steel, aluminium, and food) can reduce annual global emissions by 9.3 billion tonnes a year in 2050 – 5.6 billion tonnes in the food sector and 3.7 billion tonnes in industrial materials – which represents a 45% reduction from business as usual.[6]

Figure 2. The circular economy can bend the curve on biodiversity loss*



* Source Ellen MacArthur Foundation (2021) | This image is an adaptation of that presented by the Secretariat of the CBD's report Global Biodiversity Outlook 5 (2020) and the Nature article Bending the curve of terrestrial biodiversity needs an integrated approach (2020). It does not intend to accurately represent the impact of potential scenarios.

Analysis of individual sectors has shown that such results can be achieved in ways that offer economic opportunities:

- In the **plastics sector**, it has been estimated that by 2040 the circular economy could reduce the annual volume of plastics entering the oceans by 80% globally while reducing GHG emissions from that industry by 25%, generating savings of USD 200 billion per year, and creating 700,000 net additional jobs.[7]
- In the **fashion sector**, every 1% increase in the market share of profitable circular business models – resale, rental, repair, remaking – could reduce global GHG emissions by 13 million tonnes,[8] while applying circular economy levers to the global fibres and textiles sector could reduce the area of land given over to cotton production by 24 million hectares.[9]
- In the **food sector** designing products to make use of the outputs of regenerative farming systems, and using lower-impact, diverse, and upcycled ingredients could, in the EU and UK, lead to a 50% reduction in biodiversity loss compared with conventional agriculture while increasing food production – and the average profitability for farmers – per hectare.[10]
- In the **built environment**, circular economy strategies in Europe could help avoid 7,700 km^2 of urban sprawl by focusing on redeveloping brownfield sites and add 8,500 km^2 of green-blue spaces to cities by expanding tree canopies, vegetation, and areas of water – while generating annual revenues of EUR 575 billion by 2035.[11]

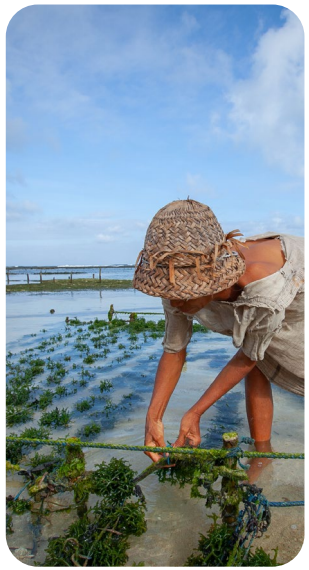
For more information, including further quantitative estimates of the benefits generated by nature-positive, circular approaches, please consult www.ellenmacarthurfoundation.org.

4 Embedding circular strategies in national biodiversity action

Integrating circular economy approaches into GBF implementation will be crucial to reversing the underlying causes of biodiversity loss. A system-level transformation, the circular economy can contribute to delivering all 23 targets – provided its principles are applied across economic sectors (Table 1).

Circular approaches are particularly integral as tools and solutions for the implementation and mainstreaming of global biodiversity goals (Targets 14–23), while also creating a positive cascade across the remaining targets:

- **Targets 14 and 15:** By design, the circular economy embeds biodiversity considerations into production and consumption systems – from agriculture, fisheries, and forestry to mining and construction – and into sectoral decision-making processes. Circular policies and related policy instruments also send clear signals to business: to reduce negative impacts on nature and build it back, adopt circular business models, and account for biodiversity impacts.[12] A core requirement under Target 15 is for companies to disclose their biodiversity commitments, impacts, and dependencies. Adopting circular strategies and tracking their performance and impact will facilitate this disclosure. In turn, the disclosures will increase transparency and accountability, and support a systemic tracking of biodiversity-related risks and contributions. The resulting data will help to inform the Target 15 implementation efforts.
- **Target 16:** The circular economy reconfigures production and consumption systems to reduce land-use change, pollution, and overexploitation. Reuse, repair, and remanufacturing decrease demand for virgin materials, particularly those whose extraction drives biodiversity loss, such as timber, metals, and agricultural land. Circular business models like product-as-a-service, sharing platforms, and take-back schemes enable people to meet needs with fewer, more resource-efficient products.[13] As circular, nature-positive products become more available and traceable, consumers are able to choose options that support biodiversity better than the industry average – for instance, food and bio-based goods produced through regenerative practices.[14]
- **Targets 18 and 19:** Circular economy strategies can strengthen both resource mobilisation and subsidy reform. By shifting practices away from extraction and unsustainable use towards regeneration, reuse, and preventing pollution, these strategies offer investment opportunities that match business value with biodiversity outcomes, helping to attract private finance and engage the business sector.[15] Investments totalling USD 334 billion have already been made in circular economy solutions globally[16] and the potential value of circular markets in the EU alone by 2040 could be EUR 1.5 trillion.[17] Examples of value creation include the second-hand apparel market, which was worth USD 119 billion in 2024,[18] the global upcycled food market, which is worth an estimated USD 61 billion in 2025,[19] and the global regenerative agriculture market, which is projected to be worth USD 39 billion by 2034.[20] Further, it's estimated that circular business models such as repair, resale, rental, and remaking could be worth USD 700 billion by 2030, making up 23% of the global fashion market.[21] These economic gains create viable ground for governments to redirect existing subsidies towards circular, nature-positive solutions, accelerating progress on both financing (Target 19) and reforming harmful incentives (Target 18).[22]



