How Siemens' Technologies Reduce **Pressures on Biodiversity Loss**

SIEMENS

> Truly sustainable economic growth and development means recognizing that our long-term prosperity relies on rebalancing our demand of Nature's goods and services with its capacity to supply them.

Professor Sir Partha Dasgupta

Biodiversity underpins the global economy yet is in unprecedented decline. From a global perspective, this is a core strategic issue – shaping regulatory frameworks, investment flows, and stakeholder expectations worldwide.

The ability to align growth with the protection of natural systems is becoming increasingly important. The world is consuming more resources than are regenerated – making decoupling growth from resource consumption essential.

This whitepaper outlines Siemens' perspective on biodiversity as a global imperative and highlights how our solutions can help customers protect ecosystems while driving competitiveness and growth.

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Key Terms

Biodiversity Conservation: Restoring and protecting ecosystems

COP16: Sixteenth meeting of the Conference of the Parties to the Convention on Biological Diversity

COP30: Conference of the Parties in Belém

EcoVadis: Sustainability rating platform

GBF: Kunming-Montreal Global Biodiversity Framework

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

MSCI: Morgan Stanley Capital International

Nature Positive: A concept to halt and reverse nature loss by 2030, and achieve full nature recovery by 2050

RED: Robust Eco Design

TNFD: Taskforce on Nature-related Financial Disclosures

Triple Planetary Crisis: Describes the three intersecting global environmental crises of pollution, climate crisis, and biodiversity loss

1 Siemens' Perspective on **Biodiversity**

Technology for Nature

Global economies depend on functioning natural systems – forests that regulate rainfall, wetlands that purify water, soils that support agriculture, and climates that remain within livable bounds. These systems are critical infrastructure for human life and economic activity and are sustained by biodiversity – the variety of life that enables ecosystems to function, adapt and endure. When biodiversity declines, ecosystems weaken, and with them, the stability of supply chains, public health and economic resilience.

Yet this foundation upon which we all depend is eroding fast. Around one million species face extinction[1], many within decades – the fastest loss of life in human history. Five direct drivers, all linked to human activity, are accelerating this: changes in land and sea use, overexploitation of natural resources, climate change, pollution, and invasive species. Siemens is directly addressing climate change within our decarbonization agenda, with our commitment to reach net-zero greenhouse gas emissions across the value chain by 2050, while supporting customers in meeting their own decarbonization goals.[2]

These pressures overlap and reinforce one another, creating systemic risks that extend far beyond individual ecosystems. The United Nations describes this convergence of climate change, biodiversity loss, and pollution as the triple planetary crisis[3]. A disrupted climate accelerates habitat loss; pollution contaminates ecosystems and weakens their capacity to recover; and biodiversity loss reduces nature's ability to regulate climate, water and disease. Addressing one without the others risks unintended consequences or missed opportunities. Effective action demands a joined-up response across sectors, disciplines, and geographies. Industry is at the heart of

this, driving many of the pressures that erode biodiversity while holding the greatest agency to shift course.

Stable climates, fertile soils, clean water, and reliable flows of raw materials are the foundations of production and growth. Yet for decades, industry operated on the flawed assumption that these resources were inexhaustible. Today, scarcity of land, water, and materials has become a defining factor for competitiveness, making circularity essential. Resilience now depends on designing for reuse, extending asset life and improving resource efficiency – and it is here that technology, innovation, and system-level redesign are beginning to deliver the most effective solutions.

This recognition shaped the starting point of our biodiversity focus. Our first step was to look inward, examining our own impacts, dependencies, and how we are integrating biodiversity into our operations. We explored the steps being taken across our sites to reduce waste to landfill, increase usage of secondary materials, and protect habitats through more circular use of resources. This marked the beginning of a more structured approach aligned with the Kunming-Montreal Global Biodiversity Framework[4] (GBF) and emerging global standards on disclosure and risk management.

In this whitepaper, we are shifting the lens outward and exploring how our technologies designed for enhancing productivity, efficiency, and climate goals can also ease pressure on ecosystems and help industries operate within what scientists describe as planetary boundaries[5] – nine Earth system thresholds for a safe operating space. The latest update from the Potsdam Institute for Climate Impact Research (2025)[6] shows that seven of these boundaries have already been crossed, with ocean acidification now joining climate change, biosphere integrity, land use, freshwater, biogeochemical flows and novel entities in the danger zone.

To understand the specific pressures on biodiversity within this context, we draw on the five direct drivers of biodiversity loss identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)[7], a scientific framework that helps link cause to effect, and action to outcome. For each driver, we examine how existing technologies contribute to pressure reduction and where further innovation is needed.

Our focus is shaped by the expectations of three stakeholder groups whose influence defines the environment in which we operate: policymakers, customers, and investors and NGOs. Policymakers are embedding biodiversity into national and global frameworks, tightening reporting rules, and linking finance to sustainability performance; customers increasingly demand products and processes with lower ecological impacts, greater transparency, and alignment with circular economy goals; and investors and NGOs now treat biodiversity loss as a systemic risk.

