



Sectoral Brief

Built Environment

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Building a nature-positive economy: The role of policy and business

Nature is the foundation of our economies. societies, and well-being—yet we are depleting it at an alarming rate through land and sea use change, resource exploitation, human-induced climate change, and pollution.[1] With more than half of global GDP dependent on nature and its services,[2] biodiversity loss and environmental degradation are not just an ecological crisis. They pose significant risks to businesses, supply chains, and financial markets worldwide. To address this challenge, policy frameworks are evolving to make nature an integral part of economic and financial decision-making. These policies can create an enabling environment for businesses to align their operations with naturepositive principles and support a wider transition to a nature-positive economy.

What is 'nature positive'?[3]

Nature positive is a global goal aimed at halting and reversing nature loss by 2030 and achieving full recovery of nature by 2050. It represents a shift from merely minimizing environmental harm to actively protecting, restoring and using nature in a sustainable way to improve the health, abundance, diversity, and resilience of species, ecosystems, and natural processes.[4] Operationalising this concept involves (i) reducing negative impacts on nature and addressing drivers of nature degradation; (ii) increasing positive impacts, including through nature-based enterprises, nature-based solutions (NbS), and conservation measures; and (iii) fostering transformative change to our economy and society. Companies that integrate nature into their decision-making can enhance long-term resilience, unlock new markets, and reduce financial risks tied to biodiversity loss.[5]

What is a nature-positive economy?

A nature-positive economy (NPE) means that the net results of all economic activities combined leads to an absolute increase in nature towards full recovery. This will require businesses, governments, and citizens to act across multiple scales in every sector, while aligning with social-ecological well-being and equity. By embedding nature-positive strategies into policy design and core business operations—whether through supply chain transformation, regenerative business models, or investment in nature-based solutions—progress can be made towards a thriving, sustainable economy.

How to transition?

The transition to a nature-positive economy demands action from all parts of society, from public policy to private initiatives. In this series of briefs, we explore how five critical sectors agriculture, the blue economy, forestry, the built environment, and tourism - can take nature positive actions to support the transition to a nature-positive economy. Each brief highlights the sector's current impact on nature and looks at how the EU policy framework and international private initiatives can potentially support or hinder the sector's NPE transition. We also highlight existing examples of businesses in the sector taking nature positive actions. This brief focuses on the built environment sector.

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Cities at a crossroads: Challenges and opportunities in the nature-positive economy

The built environment, encompassing urban development and the construction industry, is a pillar of Europe's economy, shaping cities, infrastructure, and communities. The construction industry accounts for 9% of the EU's GDP and provides 18 million direct jobs. [6] However, the related environmental footprint is substantial, with construction consuming vast amounts of raw materials and energy, and urban expansion transforming landscapes. As cities grow and climate risks intensify, transitioning the built environment towards a NPE is essential to balance economic needs with ecological resilience and social well-being.

The environmental toll of urbanisation:
Nature-negative impacts

Urbanisation and construction are major drivers of biodiversity loss, resource depletion, and pollution, fundamentally altering the natural environment. In cities, the densely built environment, limited permeable surfaces, and scarce vegetation exacerbate these impacts—leaving residents particularly vulnerable to urban heat islands during hot days and heatwaves, as well as to stormwater during intense rainfall or cloudburst events. One of the most significant pressures comes from land use change, with EU urban sprawl consuming approximately 1,000 km² of land annually, leading to habitat fragmentation and threatening biodiversity.^[7]

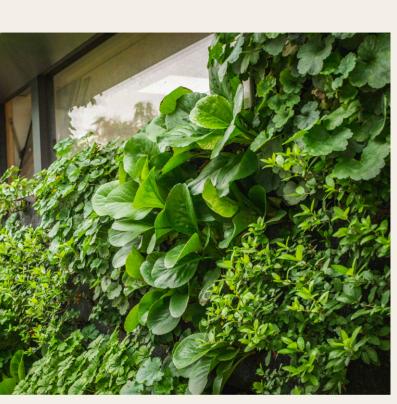
The construction sector is also a major consumer of raw materials, including sand, gravel, and limestone, with often limited adoption of circular economy principles.[8] This heavy reliance on resource extraction continues contributing to widespread environmental degradation, while construction activities can also lead to air, water, and soil pollution and further harm urban habitats and species. At the same time, buildings account for 40% of the EU's total energy consumption, with almost 75% currently classified as energy inefficient as ongoing energy renovation appears slow.[9] They also produce 35% of greenhouse gas emissions, contributing to global warming and its cascading effects on nature. The necessary sectoral shift in the EU is ongoing, with nature-based solutions and green infrastructure at the forefront, offering new, more sustainable business opportunities.