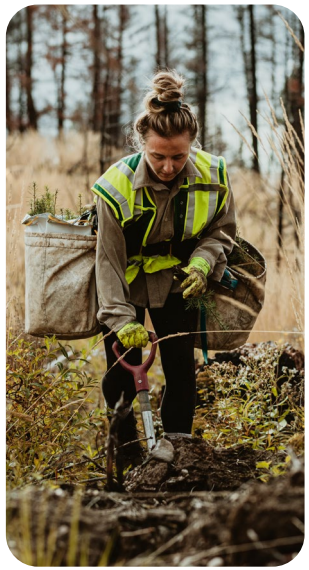


Table 1. Qualitative target-by-target assessment of how circular economy approaches support the GBF targets

2030 Biodiversity targets		How circular economy supports target delivery
1	**Spatial planning and management:** plan and manage all areas to reduce biodiversity loss	• Nature-positive, circular approaches to land and resource management can form an integral part of spatial planning in urban and agricultural environments, supporting biodiversity conservation and restoration while simultaneously delivering social and economic benefits.[A,B]
2	**Restoration:** restore 30% of all degraded ecosystems	• Circular economy supports regenerative approaches to ecosystem management across farms, forests, and urban areas to help restore biodiversity while improving economic and social outcomes.[A,B]
3	**Area-based conservation:** conserve 30% of land, waters, and seas	• Circular economy helps to eliminate waste and pollution. This reduces threats to species and habitats, contributing to and facilitating conservation efforts.[E, L] • Circulating products and materials at their highest value reduces needs for land and (primary) resource use, leaving more space for conservation and restoration.[C] • Circular economy supports regenerative approaches that can underpin species / habitat conservation and ecosystem restoration.[A, B ,C]
4	**Species conservation:** halt species extinction, protect genetic diversity, and manage human-wildlife conflicts	• Circular economy supports regenerative approaches that can underpin species / habitat conservation and ecosystem restoration.[A, B, C]
5	**Wildlife trade:** ensure sustainable, safe and legal harvesting and trade of wild species	• Regenerative management of ecosystems and species helps to maintain and restore healthy wildlife populations.[C] • Sustainable wildlife harvesting can be supported by reducing threats to species from waste and pollution, circulating products and materials to reduce pressure on ecosystems, and engaging in regenerative agriculture and forestry methods to improve ecosystem health.[C]
6	**Invasive alien species (IAS):** reduce the introduction of IAS by 50% and minimise their impact	• Circular and regenerative approaches can encourage the use of native species as low-impact alternatives. They can also drive the diversification of species currently used in forestry, agri- and aquaculture in favour of native alternatives (e.g. as ingredients for food production). Both of these aspects can help to reduce the risk of invasion associated with the use of non-native species while also supporting IAS control as part of regenerative approaches.[A, J] • Circular economy can reduce vectors for IAS (e.g. plastics pollution in marine ecosystems or the need for long-distance transport when shifting to closed- or short loop circulation of materials).[C]
7	**Pollution:** reduce pollution to levels that are not harmful to biodiversity (e.g. nutrients, chemicals, pesticides, and plastic waste discharge)	• Eliminating waste and pollution (e.g. plastics waste and pollution, chemicals, excess nutrients) is integral to the circular economy framework.[C, E, L]