Together, these stakeholders highlight the future of the sustainability transition, one that reduces risk through resource efficiency, enables innovation that aligns with ecological thresholds, and supports restoration where systems have been degraded.

We already see this potential in practice. Across sectors, our technologies are delivering outcomes that reduce environmental stress while strengthening resilience. For example, digital twins allow factories to optimize material flows and cut waste. Smart grids integrate renewable energy efficiently, reducing the need for additional land conversion and helping to protect habitats.

Automation in water treatment lowers nutrient pollution and improves downstream water quality. Environmental monitoring systems provide the data needed to manage natural systems more effectively.

These outcomes were not designed with biodiversity as a primary objective, but their benefits extend far beyond improving operational efficiency or cost savings. Resource efficiency reduces demand for raw materials. Energy efficiency helps reduce emissions that destabilize habitats. Wastewater management improves water quality, while digital tools enable more responsive environmental governance. These benefits offer a route for industry to compete and grow while remaining within the limits of what nature can sustain.

The global task now is to build on this foundation by aligning more deliberately with ecological outcomes, working across systems and with partners to scale solutions. The biodiversity crisis is profound, but so is the potential for progress if we can turn intent into action and vision into delivery.

2 Addressing the Drivers of **Biodiversity Loss**

Creating Sustainable Outcomes

Siemens has significantly strengthened its portfolio through the implementation of Robust Eco Design (RED) across our products. This enhanced approach enables the company to develop environmentally beneficial specifications that align not only with Siemens' internal sustainability goals but also with those of its stakeholders.

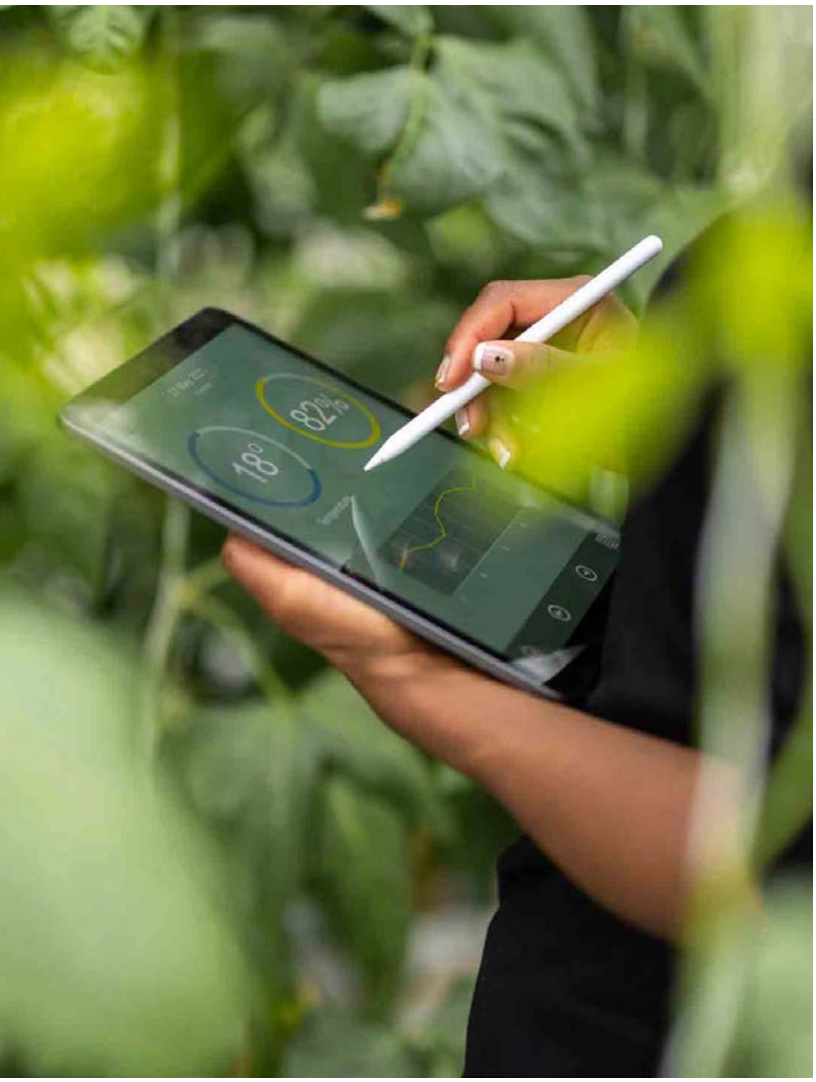
Central to this methodology is the use of quantitative environmental impact assessments, which guide design decisions to minimize ecological footprints. By embedding these criteria early in the product lifecycle development (PLM), Siemens ensures that its technologies, whether in energy infrastructure, automation, or digital solutions, are engineered with long-term environmental stewardship in mind.

> *"No product or procedure is in itself sustainable. It's how we use it that will decide whether or not it can contribute to a more sustainable society."*
>
> **Katherine Richardson.** Professor in biological oceanography and leader of the Sustainability Science Centre at the University of Copenhagen

By combining the real and the digital worlds – from automation and simulation to smart sensors and AI – we empower customers to become more competitive, resilient and sustainable. This can result in operations continuing within ecological limits, a growing necessity as the world faces the interconnected challenges of climate change, biodiversity loss, and pollution.

