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BIODIVERSITY AND THE PRIVATE SECTOR IN ITALY

TRENDS, POLICIES AND FINANCIAL INSTRUMENTS

2024

Title

Biodiversity and the private sector in Italy
Trends, policies and financial instruments

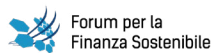
Authors



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Key Messages

In recent decades, the rapid decline in biodiversity has become one of the most urgent global nature-related challenges, with profound consequences for ecosystems, human well-being, and the economy. Italy, home to some of Europe's richest biodiversity, is particularly vulnerable, with more than 160 species at high risk of extinction¹ and nearly 20% of its ecosystems in unfavorable conservation status². These nature-related issues directly affect the business, which depends heavily on natural capital and ecosystem services, such

as clean water, pollination, and climate regulation. This report explores the intersection of biodiversity and the private sector in Italy, analyzing current trends, policies, financial instruments, and corporate practices related to biodiversity conservation. The work is based on a mix of secondary research and primary data retrieved via a survey among selected Italian companies, which reveals valuable insights into their awareness, actions, and plans regarding biodiversity.

1. Italy's rich biodiversity is under severe threat: Italy is one of the countries with the highest levels of biodiversity in Europe, but also one of those where the risks of losing this richness are among the highest. Italian biodiversity is seriously threatened by habitat destruction, pollution, and resource exploitation. Currently, over 160 species are endangered, and nearly 20% of the country's ecosystems are in critical conservation status.

2. The private sector plays a fundamental role in both the loss and protection of biodiversity: companies are contributing to the loss of biodiversity, but at the same time, they heavily depend on the ecosystem services provided by nature. Since 55% of global GDP depends on nature, the Italian private sector has a direct interest in addressing the challenges related to biodiversity loss. The private sector plays a fundamental role in both the loss and protection of biodiversity: Companies contribute to biodiversity loss, but at the same time, they heavily rely on ecosystem services provided by nature. Since 55% of global GDP depends on nature, the private sector has a direct interest in adopting a "nature positive" strategy. This approach includes materiality assessments, evaluation of impacts, dependencies, risks, and opportunities, allowing businesses to set clear targets and achieve them by following the mitigation hierarchy. Not only does this reduce negative impacts, but it also creates opportunities for innovation and growth.

3. Awareness of biodiversity's importance is growing among Italian companies: currently, only 25% of the surveyed companies evaluate their impact on biodiversity, but 48% plan to integrate it into their strategies within the next five years. This growing awareness is encouraging, but more rapid and widespread action is needed to integrate biodiversity into business strategies and achieve sustainability goals.

¹ IUCN. Statistics - <https://www.iucnredlist.org/search/stats>

² IUCN - Lista Rossa degli Ecosistemi d'Italia - <https://www.mase.gov.it/pagina/liste-rosse-nazionali#10>

4. Only 33% of Italian businesses disclose on biodiversity: European directives like the CSRD require companies to report on sustainability, including biodiversity. While challenging, early compliance offers benefits like enhanced competitiveness and reputation. Currently, only 33% of companies report on biodiversity, and just 19% follow the required ESRS standards. Italian businesses must significantly adapt to meet these regulations and improve ESG performance.

5. Public and private investments are essential to achieve Italy's biodiversity conservation goals: to achieve biodiversity conservation goals in Italy, a significant commitment is required from both the public and private sectors. Financial instruments such as green bonds, sustainability-linked bonds, and biodiversity credits are essential, and the market has been growing in recent years, reflecting increased interest in financing sustainability and green initiatives. Therefore, companies need support to increase their investments in biodiversity through tax incentives, public-private partnerships, and clearer regulatory guidelines to help them navigate this evolving landscape.

6. Nature-based solutions (NbS) present significant economic opportunities: investing in NbS, such as reforestation and sustainable agriculture, can turn biodiversity conservation into a catalyst for innovation and growth. Companies aligning with biodiversity goals can enhance climate resilience, access new markets, and improve their reputation. While 45% of Italian interviewed companies recognize the risks and opportunities related to climate change and biodiversity loss, further analysis of the methodologies used to evaluate these factors is necessary to gauge the true commitment of Italian businesses.

7. The crucial role of SMEs in biodiversity investments: small and medium-sized enterprises (SMEs) make up the majority of the Italian economy and play a key role in biodiversity conservation efforts. These companies face significant challenges, such as a lack of internal resources and adequate specialist skills, leading to increased costs that can limit their investments in this area. To support Italian SMEs, the Ministry of Economy and Finance (MEF) and the Institute for Environmental Protection and Research (ISPRA) have published guidelines that can assist them in the reporting process. Supporting SMEs will be crucial for Italy to achieve its biodiversity restoration goals and ensure a sustainable future.

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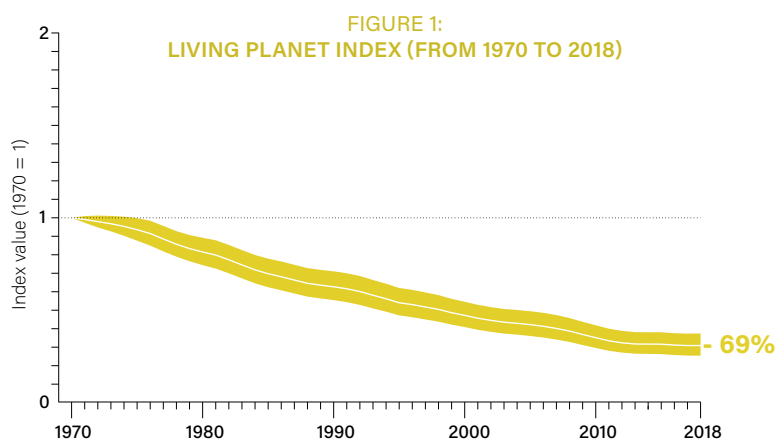
Introduction

The Convention on Biological Diversity (CBD) defines biodiversity as “the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems”³. **Human well-being is intricately linked to biodiversity in numerous ways.**⁴ Ecosystems provide essential services that support life, including clean air and water, pollination of crops, and the regulation of climate.⁵ Biodiverse environments enhance resilience, enabling ecosystems to adapt to changes and recover from disturbances such as natural disasters and climate change.⁶ Furthermore, a rich diversity of species contributes to food security by providing a variety of crops, livestock, and fish, which are vital for nutrition and economic stability.⁷

However, the recent and rapid degradation of biodiversity poses significant threats to human health, economic prosperity, and the sustainability of

various productive activities. The loss of species and habitats can disrupt food chains, diminish ecosystem services, and compromise the natural resources upon which many communities depend. As biodiversity continues to decline, the interconnectedness between human societies and natural ecosystems becomes increasingly vulnerable, highlighting the urgent need for conservation efforts to safeguard our planet’s biological wealth for future generations.

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has identified several critical drivers of biodiversity loss, including **habitat destruction, climate change, pollution, invasive species, and overexploitation of natural resources.** These factors contribute directly to the ongoing decline of wildlife, as highlighted in the WWF’s Living Planet Report 2022, which reveals that global wildlife populations monitored between 1970 and 2018 have decreased by 69% (Figure 1).⁸



Source: WWF. (2022). Living Planet Report 2022

³ Convention on Biological Diversity, UNEP/CBD/94/1

⁴ IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services <https://www.ipbes.net/global-assessment>

⁵ Millennium Ecosystem Assessment. Ecosystems and Human Well-being. <https://www.millenniumassessment.org/en/Synthesis.aspx>

⁶ Convention on Biological Diversity and its protocol on Biosafety. <https://legal.un.org/avl/ha/cpbcbd/cpbcbd.html>

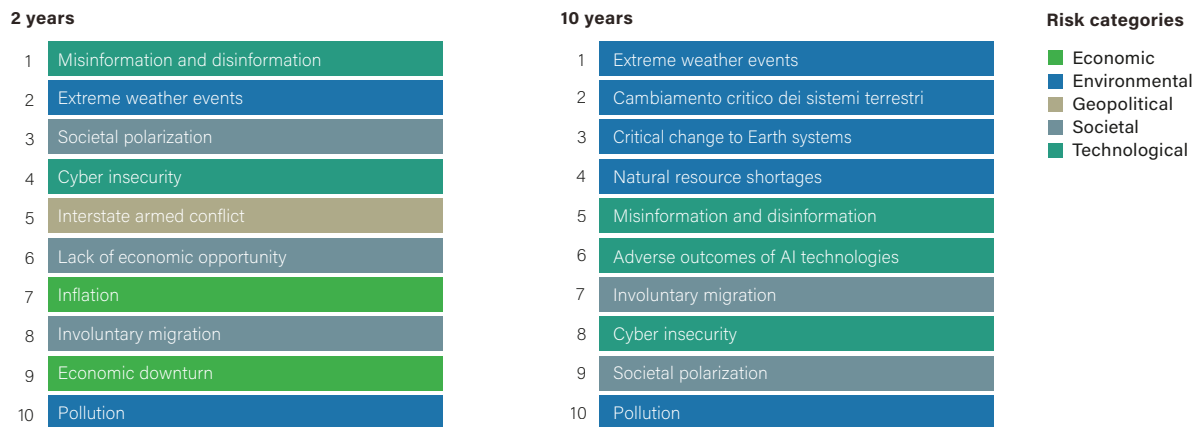
⁷ IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services <https://www.ipbes.net/global-assessment>

⁸ WWF. (2022). Living Planet Report 2022 - <https://www.wwf.it/cosa-facciamo/pubblicazioni/living-planet-report/>

According to the latest Global Risks Report by the World Economic Forum, **four of the five top perceived global risks over the next decade are nature-related**.⁹ Among them, biodiversity loss and ecosystem collapse rank as the third most severe risks, surpassed only by extreme weather events and critical changes to Earth’s systems (Figure 2). Human societies and economic activities rely on biodiversity in fundamental ways: biodiversity underpins essential ecosystem services, including **pollination of crops, regulation of water cycles, and the provision of clean air and soil fertility**. These services are vital for agriculture, forestry, fi-

sheries, and numerous industries that directly contribute to the global economy. Biodiversity is also a source of **raw materials**, offering a wealth of genetic resources that are crucial for the development of medicines, food products, and sustainable materials. Research from the World Economic Forum shows that **\$44 trillion of economic value generation – more than half of the world’s total GDP – is moderately or highly dependent on nature** and its services and is therefore exposed to nature loss.¹⁰ A lack of awareness about the **interdependence between nature and the economy** could threaten long-term business sustainability.

**FIGURE 2:
GLOBAL RISKS RANKED BY SEVERITY OVER THE SHORT AND LONG-TERM**



Source: WEF. (2024). The Global Risks Report 2024

At the international level, the main multilateral agreement that represents the commitment to achieving common goals in biodiversity protection and conservation is the **Kunming-Montreal Global Biodiversity Framework (GBF)**, adopted at COP15 in 2022. Among its key objectives, **Target 15** urges businesses to assess, disclose, and mitigate biodiversity-related risks and impacts, while **Target 19** aims to mobilize \$200 billion annually for biodiversity, including \$30 billion through international finance.¹¹ These targets require Italy, along with other signatory countries,

to implement measures encouraging businesses to evaluate and report on biodiversity-related risks and dependencies, and to foster investment in biodiversity through innovative mechanisms such as green bonds, payments for ecosystem services, and sustainable investment funds.

At the European level, the recent adoption of the Corporate Sustainability Reporting Directive (CSRD) marks a significant step forward in advancing biodiversity and sustainability reporting. The

⁹ WEF. (2024). The Global Risks Report 2024 - <https://www.weforum.org/publications/global-risks-report-2024/>

¹⁰ WEF. (2020). Nature Risk Rising. <https://www.weforum.org/press/2020/01/half-of-world-s-gdp-moderately-or-highly-dependent-on-nature-says-new-report/>

CSRD, officially adopted in Italy on September 10, 2024, will require companies to report their progress toward a sustainable economy, starting from their 2024 financial statements, depending on company size. Beyond reporting sustainability indicators, businesses will need clear guidelines for developing sustainability strategies that not only focus on nature reporting but also aim to improve biodiversity in alignment with the ambitious restoration targets set by the Nature Restoration Law.