2030 Biodiversity targets		How circular economy supports target delivery
8	**Climate change:** minimise the impacts of climate change on biodiversity and build resilience (e.g. mitigation and adaptation through nature-based solutions and/or ecosystem-based approaches)	• Circular economy is key to reducing the 45% of global GHG emissions associated with the production and consumption of products and goods. This is achieved by reducing demand for virgin steel, aluminium, cement, and plastics, and the emissions associated with their production, keep products in use, using regenerative agricultural practices, and designing out food waste.[A, B, D, F, G, K] • Circular and regenerative approaches, including nature-based solutions, can support climate adaptation across ecosystems (urban, agricultural, etc.). For example, regenerative agriculture improves the water infiltration and retention properties of soils, increasing their resilience to droughts and floods, and increasing tree canopies and expanding green spaces can help reduce urban peak temperatures by up to 3°C.[A, B, D, F]
9	**Basic well-being:** manage wild species sustainably to benefit people	• As Target 5
10	**Sustainable management and use:** enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry	• Circular economy supports regenerative approaches to agriculture, forestry, fisheries, and aquaculture, including the adoption of closed loop nutrient and water cycles, diversification, and opting for lower-impact species.[A, C, J] • Circular economy helps eliminate waste and pollution which in turn supports retaining the health and quality of soils, forests, and marine and inland water ecosystems.[C]
11	**Ecosystem services:** restore, maintain, and enhance nature's contributions to people	• Nature-positive, circular approaches support the maintenance and restoration of ecosystems and ecosystem services.[A, B, C]
12	**Green and blue spaces:** enhance green spaces and urban planning for human well-being and biodiversity	• Nature-positive, circular approaches are integral to increasing the sustainability and resilience of built environments and urban planning approaches.[B]
13	**Access and Benefit Sharing / Nagoya Protocol:** increase the sharing of benefits from genetic resources, digital sequence information, and traditional knowledge	• To be in line with the GBF Target 13, bio-based solutions and innovations need to support the fair sharing of benefits and due acknowledgement of traditional knowledge where applicable. This in turn can help financing conservation and sustainable use efforts in the place of origin. As such, circular, bio-based innovations can play an active role in implementing the Nagoya Protocol on Access and Benefit Sharing.
14	**Policy integration and coherence:** integrate biodiversity in decision-making at every level	• Circular economy approaches can be vehicles to integrate biodiversity-related considerations – directly or indirectly – into policy frameworks across economic sectors and at municipal, regional, national, and supranational levels.[A, B, C, H]
15	**Business and biodiversity:** businesses assess, disclose, and reduce biodiversity-related risks and negative impacts	• Nature-positive circular business models (CBMs) can form a framework for businesses to assess and disclose their biodiversity dependencies. Adopting circular strategies and tracking their performance and impact will facilitate this disclosure. In turn, the disclosures will increase transparency and accountability, and support a systemic tracking of biodiversity-related risks and contributions. The resulting data will help to inform the Target 15 implementation efforts.[J] • Nature-positive CBMs reduce negative and increase positive business impacts on biodiversity, and can mitigate risks related to biodiversity and nature dependencies (e.g. in sourcing ingredients for food products).[A, B, J]