When deployed to improve efficiency, reduce emissions, cut waste or extend the lifecycle of materials, our technologies generate benefits that ease pressure on ecosystems. This creates a clear opportunity to align industrial performance with the needs of nature and to support business growth within the boundaries that keep our planet livable.

We highlight how our technologies are already supporting customers in navigating these pressures. We focus on real-world outcomes and on the potential for industry, infrastructure, and mobility to help restore balance between nature, climate and economy.



Land and sea use change

Land and sea use change is identified by IPBES as the most significant direct driver of biodiversity loss. More than 75% of terrestrial environments and 66% of marine areas[8] have already been significantly altered by human activity. Agricultural expansion, responsible for nearly 90% of deforestation[9], continues to drive habitat loss at the expense of forests, wetlands and other ecosystems. In coastal and marine regions, infrastructure development, aquaculture and resource extraction have reduced the resilience of natural systems. These changes fragment landscapes, disrupt ecological processes, and weaken the ability of ecosystems to support food production, regulate water cycles and store carbon. Habitat conversion has been the leading cause of species decline[10] in the past 50 years and is projected to intensify, particularly in rapidly urbanizing regions.

Technology has an important role in addressing these pressures. Digital tools, automation, and infrastructure systems can support more efficient use of land and resources, reducing the need for conversion of natural habitats. Precision monitoring and modelling can improve planning, while integrated energy and transport systems can help cities expand without displacing surrounding ecosystems. These solutions do not replace the need for conservation and restoration, but they can provide enabling conditions that reduce pressures from land and sea use change and support more sustainable patterns of development.

Case Study

80 Acres Farms

80 Acres Farms, leveraging Siemens' digital and automation technologies, is redefining agriculture through high-tech vertical farming. Through equity provided by Siemens Financial Services, and by integrating Siemens' Teamcenter software and industrial automation, 80 Acres optimizes resources, reduces land and irrigation water use, and minimizes waste, while supporting biodiversity and resilience in food systems.

This partnership not only scales sustainable food production but also advances a model of agriculture aligned with ecological balance and climate goals.

- Siemens technology enables scalable, standardized vertical farming via Infinite Acres' Loop platform.
- Optimized resource use through increased operational efficiency: less land, water, and agricultural waste.
- Supports biodiversity by reducing habitat loss and enabling growth of heirloom/native species.
- Lower carbon emissions through local and efficient production, aligned with 80 Acres' 42% GHG reduction goal by 2030.

Case Study

SeaSim

The Australian Institute of Marine Science's National Sea Simulator (SeaSim) uses Siemens' technologies to precisely control and measure environmental factors like temperature, salinity, pH, and nutrients across its seawater tanks to help simulate sea conditions impacted by global warming.

This precision is vital for processes such as coral spawning, where natural conditions are replicated to synchronize reproduction among coral colonies annually. The system ensures stable conditions for rearing millions of coral larvae, enabling research on resilience to climate change, sedimentation, and pollution – key threats to the Great Barrier Reef's biodiversity.

- Precise control of environmental conditions (temperature, salinity, pH, nutrients).
- Enables accurate replication of lunar and seasonal cycles to support synchronized coral spawning.
- Supports annual reproduction of 250+ coral colonies, producing millions of larvae for research.
- Facilitates experiments on coral resilience to climate change, sedimentation, and pollution.
- Contributes to biodiversity conservation on the Great Barrier Reef through controlled, scalable research.

Overexploitation of Resources

IPBES identifies the direct exploitation of species and ecosystems – through logging, fishing, hunting and harvesting – as the second most significant driver of biodiversity loss. Over one third[11] of global fish stocks are harvested unsustainably, with a further 60% at their limit. Unsustainable water extraction and soil degradation reduce species abundance, disrupt food webs and undermine the ecological integrity of ecosystems. While wild species extraction supports billions of livelihoods, IPBES warns that unsustainable practices are depleting the very resources that underpin food security, climate resilience of people, and long-term economic stability.

Digital monitoring systems can increase traceability in supply chains, improving oversight of fisheries, forestry and wildlife products. Automation and data analytics can support more efficient industrial processes, lowering demand for raw resource inputs. Infrastructure and energy systems designed for efficiency and circularity can reduce pressure on natural resource extraction by extending product life cycles and lowering material intensity. Meeting human needs will always require the use of natural resources. The challenge is to do so in ways that sustain the ecosystems we depend on. Technology can help ease this pressure by improving efficiency, enabling circularity, and reducing demand on wild populations and ecosystems.

Case Study

Empresa Portuguesa das Águas Livres, S.A. and Águas do Vale do Tejo

Through its digitalization and automation solutions, Siemens supports EPAL and Águas do Vale do Tejo in reducing water and energy consumption by increasing efficiency.

While the primary goal is to enhance efficiency and water use, these improvements indirectly benefit biodiversity by reducing environmental strain.