Narrowing the focus to Italy, the country is one of the richest in biodiversity among European nations, yet its unique ecosystems are under significant threat, with over 160 species at high risk of extinction.¹² ¹³ The 2023 Impact Assessment Study, drafted in support of the Nature Restoration Law by the European Commission, highlights that Italy's biodiversity restoration and conservation efforts could generate nearly **€70 billion in economic benefits by 2050**, underscoring the strong connection between business and biodiversity.¹⁴

This report analyzes the connection between biodiversity and business activities in Italy, providing an initial national baseline to meet the above-mentioned GBF targets. The report is structured across four chapters. The **first chapter** offers an overview of Italy's current state of biodiversity. The **second chapter** examines the impacts, risks, and dependencies for businesses tied to ecosystem services, identifying business opportunities from the sustainable management of natural resources. The **third chapter** explores the regulatory framework for biodiversity at the International and Italian levels, along with reporting practices related to sustainability. The **fourth chapter** reviews pu-

blic and private financial instruments supporting sustainability and biodiversity protection investments. In addition to the four main chapters, the report includes two in-depth boxes focused on the CSRD Directive and Italian initiatives related to sustainable finance, the private sector, and biodiversity conservation. Finally, the report concludes with a set of key messages and recommendations, emphasizing the urgent need for action to restore and conserve biodiversity. It calls for contributions from both the public and private sectors and advocates for a more effective integration of biodiversity into corporate strategies.

This report grounds itself on scientific and gray sources at the international and national levels and primary data from **a survey distributed to Italian companies through the Unione Italiana Olio di Palma Sostenibile, Alleanza Italiana per lo Sviluppo Sostenibile (ASviS), B Lab Italy, Koinetica and Forum per la Finanza Sostenibile**. Figure 3 illustrates the main characteristics of the enterprises that participated in the survey, categorized by size, location, and economic activity. While the responses collected, 71, provide valuable insights into the private sector's trajectory, it is important to note that the data represent an initial qualitative view of the commitment of Italian companies. For each section, survey results will be presented to complement with literature review. Additionally, it should be acknowledged that the enterprises interviewed are already part of a network highly sensitive to biodiversity conservation. This situation introduces a bias, as the sample does not fully represent the broader national landscape. Therefore, the survey results are not intended to reflect the overall perspective of Italian businesses.

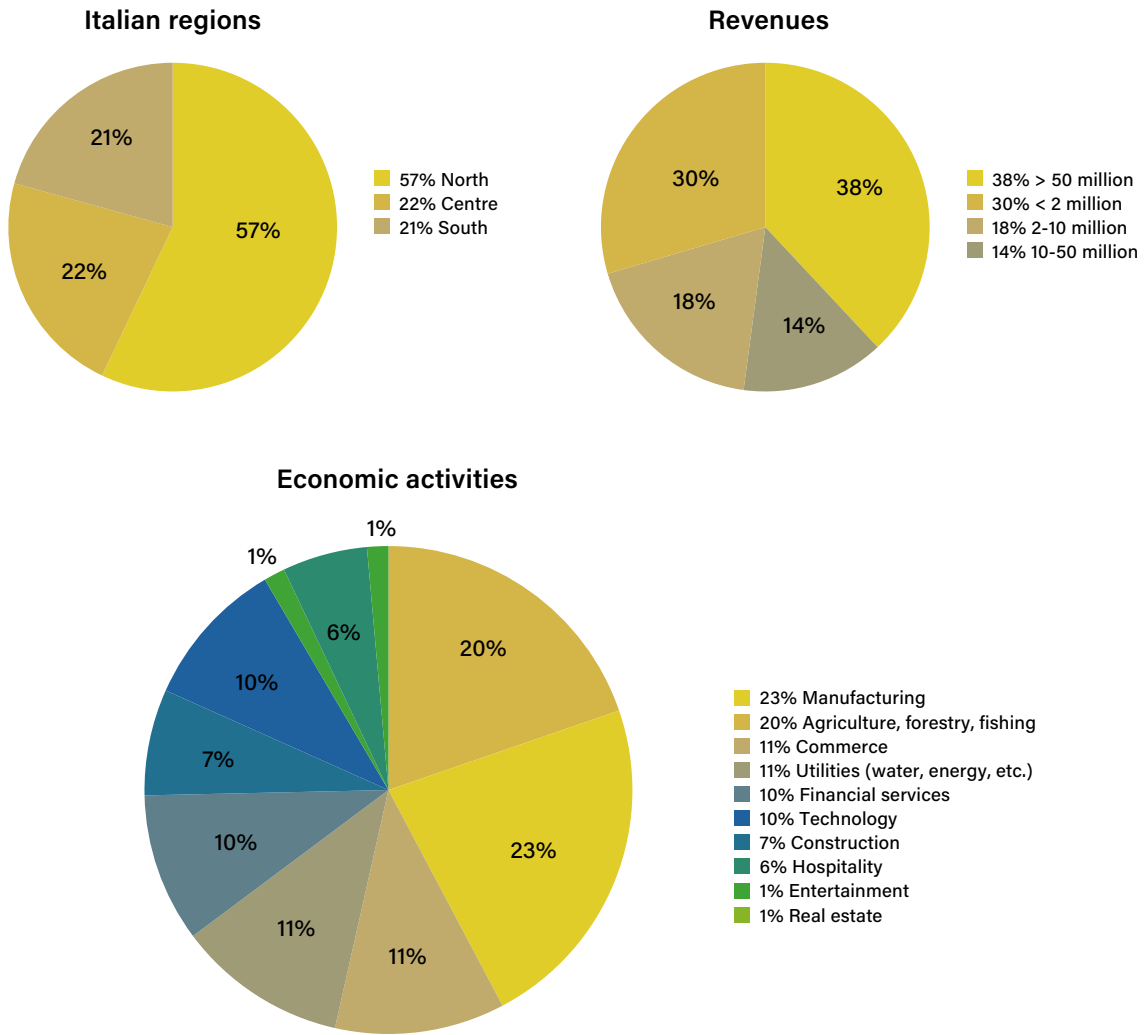
¹¹ Kunming-Montreal Global Biodiversity Framework: <https://www.cbd.int/gbf>

¹² ISPRA. Biodiversity and natural, agricultural and forests areas. <https://www.isprambiente.gov.it/contentfiles/00008600/8682-biodiversity.pdf>

¹³ IUCN. Statistics - <https://www.iucnredlist.org/search/stats>

¹⁴ EU. (2023). Impact assessment study to support the development of legally binding EU nature restoration targets <https://op.europa.eu/en/publication-detail/-/publication/db3e5d55-310c-11ee-946a-01aa75ed71a1/language-en>

FIGURE 3:
SIZE, LOCATION AND ECONOMIC SECTOR OF THE ENTERPRISES THAT PARTICIPATED IN THE SURVEY



A photograph of a lush green wheat field. In the foreground, several bright yellow flowers are out of focus, creating a soft, bokeh effect. The wheat stalks are tall and green, filling the middle ground. The background is a vast, slightly blurred expanse of the same green field under a bright sky.

01.

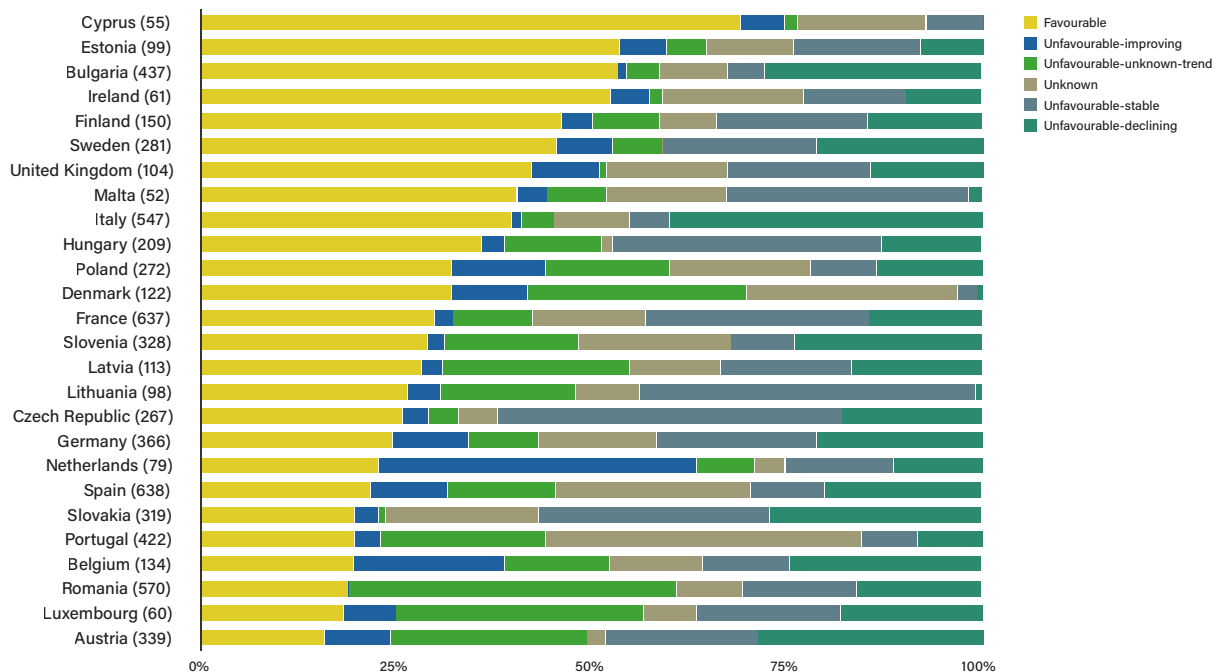
Current state of biodiversity in Italy

Italy is one of the most biodiverse countries in the European Union¹⁵, distinguished by a rich variety of animal and plant species. This biological wealth stems from the diverse geology, topography, and climate of the region, alongside its paleogeographic and paleoclimatic history.¹⁶ Furthermore, Italy exhibits a high level of **endemism**, with numerous species found exclusively within its

borders. This natural heritage brings with it a significant responsibility for conservation.

According to the Composite Report (EEA, 2020) Italy ranks as the fourth EU Member State with the **highest percentage of species in unfavorable conditions**, following Slovakia, the Czech Republic, and Austria (Figure 4).¹⁷

FIGURE 4:
CONSERVATION STATUS TRENDS FOR EACH MEMBER STATE



Source: <https://www.eea.europa.eu/soer/publications/soer-2020> EEA 2020

The IUCN Red List highlights that more than 160 species in Italy are at high risk of extinction.¹⁸

Among the 2,430 vascular plant species evaluated, 2.2% are classified as extinct or probably extinct, while 24.3% are in unfavorable conditions.¹⁹ The situation is similarly alarming for Italian vertebrates:

21% of cartilaginous fish, 48% of freshwater fish, 19% of reptiles, 36% of amphibians, 23% of mammals, and 27% of breeding birds are listed as endangered.²⁰ Overall, 30% of vertebrate species in Italy are categorized as vulnerable, endangered, or critically endangered (Figure 5).

¹⁵ ISPRA. Biodiversity and natural, agricultural and forests areas.