2030 Biodiversity targets		How circular economy supports target delivery
16	**Sustainable consumption:** enable sustainable consumption choices to reduce waste and overconsumption	• The circular economy reduces waste across the economy and its associated threats to ecosystems.[C, E] • Greater availability and traceability of nature-positive, circular products enable consumers to choose options that are better for biodiversity than the industry average (e.g. regenerative approaches to producing food and other bio-based products).[A, J]
17	**CBD Cartagena Protocol:** strengthen biosafety and distribute the benefits of biotechnology	• To be compatible with the GBF Target 17, biotechnology innovations for the circular economy should support fair sharing of benefits. As such, circular innovations can play a role in implementing the Cartagena Protocol.
18	**Subsidy reform:** reduce harmful incentives by at least USD 500 billion per year, and scale up positive incentives for biodiversity	• Circular approaches (e.g. CBMs) can form an economically appealing alternative for governments looking to re-target existing subsidies and, as such, can help to accelerate subsidy reform.[A, B, H]
19	**Resource mobilisation:** mobilise USD 200 billion per year for biodiversity from all sources, including USD 30 billion through international finance	• Circular approaches (e.g. CBMs) offer economically attractive routes to ecosystem restoration, regenerative resource management, and GHG emission reduction and so can attract funding directly or indirectly aimed at improving biodiversity.[A, B, I]
20	**Capacity building:** strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity	• Adoption of nature-positive, circular approaches (e.g. CBMs) can directly or indirectly facilitate technology transfer and cooperation, and also have wider capacity building benefits (e.g. related to regenerative agriculture or solutions for the built environment).[A, B, G, H, K]
21	**Knowledge base and data:** Ensure that knowledge is available and accessible to guide biodiversity action	• Adoption of nature-positive, circular approaches (e.g. CBMs) can directly or indirectly facilitate knowledge gathering for biodiversity, including as part of cooperation with farmers on circular design for food products (regenerative approaches, diverse ingredient portfolios, etc.)[A, B, J]
22	**Indigenous peoples and local communities (IPLC):** ensure participation in decision-making and access to justice and information related to biodiversity for all	• Adoption of nature-positive, circular approaches (e.g. CBMs) can facilitate IPLC participation, including as part of identification and adoption of regenerative approaches.[A] • Landscape approaches to support circular and sustainable food systems can facilitate IPLC participation.[A, J]
23	**Gender equality:** ensure gender equality and a gender-responsive approach for biodiversity action	• Adoption of nature-positive, circular approaches (e.g. CBMs) can directly or indirectly facilitate gender-responsive approaches.

A Ellen MacArthur Foundation, The big food redesign (2021)

B Ellen MacArthur Foundation, Building prosperity (2024)

C Ellen MacArthur Foundation, Nature imperative (2021)

D Ellen MacArthur Foundation, Completing the picture: How the circular economy tackles climate change (2021)

E Ellen MacArthur Foundation, Towards the circular economy (Vol. 1) (2013)

F Ellen MacArthur Foundation, Growth within: a circular economy vision for a competitive Europe (2013)

G Ellen MacArthur Foundation, A 'triple play' solution for achieving China's climate objectives (2024)

H Ellen MacArthur Foundation, Universal circular economy policy goals (2021)

I Ellen MacArthur Foundation, Financing the circular economy - Capturing the opportunity (2020)

J Ellen MacArthur Foundation, 10 ways to unlock the potential of circular design for food (2025)

K Ellen MacArthur Foundation, An innovation pathway to decarbonization (US) (2024)

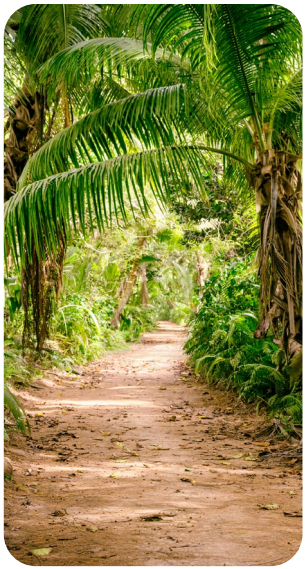
L Ellen MacArthur Foundation, New plastics economy: Rethinking the future of plastics & catalysing action (2017)

5 Countries can still strengthen biodiversity action through circular integration

Despite this significant potential, most countries have not reflected circular approaches in their updated NBSAPs. Our assessment of the updated NBSAPs and national targets reveals that, while 37 countries out of 147 (25%) reference the circular economy as a means to support the delivery of their biodiversity targets, these references are often limited in scope and lacking in depth (Box 1). Mentions are most often tied to plastics and waste, with only a few countries connecting circularity to the bioeconomy, built environment, or sustainable consumption. This is a missed opportunity, especially given that growing and harvesting biomass are among the greatest stressors on biodiversity. Few NBSAPs take circular approaches to bio-based sectors like agriculture and forestry or bioeconomy strategies to strengthen the delivery of biodiversity plans and targets.