A path forward: The role of sustainable urban development in advancing the nature-positive transition

Sustainable urban development processes have the potential to drive nature-positive change, not least by integrating nature-based solutions, adopting sustainable and recycled materials, and developing energy-efficient buildings to mitigate negative environmental impacts. Key nature-positive strategies include green roofs and walls, urban forests, wetlands, and permeable pavements, which help reduce heat island effects, improve air quality, enhance recreational spaces, and increase property values (though unintended tradeoffs regarding gentrification and exclusion should be considered), while also supporting urban biodiversity.

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Sustainable urban mobility and biodiversity corridors can also be promoted through, for example, bike or foot pathways integrated with green and blue infrastructure. Sustainable construction materials such as using recycled steel, wood, and low-carbon as well as adopting circular economy principles (e.g. recycling construction and demolition waste, reusing building materials, and designing for disassembly) can reduce the demand for new raw materials. Constructing energy-efficient buildings and retrofitting existing structures through passive design strategies, highperformance insulation, and renewable energy integration helps to lower energy consumption and greenhouse gas emissions. In addition, reusing and refurbishing existing buildings is often far more sustainable than new construction—even with green materials. Using recycled materials, like reclaimed bricks, further reduces environmental impact. By further scaling up these sustainable practices in construction and urban development, the sector can create new jobs while continuing to play a transformative role in advancing a naturepositive economy.





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EU policy: Enabling or hindering the nature-positive transition?

A strong policy framework is essential to drive the built environment sector's transition to NPE. Policy can assist by setting clear targets and establishing a vision, disincentivising and fading out harmful practices, and providing financial incentives for sustainable urban development. Public policies, including strategies, regulations, and funding instruments, can either accelerate this transition by promoting green infrastructure and nature-based solutions to support biodiversity conservation or hinder progress if they continue to support environmentally harmful practices. In an accompanying report, [12] we evaluate more than 60 global and EU policies to identify potential support or hindrance regarding the NPE transition. Here we use examples of two key EU built environment sector policies to explore these potential impacts in more detail.[13]

Global and cross-cutting EU policies

At the global level, an overarching framework is provided by policies such as the Kunming-**Montreal Global Biodiversity Framework (GBF)** and the Paris Agreement, which broadly support the "nature positive" agenda, aiming to halt and reverse biodiversity loss while addressing climate change. With regards to the built environment sector, the GBF includes targets to ensure the planning and management of all areas to reduce biodiversity loss. This involves fostering participatory, integrated, and biodiversity-inclusive spatial planning and/or effective management processes that address land and sea use change, aiming to bring the loss of areas of high biodiversity importance close to zero by 2030, while respecting the rights of Indigenous peoples and local communities (Target 1).

Additionally, it seeks to significantly increase the area, quality, connectivity, access to, and benefits from green and blue spaces in urban and densely populated areas by sustainably mainstreaming the conservation and sustainable use of biodiversity (Target 12). The GBF also provides a roadmap for integrating biodiversity conservation into global economic systems and encourages governments, businesses, and communities to take coordinated action. In parallel, the Paris Agreement establishes a global warming target and aims to enhance adaptive capacities, strengthen resilience, and reduce climate change vulnerability while recognising the key role of cities in effectively scaling up and supporting actions to reduce emissions, build resilience, and decrease vulnerability to the adverse effects of climate change. Their effectiveness depends on strong enforcement, coherent implementation, appropriate funding, and subsidy reforms. Without active efforts from cities in managing the emergence and growth of urban areas, greenhouse gas emissions from consumption and land use change will continue to rise.





EU policy can support a NPE by establishing a vision and direction, such as through the European Green Deal (EGD), the EU's flagship strategy for achieving the transition to a climateneutral economy by 2050. Launched in 2019, it provides a comprehensive policy framework for transforming the EU's economy to reduce greenhouse gas emissions, enhance resource efficiency, and restore Europe's natural ecosystems. Among other important policies, the EGD includes the **EU Biodiversity Strategy** for 2030, which aims to halt biodiversity loss, restore degraded ecosystems, and enhance green infrastructure. It establishes targets and underscores the need for transformative changes across sectors to integrate biodiversity into every aspect of policymaking and business practices, ensuring long-term resilience. The evolving EU political landscape following the 2024 elections—with a focus on competitiveness and policy simplification introduces potential risks. Recent initiatives such as the European Competitiveness Compass and the Omnibus simplification package illustrate this shift. While efforts to reduce administrative burdens can be beneficial. care must be taken to ensure they do not undermine ambitious and mandatory nature policies.