<https://www.isprambiente.gov.it/contentfiles/00008600/8682-biodiversity.pdf>

¹⁶ ISPRA. <https://www.isprambiente.gov.it/attivita/biodiversita/le-domande-piu-frequenti-sulla-biodiversita/come-si-presenta-la-situazione-della-biodiversita-in-italia>

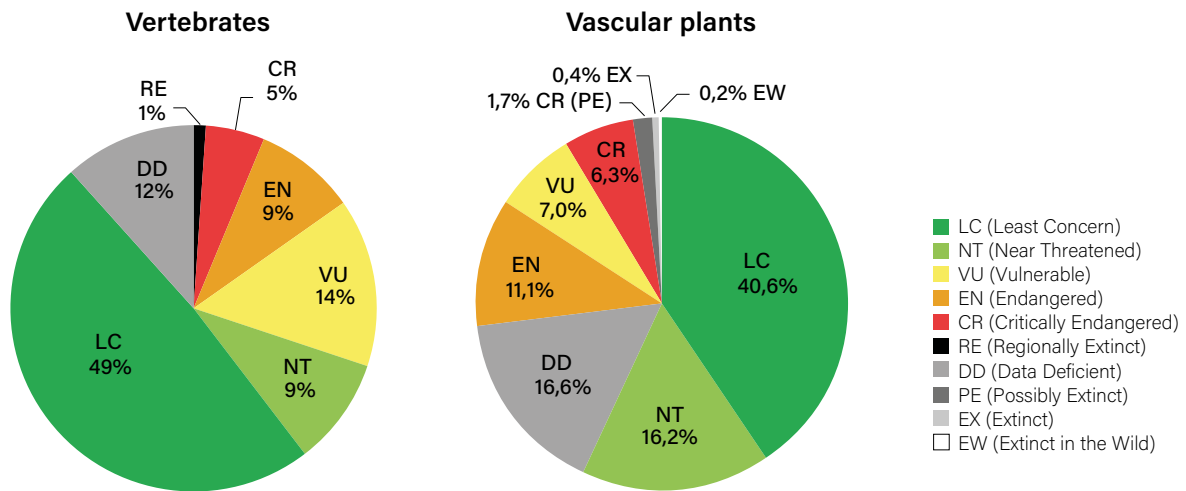
¹⁷ EEA. (2020). European Environmental Agency - State of the European Environment Report <https://www.eea.europa.eu/soer/2020>

¹⁸ IUCN. Statistics - <https://www.iucnredlist.org/search/stats>

¹⁹ ISPRA. <https://indicatoriambientali.isprambiente.it/it/biodiversita-stato-e-minacce/consistenza-e-livello-di-minaccia-di-specie-vegetali>

²⁰ IUCN. https://www.iucn.it/pdf/Comitato_IUCN_Lista_Rossa_dei_vertibrati_italiani.pdf

FIGURE 5
ITALIAN VERTEBRATE AND VASCULAR PLANT SPECIES IUCN RED LIST (2022)



Source: Banca Dati indicatori ambientali ISPRA <https://indicatoriambientali.isprambiente.it/it/biodiversita-stato-e-minacce>

In Italy, **protected areas** are managed through a network of national and regional parks that integrate with the Natura 2000 network, encompassing 2,646 sites. Currently, approximately 4,068,476 hectares of marine areas are protected, representing 11.62% of Italian territorial waters and Ecological Protection Zones (ZPE). Additionally, around 6,532,341 hectares of land are designated as protected, accounting for 21.68% of the country's total territory²¹.

Despite these efforts, Italy faces significant challenges, with **58 ecosystems at risk**, covering 19.6% of the national territory and nearly half of the country's natural and semi-natural ecosystems. As emphasized by the European Biodiversity Strategy (EBS) and the new Nature Restoration Law, the existing network of protected areas remains inadequate for ensuring sufficient biodiversity protection. To achieve the 30% target set by the EBS 2030, an additional 18% of marine areas (approximately 6,600,000 hectares) and 8% of land areas (around 2,500,000 hectares) must be protected. Expanding this network by creating ecological corridors is crucial for enhancing landscape connectivity and

bolstering resilience against climate change, particularly in safeguarding carbon-rich ecosystems such as primary forests, peatlands, and seagrass meadows.²²

The primary threats to biodiversity arise from the destruction and fragmentation of natural habitats, largely driven by human expansion and activities, as well as presence of invasive alien species. The overall economic cost of invasions to Italy between 1990 and 2020 was estimated at € 704.78 million.²³

In 2022, **land consumption** within the areas included in the EUAP (Official List of Protected Areas) totaled 58,381 hectares, representing 1.9% of the protected territory. Between 2021 and 2022, land consumption increased by 104 hectares. From 2006 to 2022, a total of 1,683 hectares were lost in Italy's protected areas, leading to often irreversible losses of semi-natural and agricultural lands and their associated ecosystem services. Natural areas, including countryside, forests, and wetlands, have been replaced by construction and infrastructure. Additionally, intensive agricultural practices, along with the use of pesticides and fertilizers, have fur-

²¹ IUCN - Lista Rossa degli Ecosistemi d'Italia - <https://www.mase.gov.it/pagina/liste-rosse-nazionali#10>

²² ISPRA. Indicatori ambientali Rete Natura 2000 - <https://indicatoriambientali.isprambiente.it/it/aree-tutelate>

²³ The recorded economic costs of alien invasive species in Italy <https://neobiota.pensoft.net/article/57747/>

ther degraded soils, depleting biodiversity and diminishing food quality.²⁴

The overall state of biodiversity and ecosystem conservation in Italy presents a **critical scenario**, with many natural habitats and species in unfavorable conditions, primarily due to human activities. It is essential to recognize that the impact of human activities on biodiversity is multifaceted. **Economic activities heavily depend on climate, natural re-**

sources like water, food, and energy, as well as the stability of soil **and ecosystems**. Consequently, environmental degradation undermines the very foundations of economic production, highlighting the interdependence between biodiversity and human activity. In the next chapter, we will delve into the interactions between the economy and nature, examining the impacts, risks, dependencies, and opportunities that economic activities present in relation to ecosystems.

²⁴ ISPRA. Indicatori Ambientali - Impermeabilizzazione e consumo di suolo - <https://indicatoriambientali.isprambiente.it/it/uso-e-consumo-di-suolo/impermeabilizzazione-e-consumo-di-suolo>

02.

**Biodiversity:
impacts, opportunities,
dependencies, and
risks for the private
sector**



The private sector heavily **depends** on biodiversity for essential natural resources and ecosystem services, such as clean water, pollination, and climate regulation. However, business activities can significantly **impact** biodiversity, leading to habitat destruction, pollution, and overexploitation of resources. These actions not only harm the environment

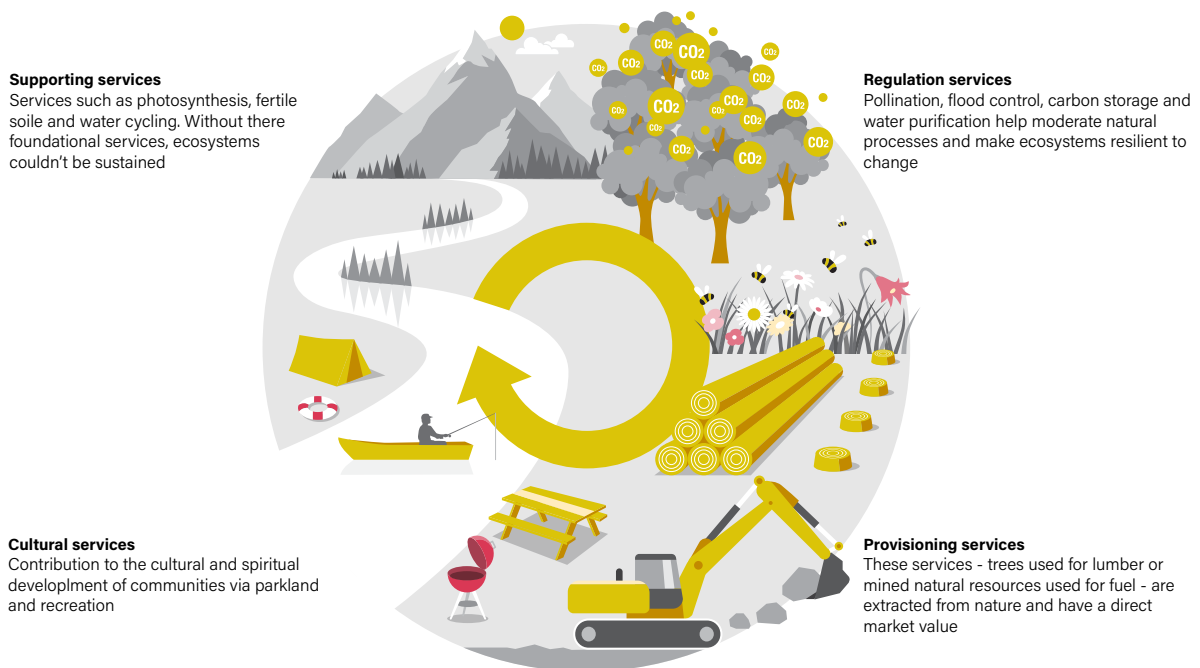
but also expose companies to considerable **risks**, including reputational damage, increasing regulatory pressures, and supply chain vulnerabilities. Therefore, protecting biodiversity should be viewed not just as a responsibility but as an **opportunity** to promote economic growth and innovation.

2.1 Dependencies: understanding economic reliance on ecosystem services

Businesses depend significantly on ecosystem services and the benefits provided by natural ecosystems (Figure 6). Over 2 billion people globally use wood as a primary energy source, and approximately 4 billion depend on natural medicines for healthcare. Notably, around 70% of cancer drugs are derived from or inspired by natural products.

Nature also supports air quality, freshwater resources, soil health, climate regulation, pollination, and pest control. For example, terrestrial and marine ecosystems sequester 5.6 gigatons of carbon annually, equivalent to about 60% of global anthropogenic emissions.²⁵

FIGURE 6:
ECOSYSTEM SERVICES DIVIDED IN THE FOUR CATEGORIES: SUPPORTING, CULTURAL, REGULATING AND PROVISIONING.



Source: PWC <https://www.pwc.com/us/en/services/esg/library/biodiversity-loss-and-nature.html>

²⁵ IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services <https://www.ipbes.net/global-assessment>

Globally, over \$44 trillion in economic value — more than half of the world's GDP—**depends significantly on ecosystem services**²⁶, with construction (\$4 trillion), agriculture (\$2.5 trillion), and the food and beverage industry (\$1.4 trillion) being among the most reliant sectors²⁷. In Italy, the construction sector accounts for approximately 5.3% of the national GDP, while the agrifood sector represents around 19%. Both sectors depend heavily on regulatory services like water availability and pollination, which are crucial for critical crops such as grapes, olives, and almonds.

Biodiversity loss has already resulted in tangible economic consequences in Italy. Desertification threatens about 20% of the national territory, especially in southern regions, reducing agricultural productivity and water availability²⁸. A European Commission study estimates **that biodiversity loss and ecosystem service degradation could cost the Italian economy around €3 billion annually**, primarily due to reduced agricultural productivity and marine biodiversity loss²⁹. Declining water resources in arid regions could severely damage the agricultural sector, impacting exports like wine and olive oil.

To evaluate and raise awareness among businesses about their dependence on natural resources, the survey asked participants which ecosystem services most

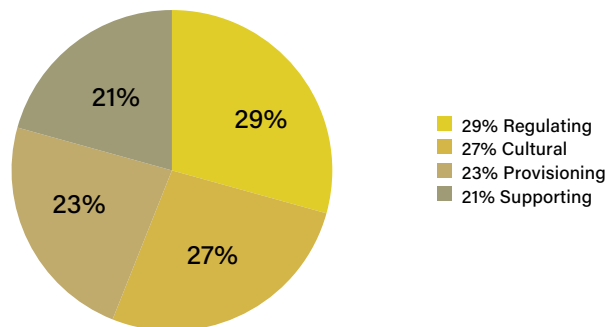
influence their production activities. All 71 interviewed Italian businesses demonstrated a strong understanding of the ecosystem services they rely on, reflecting a solid grasp of the benefits that nature provides across various sectors.