Countries can still reflect circular approaches in their NBSAPs implementation – but the window for meaningful integration is narrowing. The assessment of the previous global biodiversity targets shows that, while more governments and businesses are developing plans for sustainable production and consumption, these are not being implemented on a scale that matches the negative impact of unsustainable activities and mounting resource pressures on ecosystems.[23]

Securing sufficient biodiversity funding remains a major challenge. Although the headline target of mobilising USD 200 billion a year by 2030 (Target 19) was set in 2022, it took until 2025 to agree a delivery roadmap.[24] Both public and private sources are recognised as a necessary part of the solution, but given the ongoing cuts to countries' sustainability finance, hopes for progress have been pinned on the latter. Nature-positive, circular business models (as part of Targets 15 and 16 above) offer a compelling route through this context: they help mitigate supply chain risks, reduce infrastructural exposure to natural hazards and disasters, and align with emerging disclosure and sustainability requirements.



Box 1. Tracking circular economy uptake in NBSAPs and national targets

147 out of 196 Parties to the CBD have updated their national plans to reflect the GBF objectives and submitted those to the CBD, either in the form of updated NBSAPs (57) or as updated national targets (90).[25]

Explicit references to circular economy

- **42%** (24 countries out of 57) mention the circular economy in their NBSAPs as a means to support the delivery of their biodiversity objectives (one or more mentions).
- When counting both NBSAPs and submitted updated targets, the figure drops to **25%** (37 countries out of 147).

Context and depth of integration

- **54%** of countries (20 out of 37) that reference the circular economy do so in relation to only one target or theme.
- **Plastics** are the most cited area in connection with the circular economy (12 countries out of 147) followed by **waste** (7 countries out of 147), **consumption and production** (5 countries out of 147), and **bioeconomy** (5 countries out of 147).
- Some countries also made links between circular economy and the delivery of biodiversity objectives through areas such as climate and decarbonisation, built environment and planning, and fiscal instruments and investment.

6 Recommendations

Governments, supported by the private sector and other stakeholders, should consider the following as they implement their NBSAPs:

Explicitly recognise the circular economy's potential to transform the whole economic system into one that values, preserves, and regenerates nature. Key system-level shifts already recognised in the biodiversity discussions include integrating biodiversity data into the frameworks that inform the system (e.g. national capital accounting), aligning economic incentives to support biodiversity (e.g. both public subsidies and private finance), and deploying economic instruments (e.g. green public procurement and environmental taxes).[26] The uptake of circular approaches across all economic sectors is an essential addition to these efforts, offering a means of doing business and reshaping economic systems that is compatible with both biodiversity and climate objectives.

Embed the circular economy into all stages of GBF delivery and national planning. Apply circular approaches as cross-cutting drivers of progress, particularly for **Targets 14** (mainstreaming), **15** (business action), **16** (sustainable consumption), **18** (incentive reform), and **19** (resource mobilisation), which together create the enabling conditions for success. Use the NBSAPs implementation process to embed circular approaches and business models across sectors, and improve the coherence of biodiversity, circular economy, and bioeconomy policies in practice. Prioritise agriculture and food systems as high-impact entry points,[27] and leverage the benefits of circular approaches, for both biodiversity and climate, to support integrated planning and delivery across these two agendas – as increasingly called for by governments, businesses, and civil society organisations

Integrate the circular economy into national monitoring, reporting, and disclosure systems. Build circular economy approaches into national GBF monitoring and reporting frameworks. While the monitoring framework already identifies indicators relevant to the circular economy under **Target 16** – such as the food waste index, recycling rate, and life cycle impact assessment[28] – their optional status risks leading to limited national uptake. Countries should promote their use and embed them into national reporting systems, as well as extending circular economy monitoring beyond **Target 16**. For instance, track progress on the financing of nature-positive circular practices (**Target 19**) and uptake in key sectors to support sustainable resource management (**Target 10**). Under **Target 15**, encourage businesses and financial institutions to disclose circular practices that reduce biodiversity harm and support system-wide transition, using the Taskforce on Nature-related Financial Disclosures as a guiding framework.[29]

Use the 2026 national reports and the seventeenth Conference of the Parties to CBD (COP17) to align biodiversity and circular economy strategies. These milestones offer timely opportunities to identify concrete interlinkages, develop joint delivery mechanisms, and demonstrate how circular approaches contribute to GBF implementation. Ensure alignment with national climate objectives and plans, and prioritise private-sector engagement to drive nature-positive, circular approaches in business. Build on the momentum of COP16 by making COP17 a platform to integrate biodiversity, circular economy, and bioeconomy strategies. Foreground ways the circular economy can support bio-based sectors in their efforts to deliver the GBF targets.