EU policy can also establish rules and regulations that reduce a sector's negative impacts on nature and create additional nature, an approach employed by the **EU Nature Restoration Regulation**. This regulation introduces legallybinding and time-bound targets to restore degraded ecosystems, habitats and species in the EU. Through these targets and an obligation to draft National Restoration Plans, the EU Nature Restoration Regulation is expected to boost national restoration efforts, bringing the EU closer to the nature-positive economy. Article 8 of the regulation reinforces this by requiring Member States to prevent net loss of urban green space and tree canopy cover by 2030 and ensure a continuous increase in these areas from 2031 onwards.

FEU policies can also provide funding for nature-positive or nature-negative activities. The **Multiannual Financial Framework** (MFF), for example, establishes the EU's long-term budget, outlining priorities and ensuring predictable and stable funding for various policies and programs. While funding through the current MFF (2021-2027) supports some nature-positive initiatives such as responsible resource use and green and blue infrastructure development, it can also fund activities that may conflict with the NPE, such as unmanaged infrastructure expansion. These conflicting priorities within the EU budget weaken its transformative potential for a nature-positive transition.

Sector-specific policy in the EU

Sector-specific EU policy can also support the NPE transition. Two important built environment policies regarding the transition to a nature-positive economy are the EU Green Infrastructure Strategy and the New European Bauhaus Strategy. Other related strategies include, for example, the Renovation Wave Strategy, Urban Wastewater Treatment Directive, Energy Performance of Buildings Directive, and the Energy Efficiency Directive.

The 2013 EU Green Infrastructure (GI) Strategy seeks to preserve, restore, and enhance green

infrastructure in the EU through promotion in key EU policy areas, support for implementation, improved access to finance, and strengthened information and innovation. A strategically planned EU-wide GI network is envisioned to enhance biodiversity and ecosystem services, improve environmental quality, and connect natural areas. The Strategy calls for integrating GI into mainstream urban planning and financing mechanisms, promoting nature-based solutions to enhance cities' resilience and livability as well as the potential for creating local green job opportunities and sustainable growth.

However, as a Communication, the Strategy lacks binding requirements and explicit targets for equity, gender, and diversity inclusion, which makes implementation and contributions towards transformative change dependent on Member States' own initiative. Finally, while the Strategy encourages public and private investments, financial support is fragmented.

The New European Bauhaus (NEB) Strategy,

launched in 2021 as part of the European Green Deal, promotes sustainability, inclusivity, and aesthetics in urban development, aligning with key EU policies such as the Circular Economy Action Plan and the EU Biodiversity Strategy for 2030. The Strategy integrates nature-based solutions and circular design principles into architecture and urban planning, encouraging regenerative practices and biodiversity enhancement. Financial mechanisms, including the European Regional Development Fund and Horizon Europe, have contributed €106.3 million in dedicated funding for NEB projects, fostering climate resilience through sustainable construction, green infrastructure, and ecosystem restoration. Additionally, tools such as the NEB Compass and Investment Guidelines provide structured frameworks to support transformative projects. However, the lack of binding commitments and clear regulatory enforcement leaves the success of NEBdependent on voluntary adoption and potential trade-offs, such as balancing affordability with sustainability or ensuring that rapid infrastructure development aligns with naturepositive goals, present additional challenges. Without stronger governance mechanisms and dedicated long-term funding, the NEB's full potential to drive systemic change toward a nature-positive economy remains uncertain.





Private sector action in the built environment's nature-positive transition

Alongside public policy, private and nongovernmental actors play a critical role in driving the transition to a nature-positive economy. Key initiatives include, for example, sustainability reporting (such as the Taskforce on Nature-related Financial Disclosures ^[15]), finance alignment (such as the Finance for Biodiversity Foundation), and knowledge development (such as IPBES. ^[16]) In the built environment sector, **businesses are increasingly collaborating to promote sustainable practices**. These following initiatives stand out for their impact on the NPE transition:

World Green Building Council (WorldGBC)^[17]

The WorldGBC is an NGO founded in 2002 to serve as the hub of a global network of national and regional green building councils working to reduce the built environment's impact on natural systems. The Council has 47,000 private members and corporate partners such as Google, Deloitte, and BASF. While primarily focussed on reducing the climate impact of the built environment, the WorldGBC is broadly aligned with the NPE transition, advocating for circular economy approaches to the built environment and green buildings more generally. The WorldGBC primarily drives positive change through advocacy and knowledge creation and sharing. While effective in this manner, WorldGBC's lack of requirements on members or monitoring of member business operations mean it is difficult to assess the on-the-ground impact on the NPE transition of its work.