The survey results (Figure 7) indicate that 29% of respondents identified regulating services as the most influential, while 27% highlighted cultural services. This emphasis on cultural services may be attributed to Italy's status as a highly touristic country, where businesses recognize the importance of maintaining natural beauty and heritage for visitor satisfaction. Additionally, the focus on well-being suggests that these companies are increasingly aware of their social responsibilities.

Furthermore, 23% and 21% of respondents cited provisioning and supporting services, respectively. This diversity in service prioritization underscores the varied ways in which different sectors interact with and rely on natural ecosystems.

Future surveys with a larger number of companies could provide deeper insights into which sectors place the greatest value on specific ecosystem services, further informing strategies for sustainable business practices.

FIGURE 7:
RESULTS FROM THE SURVEY ON ECOSYSTEM SERVICES RECOGNIZED
AS BENEFICIAL TO THEIR ECONOMIC ACTIVITIES.



²⁶ PWC. 2020. Nature Risk Rising. <https://www.pwc.com/th/en/press-room/press-release/2020/press-release-28-02-20-en.html>
²⁷ WEF. (2020). New Nature Economy Report Series - <https://www.weforum.org/publications/new-nature-economy-report-series/>
²⁸ ISPRA. Disponibilità d'acqua, raggiunto il minimo storico: deficit massimi in Sicilia, Sardegna e nel distretto del fiume Po - <https://www.isprambiente.gov.it/it/archivio/notizie-e-novita-normative/notizie-ispra/2023/06/disponibilita-dacqua-raggiunto-il-minimo-storico-deficit-massimi-in-sicilia-sardegna-e-nel-distretto-del-fiume-po>
²⁹ EU Impact Assessment Study to support the development of legally binding EU nature restoration targets - <https://op.europa.eu/en/publication-detail/-/publication/db3e5d55-310c-11ee-946a-01aa75ed71a1/language-en%20assessment%20study%20to%20support%20the%20development%20of%20legally%20binding%20EU%20nature%20restoration%20targets>

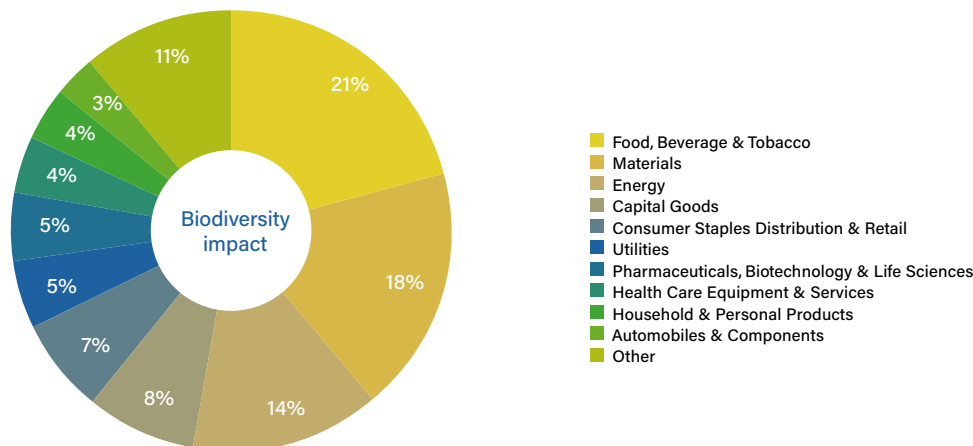
2.2 Impacts: Effects of Biodiversity Loss in Italy

Across the globe, specific economic sectors are leading contributors to biodiversity degradation. The Finance for Biodiversity Foundation³⁰ identifies **agriculture and food products, oil, gas, consumable fuels, chemicals, metals and mining, pharmaceuticals, and electric utilities as particularly harmful industries** (Figure 8). These sectors contribute to biodiversity loss through habitat destruction, soil degradation, pesticide use, pollution, climate change, and overexploitation of natural resources.

In Italy, **agriculture** and **forestry**, while only contributing around 2% to the national GDP³¹, have a signifi-

cant impact on land use and biodiversity. On one hand, the agricultural sector has abandoned large areas of land over the years³², leading to soil degradation and the loss of traditional practices that support biodiversity. On the other hand, the forestry sector, although not heavily reliant on domestic timber extraction, is notably affected by the import of illegal timber³³. Italy is a major buyer of timber from illicit sources, contributing to the trade of untraceable, unsustainable products. This reliance on illegally sourced timber increases profits from uncontrolled raw materials, further impacting global biodiversity and forest ecosystems.

FIGURE 8:
BIODIVERSITY IMPACTS IN DIFFERENT SECTORS



Source: Finance for biodiversity - top 10 biodiversity impacts ranking of company industries
<https://www.financeforbiodiversity.org/tracking-top-biodiversity-impact-sectors-with-footprinting-tools/>

The **construction** sector accounts for about 6% of the national GDP, while the **extractive industry** for non-petroleum materials represents 20% of the total, placing Italy as the 5th country in Europe for this sector. Moreover, the degradation of natural sites, such as the Alps and coastal regions, poses risks to **tourism**, which heavily relies on Italy's natural beauty for its economic viability.

According to our survey (Figure 9), awareness of the issue and efforts to assess impacts and dependencies

on nature are growing. While 48% of interviewed businesses are not yet evaluating these impacts, they plan to do so within the next five years. Among the Italian companies already assessing their environmental impacts, the primary focus is on greenhouse gas (GHG) emissions, followed by water consumption and solid waste management. We expect a further increase in the evaluation of impacts and dependencies on ecosystems in the coming years.

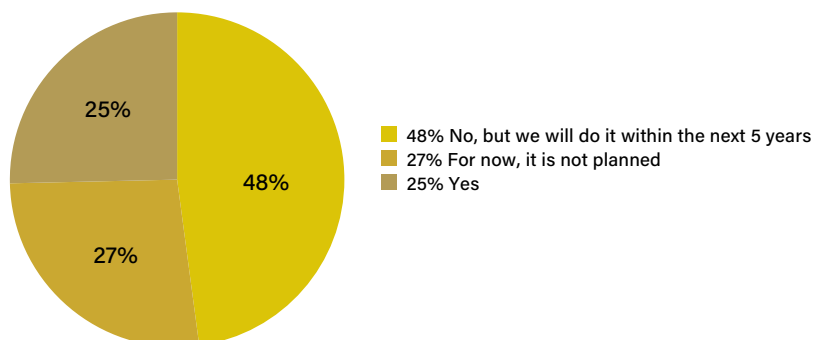
³⁰ Finance for Biodiversity Foundation. <https://www.financeforbiodiversity.org/tracking-top-biodiversity-impact-sectors-with-footprinting-tools/>

³¹ ISTAT. <https://www.openpolis.it/le-attivita-estrattive-di-materiali-non-energetici/>

³² ISPRA. Consumo di suolo 2022

³³ <https://www.salvafloresta.it/en/404/74-articoli/forests/2170-illegal-logging-in-italy.html>

FIGURE 9:
RESULTS FROM THE SURVEY ON EVALUATION OF IMPACTS AND
DEPENDENCIES ON BIODIVERSITY FOR THE ITALIAN BUSINESSES.



2.3 Risks: business vulnerabilities from biodiversity loss

Biodiversity loss, driven by factors such as land and sea-use change, overexploitation of organisms, climate change, pollution, and invasive alien species³⁴, presents significant risks not only to ecosystems but also to businesses and the global economy (Figure 10). As ecosystems degrade, companies face increasing challenges, from operational disruptions to regulatory pressures, which affect their ability to function efficiently. These risks can be categorized into **transition risks** — arising from efforts to shift toward more sustainable practices — and **physical risks**, which stem from the direct consequences of environmental degradation. In Italy, where biodiversity is rich and the economy heavily depends on ecosystem services, these risks are particularly pronounced. The economic damages from natural disasters in Italy are substantial, totaling €90.1 billion between 1980 and 2020—the third highest in the

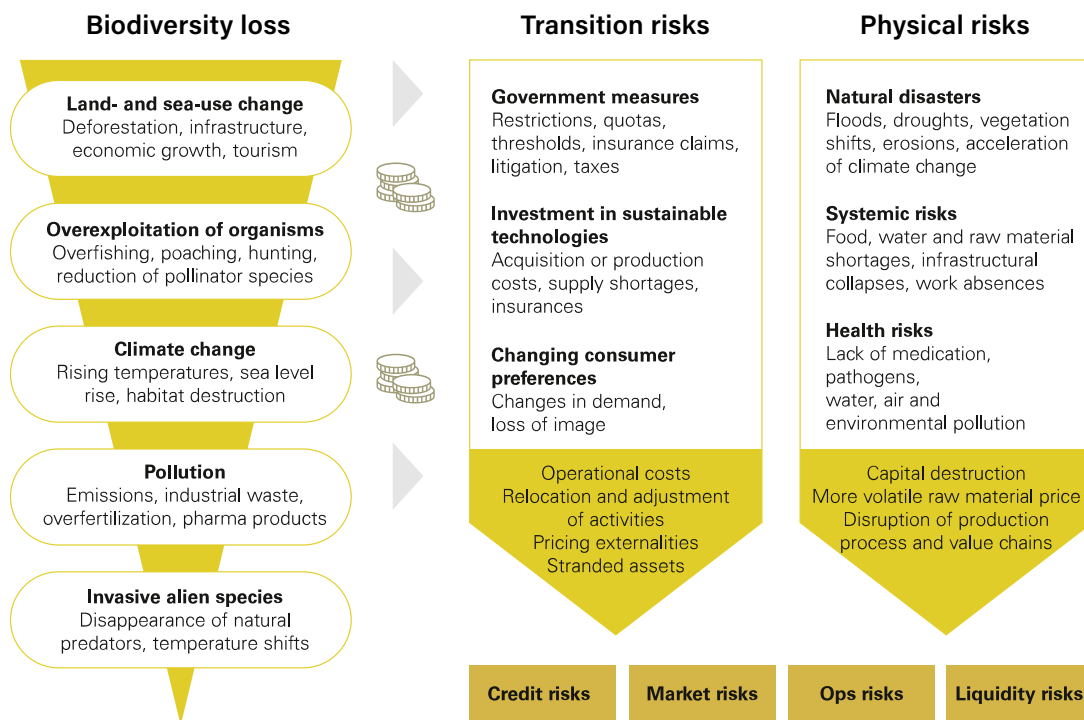
EU after Germany and France. In 2023, the flooding in Emilia-Romagna in May marked the sixth-largest global catastrophe in terms of economic loss, amounting to \$9.8 billion. Additionally, recurring storms in northern Italy and flooding in Tuscany caused further economic losses of approximately €2 billion.³⁵

To mitigate these risks, businesses can adopt a “nature positive” strategy, which involves assessing their material impacts, dependencies, and risks related to biodiversity. By setting science-based targets and applying the mitigation hierarchy—avoid, minimize, restore, and offset—companies can actively reduce their biodiversity-related risks. Moreover, this approach positions businesses to seize new opportunities, enhance their resilience, and align with emerging regulations and stakeholder expectations on biodiversity protection.

³⁴ IPBES. 2019.