The GBF cannot succeed without reshaping the systems that drive biodiversity loss, and circular economy approaches offer a ready means to begin that transformation.

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About the Ellen MacArthur Foundation

The Ellen MacArthur Foundation is an international charity that develops and promotes the circular economy in order to tackle some of the biggest challenges of our time, such as climate change, biodiversity loss, waste, and pollution. We work with our network of private- and public-sector decision makers, as well as academia, to build capacity, explore collaborative opportunities, and design and develop circular economy initiatives and solutions. Increasingly based on renewable energy, a circular economy is driven by design to eliminate waste, circulate products and materials, and regenerate nature, to create resilience and prosperity for business, the environment, and society.

Further information:
ellenmacarthurfoundation.org

Endnotes

1 For example, Living Planet Index (1970–2020) / 2024 Living Planet Report (2024); Intergovernmental Panel on Biodiversity and Ecosystem Service (IPBES), Global Assessment (2019); World Resource Institute (WRI) Global Forest Review (2024); IUCN Red List of Mangrove Ecosystems (2024)

2 Intergovernmental Panel on Biodiversity and Ecosystem Service (IPBES) Nexus Assessment (2024); International Resource Panel Global Resource Outlook (2024)

3 Ellen MacArthur Foundation, The Nature Imperative: How the circular economy tackles biodiversity loss (2021)

4 International Resource Panel Global Resource Outlook (2024)

5 SITRA, Tackling root causes: Halting biodiversity loss through the circular economy (2022)

6 Ellen MacArthur Foundation, Completing the picture: How the circular economy tackles climate change (2021)

7 The Pew Charitable Trust and Systemic, Breaking the Plastic Wave: a Comprehensive assessment of pathways towards stopping ocean plastic pollution (2020)

8 McKinsey & Co. and Global Fashion Agenda, Fashion on Climate: How the fashion industry can urgently act (2020)

9 SITRA, Tackling root causes: Halting biodiversity loss through the circular economy (2022)

10 Ellen MacArthur Foundation, The big food redesign: Regenerating nature with the circular economy (2021); Ellen MacArthur Foundation, From obstacles to opportunities: 10 ways to unlock the potential of circular design for food (2025)

11 Ellen MacArthur Foundation, Building prosperity: Unlocking the potential of a nature-positive, circular economy for Europe (2024)

12 Ellen MacArthur Foundation, Universal circular economy policy goals (UPGs) (2021)

13 Ellen MacArthur Foundation, Growth within: a circular economy vision for a competitive Europe (2015)

14 Ellen MacArthur Foundation, The big food redesign: Regenerating nature with the circular economy (2021); Nature in Mind food product portfolio (2025)

15 Ellen MacArthur Foundation, Achieving 'growth within' (2017); Ellen MacArthur Foundation, Financing the circular economy - Capturing the opportunity (2020); Ellen MacArthur Foundation, Building Prosperity: unlocking the potential of a nature-positive, circular economy for Europe (2024)

16 Ellen MacArthur Foundation, Financing the circular economy (2021)

17 Summa Equity, Investing in a circular and waste-free Europe (2023)

18 ThredUp, Resale report 2025 (2025)

19 Future Market Insights, Products from food waste (2025)

20 Insight Ace Analytic, Global regenerative agriculture market research report (2025)

21 Ellen MacArthur Foundation, Circular business models: Redefining growth for a thriving fashion industry (2021)

22 Ellen MacArthur Foundation, Universal circular economy policy goals (UPGs) (2021), see especially UPG3

23 Secretariat of the Convention on Biological Diversity, Global Biodiversity Outlook 5 (2020)

24 See CBD COP16 outcomes after the continued meeting in Rome in February 2025

25 As in July 2025, Ellen MacArthur Foundation's own assessment

26 Intergovernmental Panel on Biodiversity and Ecosystem Service (IPBES) Nexus Assessment (2024)

27 Ellen MacArthur Foundation, The big food redesign: Regenerating nature with the circular economy (2021); Ellen MacArthur Foundation, From obstacles to opportunities: 10 ways to unlock the potential of circular design for food (2025)

28 GBF Monitoring Framework and GBF Target 16 indicators

29 Taskforce on Nature-related Financial Disclosures, Recommendations of the Taskforce on Nature-related Financial Disclosures (2023)

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