World Business Council for Sustainable Development (WBCSD)^[18]

Founded in 1995, the WBCSD is a coalition of 230 multinational companies promoting sustainable development across the whole economy, including a specific focus on the built environment. The Council primarily aims to generate change through knowledge creation in the space of sustainability and business, policy advocacy, and promoting voluntary business practices. In recent years, it has expanded its focus from climate and circular economy issues to also consider the nature-positive transition, including developing a Roadmap to Nature Positive: Foundations for the Built Environment that aims to support real-estate developers and builders understand and manage their impact on nature (without proposing any mandatory requirements. The WBCSD engages in highprofile global forums like COP and G20 and supports sustainability disclosures, playing a significant role in shaping corporate narratives around sustainability. Beyond this agenda setting role, the WBCSD predominantly depends on voluntary implementation of actions by corporate members, with no clear accountability mechanisms in place, meaning its on-the-ground contributions to the NPE transition are difficult to estimate.





Scaling change: Examples of nature-positive urban policy in practice

Biotope City Vienna in Austria seamlessly integrates urban development with nature to tackle climate change challenges. Built on a 7-hectare former industrial site starting from a circular economy and carbon-neutral construction target, the project provides 950 housing units, with two-thirds designated as affordable social housing. Ensuring equitable access to green spaces, it features extensive green roofs, vegetated facades, artificial wetlands, and rainwater retention ponds. The transdisciplinary project was a collaboration between eight developers, seven architectural firms, and three landscape architecture offices.

GREENPASS® microclimate simulations demonstrated the effectiveness of the nature-based solutions implemented by Biotope City Vienna, showing potential reductions in air temperature by up to 2.2°C, a 33% decrease in water runoff, a high thermal comfort score and more than a twofold increase in carbon sequestration on hot days and reduction of 50% thermal storage amongst other measurable benefits and co-benefits of the project, which was less than 2% of the total investment cost. Communal spaces for recreation and urban gardening further enhance social engagement, cohesion, and well-being, fostering a greener and more livable urban environment.

and more livable urban environment.

Biotope City Vienna is in line with key EU policies that support sustainable urban development. By enhancing urban biodiversity and climate resilience, it directly contributes to the EU Green Infrastructure Strategy and the EU Biodiversity Strategy for 2030. The project's design also reflects the principles of the New European Bauhaus, integrating sustainability, functionality and aesthetics into the urban fabric, based on circular economy thinking in relation to the recycling of construction waste. The project has helped improve and expand the use of a green space factor in Austrian cities. This tool supports public authorities in managing green space more effectively, aligning with the Nature Conservation Act and related urban objectives. Biotope City also provides specific NbS related outcomes in terms of energy balances of buildings (efficiency, cooling demand) and neighbourhoods, reflecting the Energy Performance of Buildings Directive (EPBD) and related national implementation, and microclimatic simulation as an effective tool for cities, developers, architects and construction industry to maximise NbS impacts.





Final reflections

Healthy ecosystems are essential to achieve the EU's political priorities, including its competitiveness. They provide important services that form the backbone of many economic sectors, including agriculture, the blue economy, forestry, the built environment, and tourism. Such services—ranging from carbon sequestration and water purification to soil fertility and pollination—are integral to maintaining Europe's economic stability and growth. As global markets increasingly prioritise sustainability, investing in nature-positive solutions and nature-based enterprises enhances Europe's ability to compete in emerging green markets, ensuring sustainable growth and securing its leadership in the global transition to a nature-positive economy. By embedding nature-positive strategies into policy design and business operations, progress towards the transition to NPE can be achieved.

In the built environment sector, this transition can be accelerated through targeted regulatory measures and strategic private and public investment supporting the mainstreaming and uptake of nature-based and hybrid solutions in urban planning, use of sustainable and recycled materials, and construction of energy-efficient infrastructure. Embedding nature-positive design into green public procurement and urban planning - such as through municipal Urban Nature Plans - can help building owners, planners, and policymakers to prioritise sustainability and social inclusion, while also enhancing competitiveness and supporting EU goals under the e.g. Nature Restoration Regulation and Biodiversity Strategy to 2030.