³⁵ AON. 2024. Climate and Catastrophe Insight - <https://www.aon.com/en/insights/reports/climate-and-catastrophe-report>

FIGURE 10:
THE FIVE MAIN DRIVERS OF BIODIVERSITY LOSS AND CONSEQUENCES
RELATED TO BUSINESS: PHYSICAL AND TRANSITION RISKS



Source: KPMG <https://kpmg.com/be/en/home/insights/2023/01/ba-loss-of-biodiversity-the-twin-risks-of-climate-change.html>

2.4 Opportunities: Leveraging Nature-Based Solutions

Investing in biodiversity and adopting **nature-based solutions (Nbs)** — actions that leverage natural ecosystems to address societal challenges — can transform perceived costs into significant economic opportunities. These solutions, such as reforestation, wetland restoration, and sustainable agriculture, enhance climate resilience and offer a competitive edge. Nature-related opportunities arise when businesses mitigate the risks of natural capital loss or strategically transform their business models, products, and services to actively halt or reverse nature loss. This can include implementing or supporting NbS through financing or insurance.³⁶

By integrating biodiversity into decarbonization and climate plans, companies can future-proof their operations, meet evolving regulations, and respond to the

growing demand for transparent ESG reporting. Globally, the nature-based economy presents a major opportunity, potentially generating over \$10 trillion in annual business value by 2030 and creating 395 million jobs. Prioritizing biodiversity protection can help businesses build resilience and attract investments, particularly in sectors like agriculture and food production, which could unlock \$4.5 trillion annually by safeguarding ecosystems.³⁷

Companies leading in biodiversity preservation are likely to enhance their brand reputation and gain consumer trust, positioning themselves advantageously in the market. Proactively implementing biodiversity practices also prepares them for future regulations and allows them to shape emerging policies.

³⁶ The TNFD framework beta v0.1 - <https://tnfd.global/publication/the-tnfd-framework-beta-v0-1/>

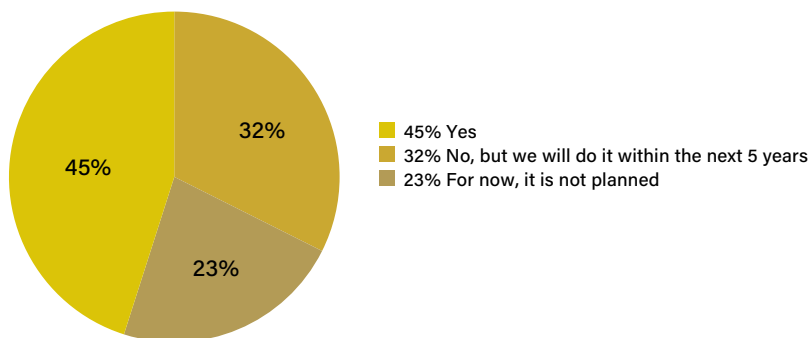
³⁷ WEF. <https://www.weforum.org/press/2020/07/395-million-new-jobs-by-2030-if-businesses-prioritize-nature-says-world-economic-forum/>

Our survey results show that 45% of Italian companies recognize the risks associated with climate change and biodiversity loss, as well as the opportunities these present, while an additional 32% plan to assess them within the next five years (Figure 11). However, it is important to note that while only 25% of businesses actively measure their impacts and dependencies on biodiversity, many more may perceive risks through external mechanisms like insurance. These tools, often used to assess climate risks, do not fully address biodiversity-related risks as measured by science-based frameworks. Therefore, a more in-depth analysis of the

methodologies used to evaluate risks and opportunities is needed to assess the real commitment of Italian businesses.

In Italy, where biodiversity is rich, leveraging nature-based solutions is particularly advantageous. Aligning investment strategies with biodiversity conservation can drive economic growth, improve environmental resilience, and foster innovation, positioning Italy as a leader in sustainable development. Embracing this approach unlocks new business opportunities, contributes to conservation goals, and ensures a more sustainable and prosperous future.³⁸

FIGURE 11:
RESULTS ON EVALUATION OF RISKS AND OPPORTUNITIES RELATED TO
BIODIVERSITY FOR ITALIAN BUSINESSES.



³⁸ WEF. (2020). New Nature Economy Report. <https://www.weforum.org/publications/new-nature-economy-report-series/#:~:text=A%20new%20nature%20economy%20could,395%20million%20jobs%20by%202030.&text=Champions%20for%20Nature%2C%20a%20community,halt%20nature%20loss%20by%202030.>

03.

Regulatory and policy environment at Italian level

In recent years, global awareness of biodiversity conservation has significantly increased, leading to important initiatives and international agreements (Figure 12). **The 2015 Paris Agreement** established a framework for addressing climate change, highlighting the interconnection between climate and ecosystems. Concurrently, the **United Nations Sustainable Development Goals** (SDGs), particularly Goals 14 and 15, emphasize the need to protect marine and terrestrial life. More recently, the **Kunming-Montreal Global Biodiversity Framework** was adopted at the **Convention on Biological Diversity COP15** in 2022, setting ambitious targets for ecosystem protection and improvement.

In Europe, the push for environmental sustainability is exemplified by the **European Green Deal**, which aims for climate neutrality by 2050. Accompanying this initiative are several guidelines, including the **EU Biodiversity Strategy for 2030**, which outlines concrete measures for ecosystem preservation, and the Nature Restoration Law, requiring Member States to restore at least 20% of degraded ecosystems by 2030. Businesses that contribute to biodiversity loss are increasingly encouraged to proactively measure their environmental impacts and develop mitigation strategies. The European Commission has introduced the **EU Taxonomy**, a classification system aimed at directing financial flows toward environmentally sustainable activities, thereby preventing greenwashing and promoting genuine environmental responsibility.

Alongside the Taxonomy, **the Sustainable Finance Disclosure Regulation** (SFDR), guides financial institutions towards sustainable projects through mandatory sustainability disclosures based on environmental, social, and governance (ESG) criteria. In addition to the SFDR, mandatory sustainability reporting in Italy is governed by the **Corporate Sustainability Reporting Directive** (CSRD), which was transposed into Italian law in August 2024. This directive will initially apply to large listed companies starting in 2024 and will gradually extend to large unlisted companies and listed small and medium-sized enterprises (SMEs) by 2028. The CSRD aims to promote transparency and requires com-

panies to assess and disclose their Environmental, Social, and Governance (ESG) performance, revolutionizing corporate accountability in the process. It encourages businesses to adopt sustainable models that attract sustainability-focused investors. Furthermore, the directive mandates the use of the **European Sustainability Reporting Standards** (ESRS), which includes ESRS E4, specifically dedicated to biodiversity impacts, risks, opportunities, and dependencies in corporate disclosures.

In Italy, **the number of companies required to comply with mandatory reporting is expected to rise significantly, from 200 to over 4,000 by 2028**. This shift marks an important milestone for the business world, as companies must adapt to new regulations and integrate ESG principles into their corporate strategies. While several voluntary standards and methodologies can help companies measure their biodiversity and environmental impacts scientifically and transparently—such as the Taskforce on Nature-related Financial Disclosures (TNFD), the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB), the Science-Based Targets for Nature (SBTN), Capitals Coalition (ACT-D), and Ecovadis—the CSRD will specifically require companies to orientate their business strategies towards sustainability standards.

While large corporations are primarily required to adopt the CSRD, the implications extend across the entire value chain, affecting SMEs, which make up over 75% of Italian businesses. The **Commissione Nazionale per la Società e la Borsa** (Consob) oversees ESG regulations in Italy. By 2022, approximately 210 companies had published sustainability reports under the Non-Financial Disclosure Regulation (NFDR), largely using Global Reporting Initiative (GRI) standards. Many non-mandated companies are also beginning to align their sustainability plans with relevant ESG issues.

Identifying material topics is essential for companies as they transition to sustainable models. The CSRD promotes the assessment of impacts, risks, and opportunities, providing strategic advantages such as regulatory compliance, enhanced reputa-

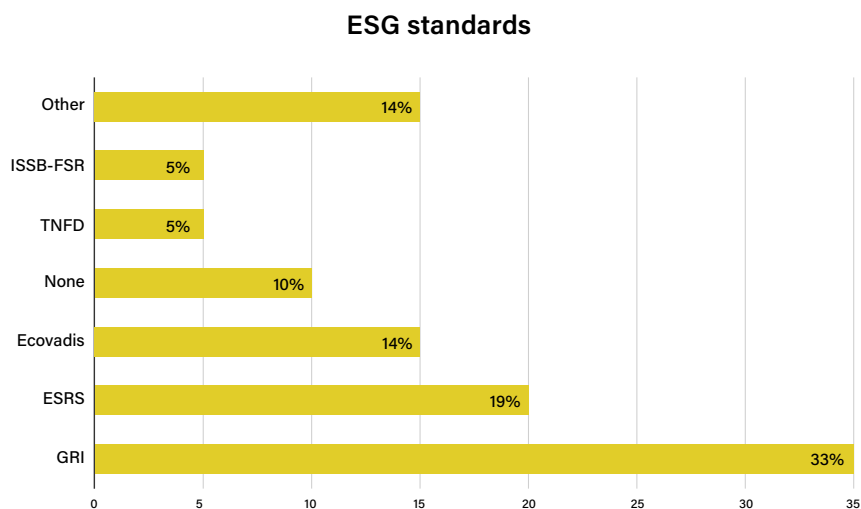
tion, and improved relationships with stakeholders who prioritize environmental and social responsibility. Currently, 64% of surveyed companies disclose their sustainability efforts through ESG reports, with only 20% lacking plans to do so in the next five years. However, among those reporting, only 33% include biodiversity assessments. The GRI remains the most commonly used reporting stan-

dard, although 19% have begun reporting under the new ESRS (European Sustainability Reporting Standards) framework (Figure 13). This reflects a growing interest in integrating biodiversity into ESG reporting, though companies will need support to fully comply with ESRS guidelines, particularly regarding biodiversity disclosures.

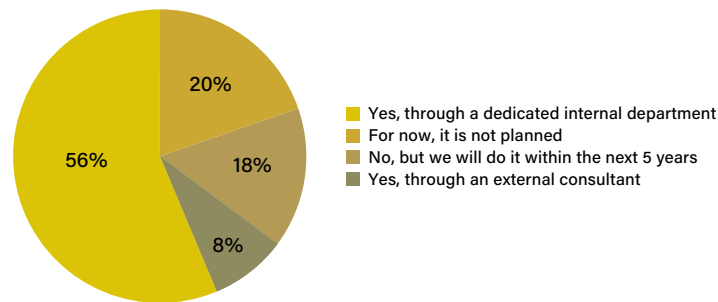
FIGURE 12:
GLOBAL GOALS, UE INITIATIVES, EU REGULATIONS AND STANDARDS FOR PUSHING ENVIRONMENTAL SUSTAINABILITY.



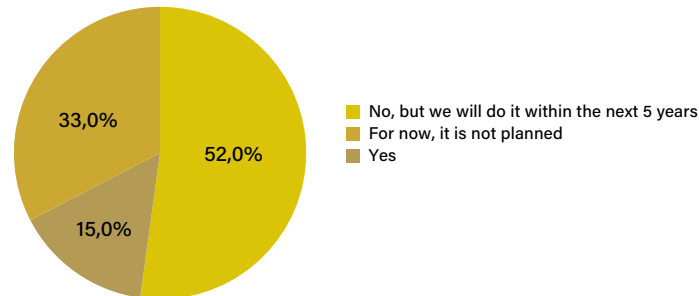
FIGURE 13:
PERCENTAGE OF ITALIAN COMPANIES THAT DRAFT AN ESG REPORT, INTEGRATE BIODIVERSITY INTO IT, AND THE STANDARDS THEY USE.