- **Accurate resource usage:** Water and energy consumption is more accurately measured and reported in real time, resulting in more efficient management.
- **Lower carbon footprint:** Efficient and renewable energy use reduces emissions, mitigating the impacts that climate change has on biodiversity.
- **Improved resource stewardship:** Data-driven operations promote sustainable water and energy use, aligning with conservation goals.
- **Reduced losses:** Improved real time water and energy monitoring leads to overall efficiency increase via new integrated water & energy digital management.
- **Energy neutrality:** Maximize use of own locally produced renewable energy vs. grid energy (traditionally from carbon-intensive sources).

Climate Change

IPBES identifies climate change as one of the fastest-growing drivers of biodiversity loss. Rising temperatures, shifting rainfall, melting ice, and ocean acidification are already transforming ecosystems across the globe. Species are relocating to adapt, but many cannot keep pace, with coral reefs experiencing widespread bleaching and alpine and Arctic habitats losing species as warming accelerates. Climate change also amplifies other drivers, intensifying land degradation, invasive species, and pollution. Without ambitious mitigation and adaptation, IPBES warns it may become the leading cause of biodiversity loss by the end of the century. The consequences extend beyond ecosystems, threatening food production, water security, health, and economic stability – as the natural systems we depend on weaken under climate stress.

Technology can play a role in mitigation and adaptation. Efficient energy systems, digital optimization of industrial processes, and electrification of transport reduce emissions at source. Smart infrastructure and monitoring can support climate-resilient planning for cities and industries. By enabling emission reductions and adaptation measures, technology can help limit the pressures climate change places on biodiversity.

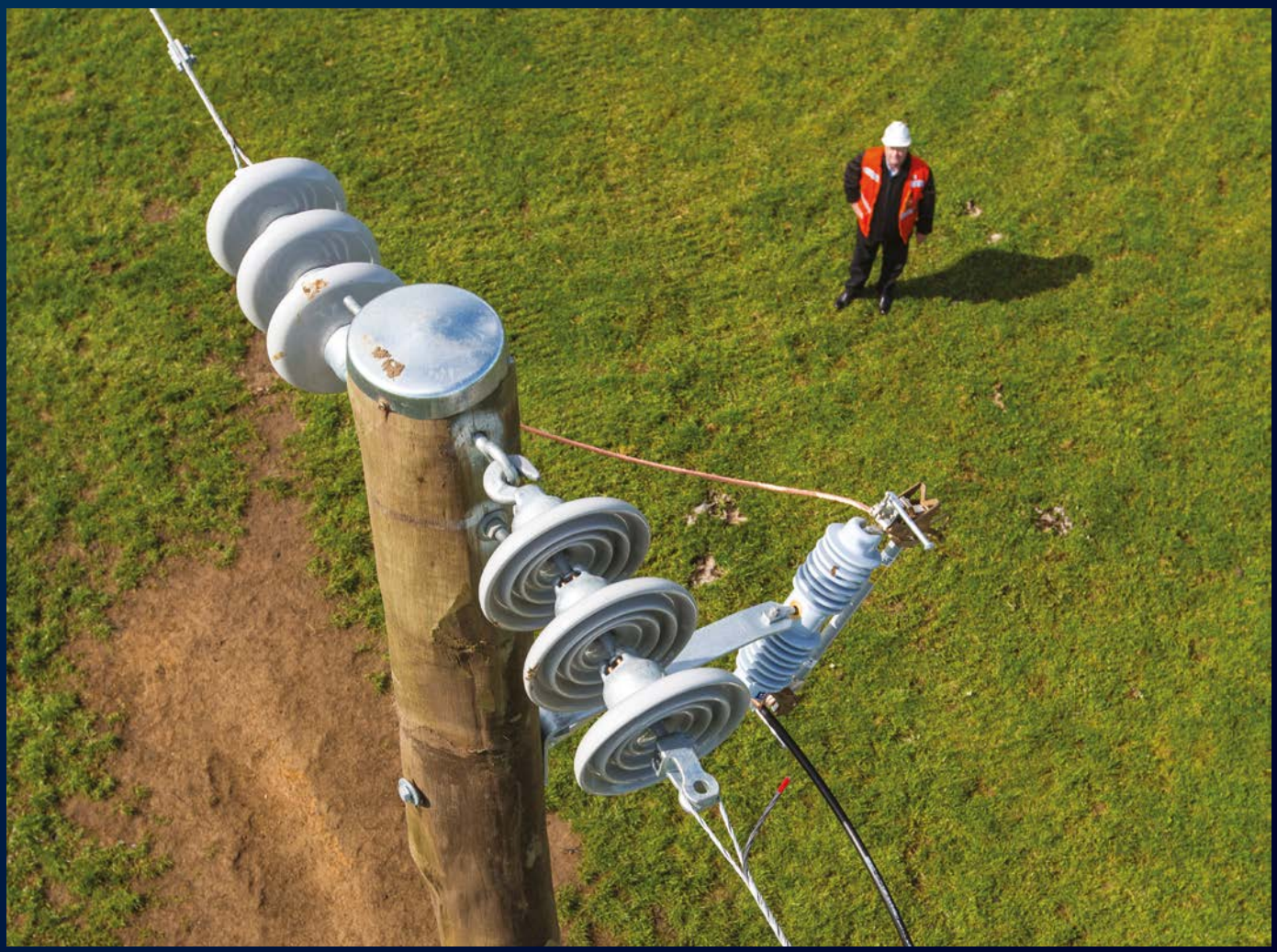
Case Study

Powercor

In the rugged bushland of Victoria, Australia, where Powercor operates one of the world's longest rural electricity networks.