Continued EU leadership is critical, including the enforcement of existing mandates - such as the prioritisation of green and blue infrastructure solutions where possible under the Urban Wastewater Treatment Directive when developing integrated urban wastewater management plans. In parallel, increased prioritisation and funding through Horizon Europe, the European Regional Development Fund, and the LIFE Programme is needed to scale up circularity, sustainable construction, and ecosystem restoration in (peri-)urban areas, contributing to EU targets on energy efficiency, climate adaptation and biodiversity conservation and a NPE transition.



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References

[1] IPBES (2019) Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. https://doi.org/10.5281/zenodo.3553579

[2] World Economic Forum(2020) The Future of Nature and Business. https://www3.weforum.org/docs/WEF The Future Of Nature And Business 2020.pdf

[3] Definitions and key terms are drawn from the GoNaturePositive Concept Note; see it for a more detailed introduction to concepts discussed in this brief: <u>GoNP! Concept Note 15/10/24</u>

[4] The Nature Positive Initiative (2023) provide a leading definition of Nature Positive: "Halt and reverse nature loss by 2030 on a 2020 baseline, and achieve full recovery by 2050". This is in line with the mission of the Kunming-Montreal Global Biodiversity Framework. See Nature Positive Initiative (2023) The Definition of Nature Positive. www.naturepositive.org/app/uploads/2024/02/The-Definition-of-Nature-Positive.pdf

[5]TNFD (2023) https://tnfd.global/publication/tnfd-v0-4-integrated-framework/#publication-content

[6] An increase of nature from a 2020 baseline and towards full recovery of all ecosystems as outlined in the Global Biodiversity Framework (CBD/COP/DEC/15/4)

[7] EUROSTAT (2024b) Developments in organic farming - Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Developments in organic farming

[8] Monitoring the twin transition of industrial ecosystems: Agri-food analytical report. European Commission (2024).

[9] Ibid

[10] European Commission (2025) CAP expenditure - European Commission. https://agriculture.ec.europa.eu/data-and-analysis/financing/cap-expenditure en.

[11] EEA (2020) State of nature in the EU - Results from reporting under the nature directives 2013-2018. EEA Report, 10/2020. https://www.eea.europa.eu/en/analysis/publications/state-of-nature-in-the-eu-2020

[12] EEA (2024) Solutions for restoring Europe's agricultural ecosystems. EEA Briefing.

https://www.eea.europa.eu/en/analysis/publications/solutions-for-restoring-europes-agricultural-ecosystems? active Tab=48a88414-57ce-4c5c-b483-a762a6dfdac4

[13] Ibid.

[14] Ibid.

[15] Ibid.

[16] EUROSTAT (2024b) Developments in organic farming - Statistics Explained (webpage). https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Developments in organic farming

[17] Kozicka, M., Havlík, P., Valin, H. et al. (2023) Feeding climate and biodiversity goals with novel plant-based meat and milk alternatives. Nature Communication 14, 5316 (2023). https://doi.org/10.1038/s41467-023-40899-2

[18] See GoNP! Deliverable 1.3. Available at https://www.gonaturepositive.eu/

[19] Four other sectoral briefs focus on other sectors and their policies and initiatives. Available at https://www.gonaturepositive.eu/.

[20] This section summarises the broader policy instrument selection and analysis conducted in the full source report. For methodological details and the complete list of analysed instruments, see GNP! Deliverable 1.3.

[21] EU Court of Auditors (2024) Special report 20/2024: Common Agricultural Policy Plans. https://www.eca.europa.eu/en/publications/SR-2024-20

[22] https://tnfd.global/

[23] https://www.ipbes.net/

[24] IFOAM Organics Europe

[25] https://saiplatform.org/ and SAI Platform (2021) Sustainable Agriculture Principles & Dractices. https://saiplatform.org/wp-content/uploads/2021/02/principlespractices_saiplatform_2021.pdf

[26] Bless, A. (2024) The co-optation of regenerative agriculture: revisiting the corporate environmental food regime. Globalizations. https://doi.org/10.1080/14747731.2024.2397260

[27] WBCSD (2024) OP2B Five-Year Report Demonstrating progress on regenerative agriculture. https://www.wbcsd.org/wp-content/uploads/2024/09/OP2B-Five-Year-Report.pdf

[28] Bless, A. (2024).



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