ESG reporting



Biodiversity included in the ESG



BOX 1 - OVERVIEW OF THE CORPORATE SUSTAINABILITY REPORTING DIRECTIVE (CSRD)

The Corporate Sustainability Reporting Directive (CSRD) marks a significant shift in corporate sustainability practices, aiming to enhance transparency and comparability of sustainability information. Key updates introduced by the CSRD include:

- **Assurance of sustainability reports:** companies are required to obtain “limited assurance,” with the goal of achieving “reasonable assurance,” conducted by accredited statutory auditors.
- **Digitalized reporting:** reports must be digitized using XHTML and XBRL, featuring digital tags for environmental, social, and governance (ESG) data.
- **Integration with financial reports:** sustainability information should be included within the Management Report to better align financial and non-financial data.
- **Single reporting standard:** adoption of the European Sustainability Reporting Standard (ESRS) is mandatory, enhancing comparability across various sectors, including specific standards for small and medium-sized enterprises (SMEs).
- **Double materiality:** organizations are required to assess and report on biodiversity, impacts, risks, and opportunities with a focus on both financial relevance and broader societal impacts.
- **Sustainability strategies and governance:** companies must articulate how their ESG goals integrate into business strategies and disclose management’s role in these efforts.

Among the ESRS standards (Figure 14), ESRS E4 specifically addresses biodiversity, requiring companies to disclose their impact on ecosystems through several key areas:

1. **Transition plan:** alignment with biodiversity preservation targets.
2. **Biodiversity policies:** strategies to address biodiversity risks and opportunities.
3. **Actions and resources:** details on efforts and resources allocated to biodiversity initiatives.
4. **Biodiversity targets:** objectives and progress towards biodiversity goals.
5. **Impact metrics:** significant influences on biodiversity, including species status indicators.
6. **Financial effects:** potential financial impacts of biodiversity-related risks and opportunities.

FIGURE 14::
ESRS FRAMEWORK

CSRD European Sustainability Reporting Standards (ESRS)

Cross-cutting standards		Cross-cutting standards		
ESRS 1: General principles		Environment (ESRS E)	Social (ESRS S)	Governance (ESRS G)
ESRS 2: General disclosures		E1 Climate change	S1 Own workforce	G1 Business conduct
Coming later		E2 Pollution	S2 Workers in the value chain	
Sector-specific standards		E3 Water and marine resources	S3 Affected communities	
SME-proportionate standards		E4 Biodiversity and ecosystems	S4 Consumers and end-users	
		E5 Resource use and circular economy		

E4	Biodiversity and ecosystems	Direct impact drivers of biodiversity loss Impacts on the state of species	Impacts on the extent and condition of ecosystems Impacts and dependencies on ecosystem services
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Source: <https://www.metabolic.nl/software/link/article/business-meets-nature-biodiversity-decoding-the-csrd/>

04.

Financing Biodiversity in Italy

4.1 Public funding instruments

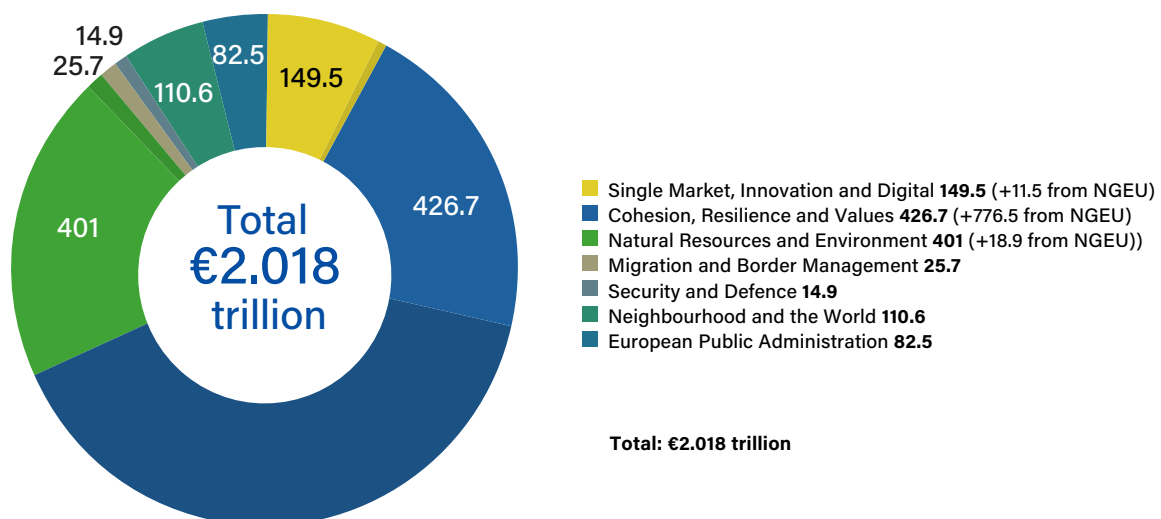
On July 17, 2024, the European Union adopted the Nature Restoration Law, a key regulation aligning with the Global Biodiversity Framework (GBF). This law mandates that each Member State, including Italy, restore and conserve 20% of habitats by 2030, with even more ambitious targets by 2050. Member States must submit their National Restoration Plans to the European Commission by mid-2026, outlining how they will meet these targets and monitor progress. This regulatory framework is crucial for addressing the biodiversity crisis and promoting a sustainable balance between humans and nature.

Achieving these goals will require a significant mobilization of financial resources. GBF Target 19 calls for mobilizing \$200 billion annually for biodiversity conservation, utilizing international, national, public, and private resources. However, the biodiversity finance gap is estimated at \$700 billion annually between 2020 and 2030, representing the shortfall between available resources and those needed to meet con-

servation objectives. The European Commission estimates that restoring 30% of ecosystems in Europe by 2030 will require approximately €20 billion annually. **In Italy, restoring 20% of habitats by 2030 will need around €260 million per year, totaling €7.2 billion by 2050.** Public funding alone is insufficient. Integrating private sector contributions is crucial, as it can leverage sustainable finance tools and develop business models that support environmental impact mitigation strategies that are also in line with sustainability reporting requirements (such as CSRD).

From the EU's 2021-2027 long-term budget and NextGenerationEU³⁹, 20% of the total €3.018 trillion is allocated to Natural Resources and Environment (Figure 15). These funds support sustainable agriculture, environmental protection, and rural development. Specific programs like LIFE and the Just Transition Fund are dedicated solely to the EU's environmental and climate goals.

FIGURE 15:
EU'S 2021-2027 LONG-TERM BUDGET AND NEXTGENERATIONEU



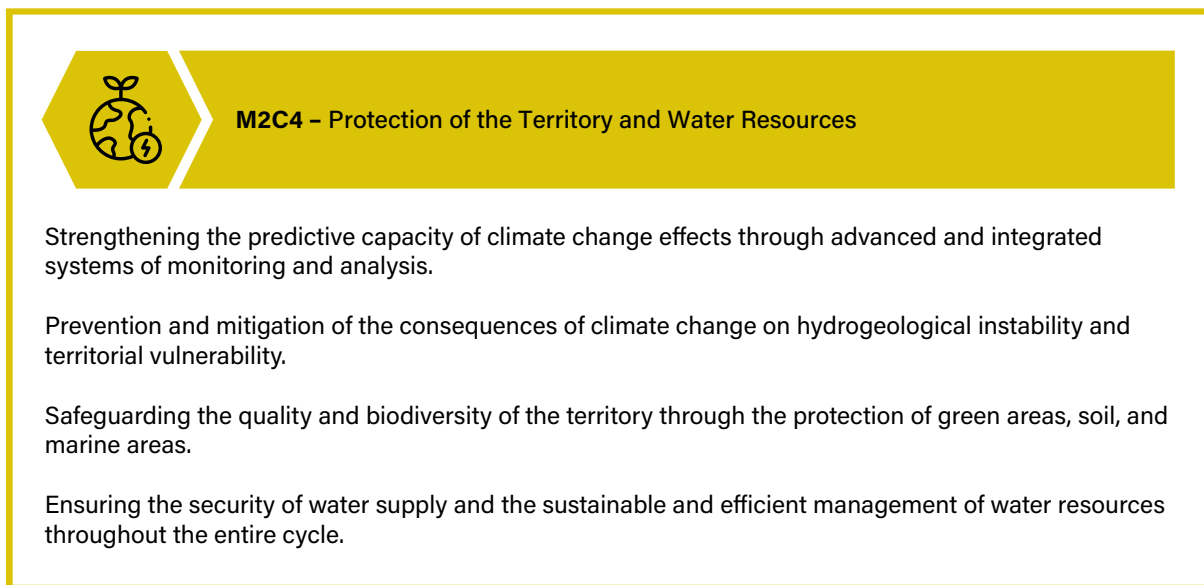
Source: <https://data.europa.eu/doi/10.2761/808559>

³⁹ European Commission: Directorate-General for Budget, The EU's 2021-2027 long-term budget and NextGenerationEU – Facts and figures, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2761/808559>

For Italy, the National Recovery and Resilience Plan (PNRR)⁴⁰ includes over €190 billion from the NextGenerationEU fund, with nearly €60 billion allocated to the Green Revolution and ecological transition mission (Figure 16).

Of this, €15 billion is earmarked for territory and water resources protection, with €1.7 billion specifically for safeguarding air quality and biodiversity through the protection of green areas, soil, and marine areas.

FIGURE 16:
MISSION2 C2 ACTIVITIES PLANNED IN THE ITALIAN PNRR



Source: <https://www.italiadomani.gov.it/it/strumenti/documenti/archivio-documenti/piano-nazionale-di-ripresa-e-resilienza.html>

In the Italian state budget, **environmental protection and natural resource management funds amount to about €8.4 billion in 2024, or 1.1% of the total primary expenditure**. This represents a significant decrease from the nearly €20.8 billion allocated in 2023 due to extraordinary measures addressing rising energy prices, which will not continue for 2024. Only 11% of these funds are specifically allocated for biodiversity and landscape.⁴¹

Private funding plays a crucial role in the conservation and restoration of biodiversity. The major actors in private finance are companies and investors. Both can contribute their capital to achieve the targets of the **Nature Restoration Law and the**

Global Biodiversity Framework, utilizing a range of economic and financial instruments, as outlined below in accordance with the **Convention on Biological Diversity (CBD)**.

The companies interviewed in our survey show a strong commitment to financing restoration projects, biodiversity initiatives, and nature-based solutions. Over 50% of respondents are actively investing in these areas, highlighting a proactive approach to environmental sustainability. Additionally, 60% of these companies are engaged in collaborative efforts and partnerships in conservation projects, reflecting a willingness to work alongside other organizations to enhance biodiversity and ecosystem health.

⁴⁰ PNRR. Piano Nazionale di Ripresa e Resilienza - <https://www.italiadomani.gov.it/it/strumenti/documenti/archivio-documenti/piano-nazionale-di-ripresa-e-resilienza.html>

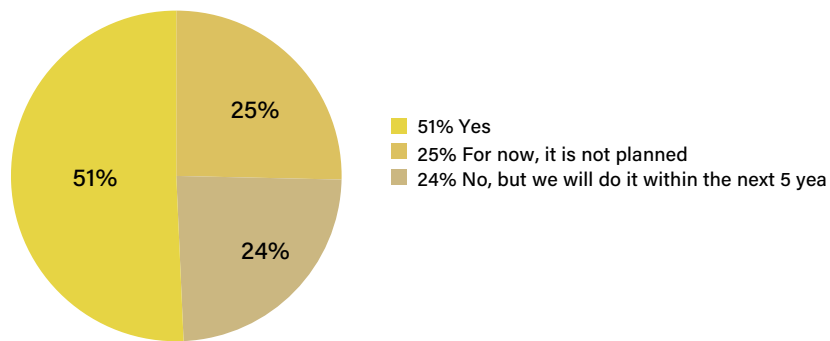
⁴¹ EcoBilancio dello Stato 2022-2024. <https://www.rigeneriamoterritorio.it/lecobilancio-dello-stato-2022-2024/>

This level of engagement indicates that **businesses recognize the critical importance of investing in natural capital** not only for environmental reasons but also as a strategic business move. By supporting restoration and conservation initiatives, companies can contribute to the resilience of ecosystems that

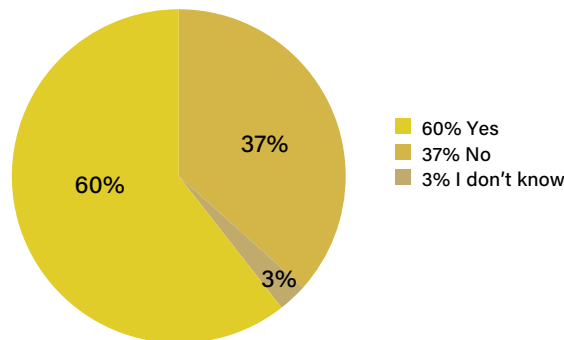
are vital for their operations, mitigate potential risks associated with biodiversity loss, and improve their corporate image. Moreover, these partnerships can foster innovation and shared learning, ultimately leading to more effective and impactful sustainability practices.