Designed to prevent bushfires by rapidly disconnecting faulty power lines, the Fusesaver's ultra-fast response time significantly reduces the risk of electrical faults igniting dry vegetation, a common cause of wildfires in remote areas. Here, we focus on adapting to the consequences of climate change. By preventing fires before they start, the Fusesaver indirectly protects native flora and fauna from climate change effects, many of which are endemic and vulnerable to habitat loss.

- Rapid fault disconnection prevents bushfires in remote, vegetation-rich areas.
- Protects native ecosystems by reducing fire-related habitat destruction.
- Supports biodiversity preservation, especially vulnerable and endemic species.
- Minimizes disruption to wildlife corridors and reduces need for post-fire rehabilitation.



Pollution

Pollution is recognized by IPBES as a pervasive driver of biodiversity loss, affecting land, freshwater, and marine ecosystems. Nutrient overload from fertilizers and animal waste leads to algal blooms and oxygen depletion, creating dead zones where aquatic life cannot survive. Chemical pollutants such as pesticides, heavy metals and industrial compounds disrupt reproduction, weaken species, and alter ecosystem dynamics. Airborne pollutants damage vegetation and acidify soils and waters, while plastic waste introduces microplastics and toxic additives into food chains. In marine environments, abandoned fishing gear injures or kills species ranging from turtles to whales. These impacts are widespread and compounding. Pollution increases vulnerability to other drivers by making forests less resilient to drought and waterways more susceptible to invasive species.

Technology offers pathways to reduce these pressures. Advances in water treatment, emissions control, circular design and digital monitoring provide mechanisms to reduce pollutants at source and track their movement through ecosystems. Cleaner production processes and improved waste management lessen the release of harmful substances, supporting healthier ecosystems and safeguarding the services they provide.

Case Study

Plastic Fischer

In the rivers of India and Indonesia, Plastic Fischer intercepts plastic waste before it reaches the ocean, helping restore aquatic ecosystems and protect biodiversity.

Plastic Fischer is enhancing operational transparency, enabling the tracking of waste collection, monitoring site performance, and validating impact metrics. This data-driven approach allows Plastic Fischer to identify pollution hotspots and prioritize cleanups in biodiversity-sensitive zones, strengthening stakeholder trust and scaling its ecological impact.

- Prevents plastic waste from reaching oceans, protecting aquatic ecosystems in India and Indonesia.
- Supports biodiversity restoration by reducing pollution in rivers and coastal habitats.
- Enhanced operational transparency through digital tracking of waste collection and site performance.

- Enables targeted cleanups in biodiversity-sensitive zones using ecological data insights.
- Facilitates scalable collaboration across regions while maintaining ecological sensitivity.

Case Study

Eyath

In Thessaloniki, Greece, Siemens' digital technologies are helping Eyath protect biodiversity by preventing pollution incidents in urban waterways.

The AI-powered SIWA Blockage Predictor enables real-time monitoring of sewer overflow behavior, allowing Eyath to anticipate and avoid untreated sewage spills that threaten aquatic ecosystems.