FIGURE 17:
SURVEY RESULTS ON BIODIVERSITY AND NATURE INVESTMENTS AND HOW BUSINESSES COLLABORATE WITH OTHER ORGANIZATIONS.

Biodiversity, Nature investments



Partnership and collaborations for conservation projects



To stimulate corporate investment in biodiversity, prioritizing tax incentives and public-private partnerships is essential. Our survey (Figure 18) reveals that 27% of respondents view tax incentives as the most effective tool for driving investment, followed by public funding at 23%. Additionally, 19% of companies highlighted the need for harmonized methodologies to effectively assess and report on biodiversity-related impacts. Access to information was cited by 17% as a significant factor influencing corporate engagement in biodiversity initiatives.

However, companies also face several barriers that

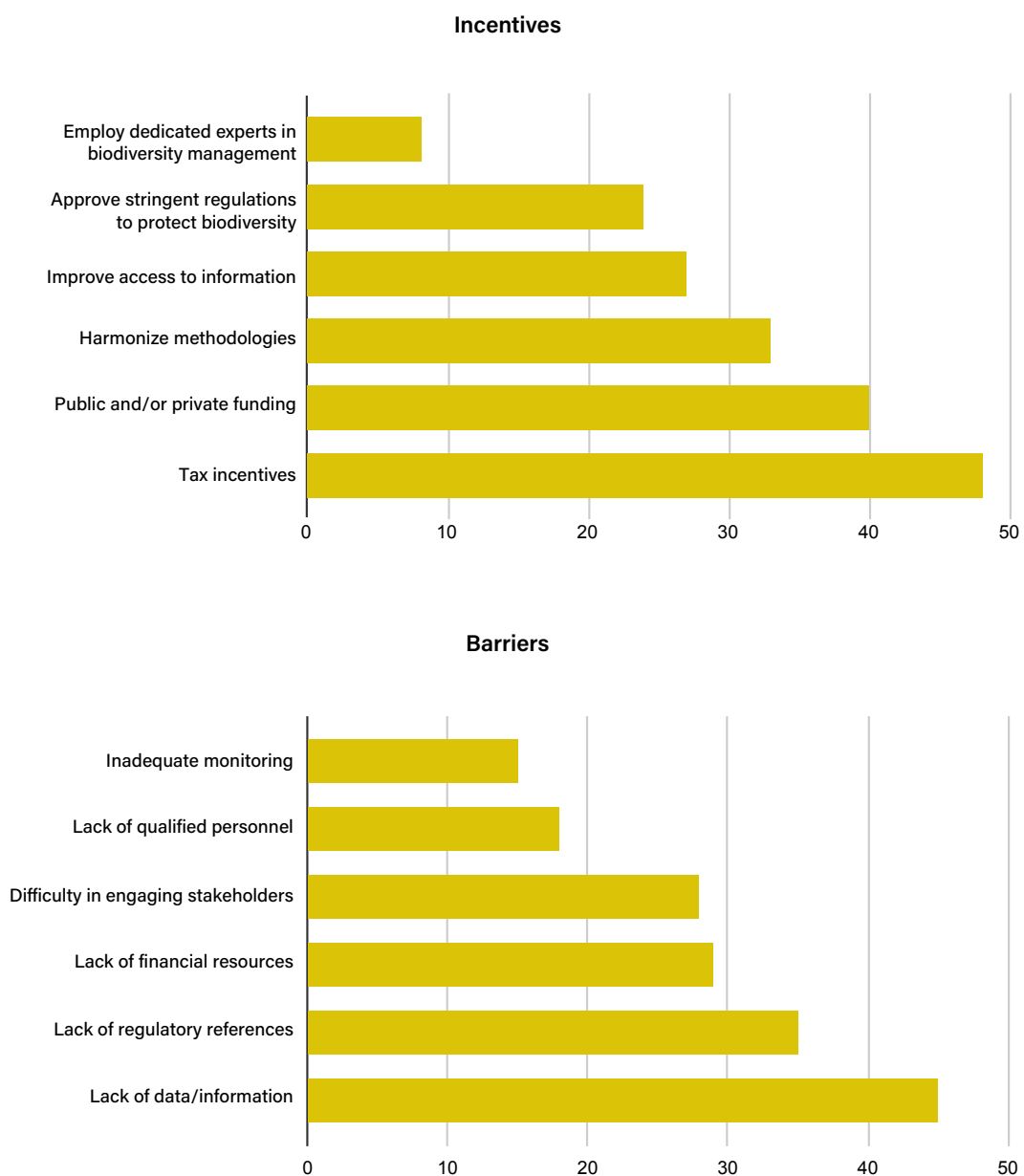
hinder their ability to invest in biodiversity. Notably, 27% of respondents identified a lack of information as a critical challenge, underscoring the need for greater access to data and resources related to biodiversity impacts and solutions. Additionally, 19% cited a lack of clear regulations, which can create uncertainty and discourage investment. Financial constraints and difficulties in engaging stakeholders were also significant obstacles, each reported by 17% of the companies surveyed.

To address these barriers, standardizing biodiversity reporting requirements across sectors

is essential. This standardization would enable companies to effectively assess, disclose, and manage biodiversity-related risks and opportunities. Adopting frameworks such as the European Sustainability Reporting Standards (ESRS) and the Taskforce on Nature-related Financial Disclosures (TNFD) can provide businesses with the guidance needed for compliance and action. Moreover, alignment between regulatory policies

— such as the Corporate Sustainability Reporting Directive (CSRD) and the Nature Restoration Law — is crucial to streamline efforts and ensure that sustainability and biodiversity initiatives are mutually reinforcing. By overcoming these barriers and implementing supportive measures, companies can significantly enhance their contributions to biodiversity conservation.

FIGURE 18:
INCENTIVES AND BARRIERS EVALUATED BY INTERVIEWED COMPANIES



4.2 Tools for sustainable finance

The instruments available to private actors for investing in biodiversity and environmental protection are divided into **economic instruments** and **financial instruments**.

Economic instruments involve raising capital to develop sustainable projects, while **financial instruments** focus on investments in financial markets.

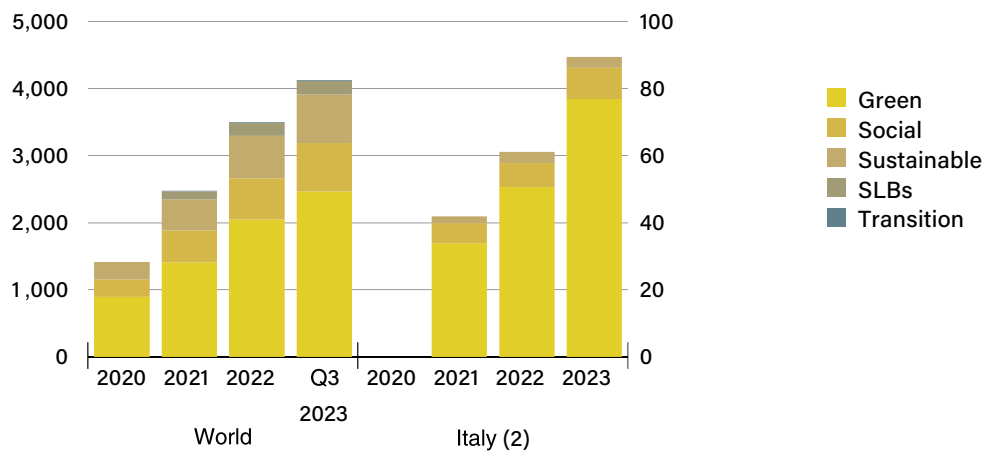
TABLE 1:
SUSTAINABLE FINANCE TOOLS

Sustainable Finance Tool	Definition
Blended finance	Blended finance allows for a multiplier effect on public spending by involving private investors. Thanks to the investment selection systems and guarantees provided by the public sector, private investors are incentivized to invest their own resources in entrepreneurial or infrastructure projects. This approach helps de-risk private investments and mobilize greater capital flows into sustainability initiatives.
Impact funds	Impact investing focuses on generating a positive and measurable social or environmental impact through recognized standards, alongside a financial return. The primary aim is to directly and tangibly influence society or the environment. In Italy, the first Impact Investing Fund is the FOF. Sustainable investments, or ESG (environmental, social, and governance), aim to integrate these considerations into investment selection to promote responsible and sustainable business practices in the long term.
Green Bonds	Green bonds are financial instruments specifically designed to fund or refinance green projects, such as those focused on renewable energy, energy efficiency, clean transportation, or responsible waste management. These bonds are crucial in directing capital towards environmentally sustainable projects.
Sustainability-Linked Bonds	Sustainability-linked bonds are bonds whose financial and structural characteristics (typically, the coupon rate) are linked to predefined sustainability targets. These targets are measured using Key Performance Indicators (KPIs) and evaluated against Sustainability Performance Targets (SPTs). For example, a bond's interest rate could be reduced if a company meets its climate-related goals.
Sustainability Bonds	Sustainability bonds are bonds where the proceeds are exclusively used to finance or refinance a combination of both green and social projects. These bonds enable investments that contribute to sustainability goals in diverse areas, including renewable energy, healthcare, and education.
Biodiversity Credits	Biodiversity credits are an economic instrument used to finance projects that achieve measurable, positive outcomes for biodiversity. Similar to carbon credits, they can be traded or invested in to support biodiversity conservation. The impact of these credits is monitored through biodiversity performance metrics.
Debt-for-Nature Swaps	Debt-for-nature swaps are an emerging form of climate finance that reduces a country's debt in exchange for commitments to environmental protection. Governments agree to allocate funds for biodiversity conservation or climate action as part of the swap agreement.
Payment for Ecosystem Services (PES)	PES schemes involve payments made by beneficiaries or users of ecosystem services to those who provide or maintain those services. This creates an economic incentive to preserve ecosystems, such as forests, wetlands, or watersheds.

The dynamics of the Italian market are in line with the global performance in terms of volume and composition. According to data from the Italian Association of Private Equity, Venture Capital, and Private Debt (AIFI), along with other financial research sources, **sustainable investments in Italy have seen notable growth in recent years.** Although the voluntary market for PES, particularly for biodiversity credits, is still in its early stages with few examples at the national level, the rise in sustainable bonds issuance points to an upward trend. The face value of green, social and sustainable bonds outstanding in Italy at the end of 2023 amounted to around €90 billion, of which the majority was made up by green bonds (86 per cent of the total), followed by social bonds (10 %) and sustainable bonds (4%). Government-issued bonds account for 45 per cent of total outstanding issuance; as for private

bonds, the largest issuers are in the financial (33 %) and public utilities sectors (15 %). In **November 2023, EU Regulation EU/2023/2631** came into effect. This regulation establishes uniform requirements for issuers of bonds who wish to use the designation **European Green Bond (EuGB)**. The regulation is expected to boost market interest and confidence in this financial product, supporting the EU's transition to climate neutrality. This new standard aims to harmonize the green bond market, providing transparency and accountability, ensuring that issuers meet certain sustainability targets. Despite this, only 7% of the currently outstanding sustainable bonds are certified by institutions that have developed international bond labeling schemes. The hope is that the new regulation will encourage more issuers to seek certification, increasing the credibility of these bonds.

FIGURE 19:
TRENDS IN THE SUSTAINABLE BONDS MARKET



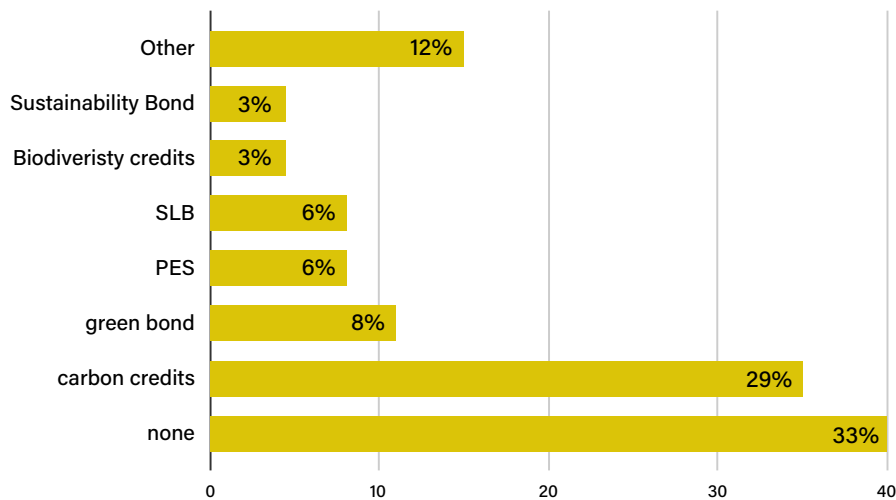
Source: Annual report on sustainable investments and climate-related risks for 2023

<https://www.bancaditalia.it/pubblicazioni/rapporto-investimenti-sostenibili/2024/index.html?com.dotmarketing.htmlpage.language=1>

Our survey results show a strong alignment with both the European and Italian markets, where carbon credits are the most commonly used financial instruments, accounting for nearly 30%. These are followed by

green bonds, PES, and sustainability-linked bonds. **Biodiversity credits, however, are utilized by only 4.5% of respondents.**

FIGURE 20:
FINANCIAL INSTRUMENTS USED RESULTING FROM OUR SURVEY



BOX 2 - INITIATIVES TO FINANCING AND MONITORING BIODIVERSITY CONSERVATION

Several initiatives have been established to finance and monitor biodiversity conservation efforts, leveraging public and private sector resources and promoting best practices. These initiatives play a crucial role in mobilizing funds, ensuring transparency, and measuring the impact of biodiversity investments. Below are key initiatives relevant to financing and monitoring biodiversity:

1. Tavolo di lavoro Finanza Sostenibile (MEF): to achieve the European Union's sustainable development and climate neutrality goals by 2050, significant commitments from the financial system and businesses, including Italian SMEs, are necessary. The Coordination Table on Sustainable Finance, organized by the Italian Ministry of Economy and Finance, has thoroughly examined the relationship between SMEs and banks. This initiative developed the "Sustainability Dialogue between SMEs and Banks," which includes 45 sustainability disclosures organized into five thematic sections. These disclosures are proportional to the size of the enterprises and aim to standardize practices adopted in the Italian context, complementing the EFRAG VSME initiative. www.dt.mef.gov.it/attivita_istituzionali/sistema_bancario_finanziario/finanza_sostenibile/Tavolo_finanza_sostenibile

2. ISPRA Sustainable Finance: in January 2024, ISPRA released a document titled "The Environmental Challenge for Sustainable Finance," aligned with the new regulatory framework on sustainable finance. The document serves as a technical support tool for stakeholders aimed at promoting the production of environmental information needed for public disclosure. It introduces definitions, quantification methodologies, metrics, and additional reference sources to support self-assessment processes, improving data quality and consistency. It builds on technical documents, including key performance indicators (KPIs) required by the CSRD Directive and other frameworks.

3. Italian Business and Biodiversity (B@B) Working Group: the Italian Business & Biodiversity Working Group is a platform established in 2023 by Etifor, the Forum for Sustainable Finance, and the Lombardy Region. Its aim is to raise awareness of the economic importance of biodiversity, promote public-private partnerships for ecosystem conservation, and align business strategies with international best practices. The Italian Business & Biodiversity Working Group seeks to create an Italian network of companies and financial institutions that want to contribute to a nature-positive future, in

line with the objectives of the Kunming-Montreal Global Biodiversity Framework and the European Commission's Nature Restoration Law. www.etifor.com/it/italian-business-biodiversity-working-group

4. Go Nature Positive Project: launched in 2024 under Horizon Europe and coordinated by Trinity College Dublin, the project aims to promote a nature-positive economy. Etifor will test indicators and roadmaps in two Italian pilot cases, focusing on forestry and tourism. www.gonaturepositive.eu

5. The Biodiversity and Climate Regional Initiative (BioClima): developed by Regione Lombardia and Fondazione Cariplo, with the support of Etifor, Bioclima encourages investments in biodiversity and climate adaptation by testing a public-private mechanism. This approach engages businesses in valuing ecosystem services from regional protected areas, increasing accountability and multiplying public funds for conservation. www.etifor.com/it/portfolio/bando-bioclima

6. ESGeneration Italy: this initiative, promoted by Borsa Italiana, FeBAF, and the Forum per la Finanza Sostenibile, aims to consolidate Italy's active role in sustainable finance at an international level. www.esgenerationitaly.it

7. HUB Nature-Based Solutions: in Italy, Nature-Based Solutions (NBS) are increasingly recognized for mitigating climate change risks, such as the urban heat island effect and urban floods. Cities like Turin, Milan, and Geneva have implemented NBS to enhance urban resilience and liveability through forested green areas, retention ponds, and systematic public space regeneration to improve environmental benefits and ecological connections. networknature.eu/nbs-italy-hub

8. Comitato per la Bioeconomia e la Fiscalità Sostenibile: this committee focuses on sustainable transitions and evaluating bioeconomy performance at the regional level. It emphasizes sustainable accounting practices in the bioenergy sector to address environmental and social impacts. Research in collaboration with Fiscalini Farms highlights the potential for dairy-based biomass energy production in Italy, emphasizing economic sustainability and regulatory compliance. oldtrasparenzamonasterolo.yamme.it/www.mite.gov.it/pagina/finanza-sostenibile.html

9. Rete delle Università per la Sostenibilità (RUS): RUS is a network of Italian universities collaborating on sustainability, including financing biodiversity conservation. It organizes conferences, working groups, and applied research to explore how universities can contribute to biodiversity protection through finance. reterus.it

10. Associazione Italiana per la Finanza Sostenibile (AIF): AIF promotes sustainable finance in Italy, discussing biodiversity during its events and working groups. It acts as a platform for dialogue between investors and financial institutions on how to integrate biodiversity into investment strategies. www.aifi.it/it/sostenibilita

05.

Conclusions and recommendations



Conclusions and recommendations

The growing recognition of biodiversity loss as one of the major global risks, alongside climate change, underscores the urgency for businesses to integrate nature conservation into their strategies. Italy, one of the most biodiverse countries in Europe, faces significant environmental and economic challenges due to ecosystem degradation. This report

has explored how the private sector can both negatively and positively impact biodiversity, highlighting the risks and opportunities that companies face in this rapidly evolving regulatory and market landscape.

The key recommendations from the report include:

1. Biodiversity as an economic and strategic priority: although 55% of the global GDP depends on nature, our survey shows that nearly half (47%) of Italian companies do not yet fully recognize the direct link between their activities and biodiversity. This lack of awareness presents a critical gap in corporate strategy and risk management. Italian businesses, particularly in the agriculture, construction, and tourism sectors, must realize that biodiversity is not an abstract concept, but a vital asset for their long-term economic sustainability. Incorporating biodiversity into business planning will not only reduce operational risks but also open new opportunities for growth and innovation.

2. Implement a nature positive strategy within each organization: Italian businesses should adopt an integrated approach to address key drivers of nature loss, including land, freshwater, and marine use, resource exploitation, pollution, and invasive species. This approach helps organizations define assessment boundaries, map their operations and supply chains, and engage stakeholders. The focus is on understanding local environmental conditions, nature-related risks, and stakeholder ESG priorities. By quantifying pressures on nature and setting science-based, time-bound targets with measurable KPIs, businesses can develop strategies tailored to their specific needs. This approach also enhances supply chain traceability, aiming for zero deforestation, and follows the mitigation hierarchy to integrate nature into decision-making processes while addressing reporting and communication requirements for stakeholders.

3. Adapting to the evolving regulatory landscape to gain a competitive advantage: with the introduction of the **Corporate Sustainability Reporting Directive (CSRD)** and the European **Nature Restoration Law**, companies must measure, disclose, and mitigate their biodiversity impacts. While 64% of surveyed companies already publish sustainability reports, only 33% include comprehensive biodiversity assessments. Moreover, only 19% have adopted the **European Sustainability Reporting Standards (ESRS)** in line with CSRD requirements. Companies that proactively adapt to these changes will not only avoid penalties but also gain competitive advantages, enhance their reputations, and attract sustainability-focused investors.

4. Leveraging innovative financial instruments to fund biodiversity: **green bonds**, **sustainability-linked bonds**, and **biodiversity credits** are essential tools for financing ecosystem protection and

restoration. However, only 4.5% of surveyed companies currently use biodiversity credits, revealing significant growth potential in this area. **Carbon credits**, on the other hand, are more commonly used, with 30% of companies utilizing them. Expanding the use of these instruments will require greater awareness and support for businesses, helping them integrate biodiversity into their financial strategies.

5. Opportunities through nature-based solutions (NbS): investing in **Nature-Based Solutions (NbS)** represents an opportunity to turn perceived costs into economic benefits. Solutions such as reforestation, sustainable agriculture, and wetland restoration can enhance climate resilience and reduce business risks. According to the survey, 45% of companies have already recognized biodiversity-related risks and opportunities in their strategies, with another 32% planning to do so within the next five years. Companies adopting biodiversity-focused practices will gain access to new markets and improve their global competitiveness, especially in sectors like agriculture and tourism.

6. Incentivizing private investment in biodiversity through fiscal measures and public-private partnerships: to stimulate private investment in biodiversity, **tax incentives**, public funding, and the creation of **public-private partnerships** are crucial. The lack of standardized information and complex regulations have been identified as major barriers for businesses wishing to invest in biodiversity. Sixty percent of companies in our survey believe that fiscal incentives and public funding are the most effective tools for encouraging such investments. Moreover, supporting small and medium-sized enterprises (SMEs), which often lack the resources needed to implement these practices, will be essential to meet national and international conservation goals.

7. Aligning reporting and regulatory policies to drive transparency and action: standardizing reporting methodologies is essential for companies to effectively assess, disclose, and manage biodiversity-related risks and opportunities. Adopting frameworks like the **CSRD** and the **Taskforce on Nature-related Financial Disclosures (TNFD)** can provide businesses with practical tools to comply with regulations and implement concrete actions. Only through greater transparency and a joint commitment between companies, financial institutions, and policymakers can we support the transition to a more sustainable, nature-positive economy.

In summary, integrating biodiversity into corporate strategies is not just a moral or regulatory obligation but represents a key economic lever to ensure the long-term resilience of Italian businesses. The future of companies is closely tied to their ability to manage environmental risks and seize the opportunities offered by nature-based solutions and sustainable finance. A proactive approach, supported by fiscal incentives, regulatory transparency, and innovative financial tools, will allow businesses to lead the transition toward an economic model that not only protects but enhances biodiversity.



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