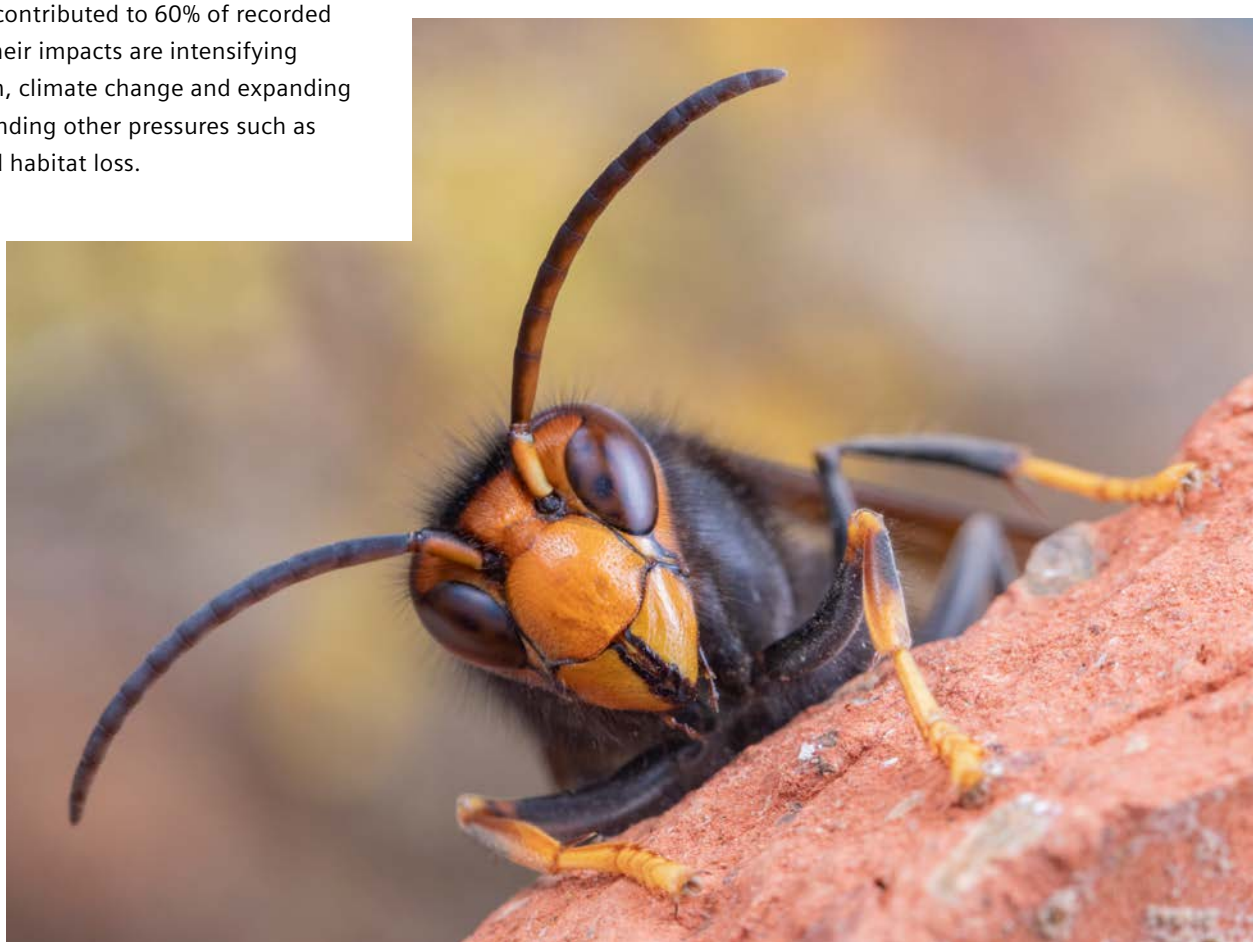
Integrated with Siemens' Insights Hub, the system provides advanced analytics and alerts, helping distinguish abnormal flow conditions and guiding future infrastructure investments. This results in a more resilient sewerage network that minimizes environmental disruption and supports habitats for fish, amphibians, and aquatic plants, aligning with Eyath's broader sustainability goals.

- Prevents pollution incidents by predicting the formation of blockages early enough to avoid sewer overflow.
- Protects aquatic ecosystems from untreated sewage spills, while securing the network's maximum hydraulic capacity.
- Enhances situational awareness with advanced analytics and alerting tools via Siemens' Insights Hub.
- Improves decision-making by distinguishing normal vs. abnormal flow conditions and identifying infrastructure pinch points.
- Supports future investment planning to strengthen ecological resilience.
- Minimizes environmental disruption, preserving habitats for fish, amphibians, and aquatic plants.

Invasive Species

The introduction of invasive alien species, transported beyond their natural ranges by human activity, can outcompete native species, alter habitats, spread disease, and disrupt ecological processes. Invasive predators have driven island bird populations to extinction, while invasive plants and pathogens have degraded ecosystems and decimated amphibians. The economic and social costs are also severe. Invasive species damage crops, forests and fisheries, reduce water supplies, and threaten livelihoods. IPBES estimates they have contributed to 60% of recorded global extinctions. Their impacts are intensifying through globalization, climate change and expanding trade, often compounding other pressures such as land degradation and habitat loss.

Technology can contribute to reducing these pressures by improving how invasions are detected, monitored and managed. Approaches such as remote sensing and digital modelling improve the detection and monitoring of invasive species. Early-warning systems and predictive analytics allow for more targeted interventions, while automation and robotics are beginning to support eradication and control efforts in sensitive habitats.



Technology can reduce the drivers of biodiversity loss by generating reliable data for improving efficiency, reducing pollution, and making decision-making effective. These applications do not replace the need for conservation and policy action, but they provide tools that make it possible to align economic activity with ecological limits. In doing so, technology helps maintain the integrity of ecosystems and strengthens resilience to both environmental and business risks.

3 **Opportunities** in Biodiversity Conservation

The Rise of Nature-Positive Action

Biodiversity has moved rapidly up the international agenda. The Kunming-Montreal Global Biodiversity Framework (GBF), adopted in 2022 by nearly 200 countries, set clear targets to halt and reverse nature loss by 2030, and subsequent negotiations have begun to build the finance, monitoring and governance architecture needed for delivery. What is emerging is a single, integrated agenda in which climate stability and ecosystem protection are treated as inseparable.

For business, this matters because it changes what stakeholders expect. COP16[12] laid the foundations for biodiversity finance and accountability, while COP30[13] in Belém places the Amazon forest and Indigenous leadership at the center of the global agenda. The next biodiversity COP, scheduled for 2026 in Armenia, will be a critical checkpoint for implementation of the GBF, testing whether governments can turn commitments into delivery.

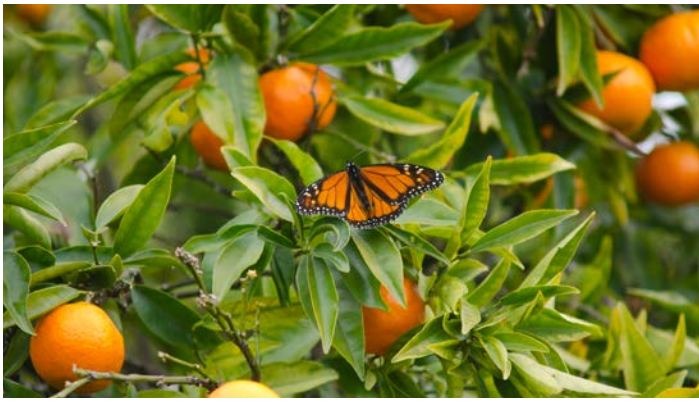
This has direct implications for Siemens and our customers, who will need tools to manage resource use impacts as rigorously as they manage carbon. Investors will continue to focus on biodiversity risk and resilience. Policymakers will expect companies to comply with new disclosure and restoration requirements. We are prepared for this future and positioned to support stakeholders with technologies that reduce pressures on ecosystems while enabling competitiveness and growth.

Investor Priorities

The stability of economies rests on the stability of ecosystems. More than half of global GDP depends on nature[14], and the collapse of just three ecosystem services – pollination, timber and fisheries – could reduce global output by 2.3% (about $US2.7 trillion[15]) by 2030. This is more than twenty times the global contraction recorded during the 2008 financial crisis, when world output fell by only 0.1%[16]. A collapse of this scale would be systemic and uneven, hitting food security, rural livelihoods and commodity markets hardest.

The World Economic Forum outlines in its Global Risks Report 2025 biodiversity loss and ecosystem change as the second greatest risk over the long term (10 years) in its annual survey. This recognition signals a shift in business leaders', academia, and government entities' priorities as biodiversity loss is now treated as a driver of global instability, with implications for supply chains, asset values, and long-term growth. Disclosure frameworks such as the Taskforce on Nature-related Financial Disclosures (TNFD), and soon to be International Sustainability Standards Board (ISSB), provide a voluntary global framework for businesses and financial institutions to assess, manage, and disclose their nature-related dependencies, impacts, risks, and opportunities.

External benchmarks validate our position in this landscape. We achieved a Platinum rating[17] from EcoVadis in 2025, assessing our wider sustainability management systems and placing us among the top one per cent of more than 130,000 companies worldwide. Since 2023, EcoVadis has added criteria for companies on nature and biodiversity alongside wider ESG criteria. We also hold an AAA rating[18] from MSCI, which incorporates biodiversity risk through public disclosures and geospatial analysis of sensitive areas. For investors, this demonstrates that Siemens is both resilient to emerging expectations and able to equip customers to meet them.



Market Demand

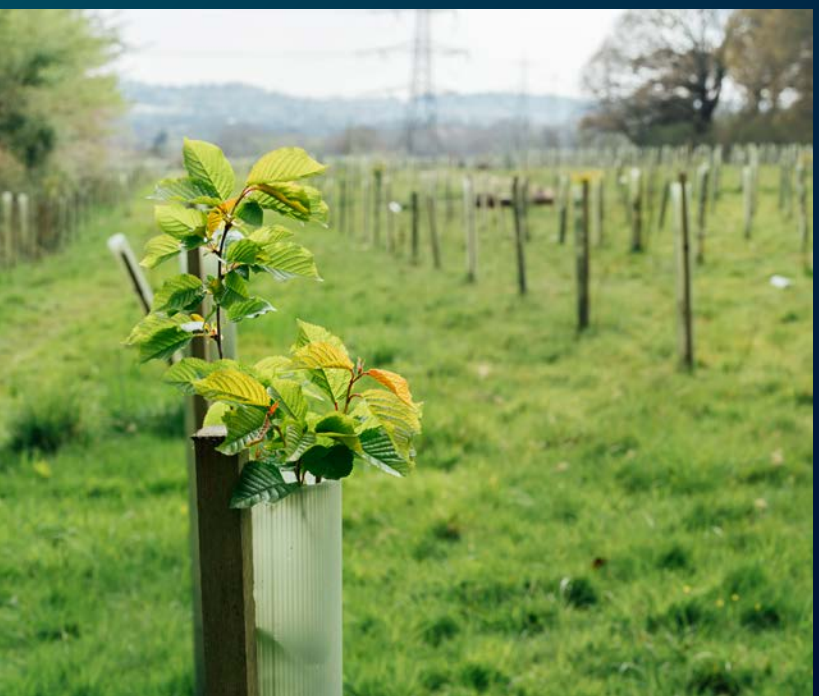
Customers are broadening their sustainability focus beyond carbon to address the protection of water, soil, and circularity. This reflects recognition, emphasized by IPBES, that biodiversity loss undermines the ecosystem services on which industries depend. For example, food and beverage companies are working to secure agricultural supply chains threatened by soil degradation and water stress. Infrastructure providers are integrating nature-based resilience into the design of cities to reduce flood and heat risks. Manufacturers are targeting reductions in water use, chemical discharge, and waste to ensure compliance and protect their license to operate. Across industries, companies are mapping their value chains through the lens of nature, recognizing dependencies on land, water, and ecosystems as critical factors for competitiveness and resilience.

We support these efforts with a portfolio that integrates digitalization, automation, and infrastructure solutions. Siemens' Xcelerator, our open and modular digital business platform, brings together software, IoT-enabled hardware, partner ecosystems, and a marketplace that connects customers and developers. Siemens' businesses deliver digital twins, system simulations, and data-driven insights across products, production, buildings, electrification and grids. By enabling predictive modelling, regenerative design and transparent data management, these capabilities help customers mitigate environmental impacts, comply with regulation, manage risk, strengthen resilience, and demonstrate credible delivery against nature-related goals.

Policy and Regulatory Acceleration

Policymakers are embedding biodiversity into binding frameworks at both national and international levels. The GBF was the first international agreement signed with clear targets to halt and reverse biodiversity loss and to ensure that all ecosystems are restored, resilient, and adequately conserved. The EU Nature Restoration Regulation requires Member States to restore at least 30% of land and sea by 2030, while the Corporate Sustainability Reporting Directive (CSRD) will require companies to report on biodiversity and ecosystems. Together, these measures show how voluntary disclosure and binding regulation are converging, creating new baselines for how companies are assessed and signaling that nature outcomes are moving into the rules of trade and finance.

The effect of these measures is that biodiversity is becoming a regulated condition of doing business. Companies will need transparent data, credible reporting and proven solutions to reduce and restore their impacts. This is where our technology can play a decisive role. Our digital platforms provide the monitoring and analytics needed to comply with disclosure standards, while our portfolio enables measurable reductions in resource use and pollution. By equipping customers with the tools to meet regulatory expectations, we can help them maintain competitiveness while contributing to wider societal goals.



Technology Supporting the Global Goal for Nature

As governments translate global biodiversity targets into regulation, disclosure and incentives, and as investors and customers integrate ecological risks into their decisions, companies are being asked to show not only how they reduce harm but how they contribute to renewal. This shift is about recognizing that natural systems underpin productivity and long-term growth, and that safeguarding them has become inseparable from industrial success.

With efficiency, transparency, and resilience emerging as sources of competitive advantage, technology that supports nature can deliver outcomes that ease ecological pressures while supporting prosperity.

What comes next is an era in which nature underpins the sustainability transition. To strengthen our sustainability risk management, we are exploring different external frameworks that fortify our biodiversity conservation activities. Our ambition is to shape systems that regenerate rather than deplete while building the trust of stakeholders who now judge performance by positive contributions to the stability of natural systems.

4 Future Directions and Strategic Initiatives

Shaping the Next Era of the Sustainability Transformation

For much of the modern era, economic progress has been built on models that rewarded scale, efficiency and extraction, with ecosystems regarded as inputs to be consumed or barriers to be managed. This approach delivered growth yet steadily eroded the ecological foundations on which prosperity depends, until the consequences could no longer be ignored.

That perspective is now shifting. Biodiversity is moving to the center of international negotiations and is increasingly placed on the same footing as climate action, recognized as essential to stability, resilience, and future growth.

This represents a shift for industry. Ecological outcomes will become a larger focal point in compliance measures, how capital is allocated and how competitiveness is defined. Customers and investors will expect not only commitments but measurable results. Businesses will be asked to demonstrate how their operations and technologies contribute to the renewal of natural systems, not simply how they limit their impact. Policymakers will continue to set the direction through disclosure rules, restoration targets, and incentives that reward measurable ecological benefit. These shifts will influence economies, disclosure requirements and the flow of finance, making biodiversity a strategic consideration for every single sector.

Across Digital Industries, Infrastructure, Transport, and Financial Services, our technologies are already delivering benefits that ease pressures on ecosystems. Cleaner processes, reduced land and water use, and decreased dependence on raw materials are tangible outcomes that contribute to healthier natural systems, in line with the priorities identified by science and underlined by IPBES.

The task is not only to make these contributions visible and measurable, but to build them into the design logic of portfolios so that ecological outcomes are part of how systems are planned, financed, and operated.

This requires collaboration. Technology alone cannot deliver renewal, but it can provide the foundation for governments, finance, industry and communities to act together. We will continue to co-create with partners, customers, and investors to scale solutions that combine commercial advantage with ecological integrity.

The next era of industry will be measured not by the scale of what we build but by the stability of the natural systems that make building possible. The companies that succeed will be those that embed ecological renewal into the fabric of their technologies and their growth.

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