Biodiversity, Natural Capital and the Economy:

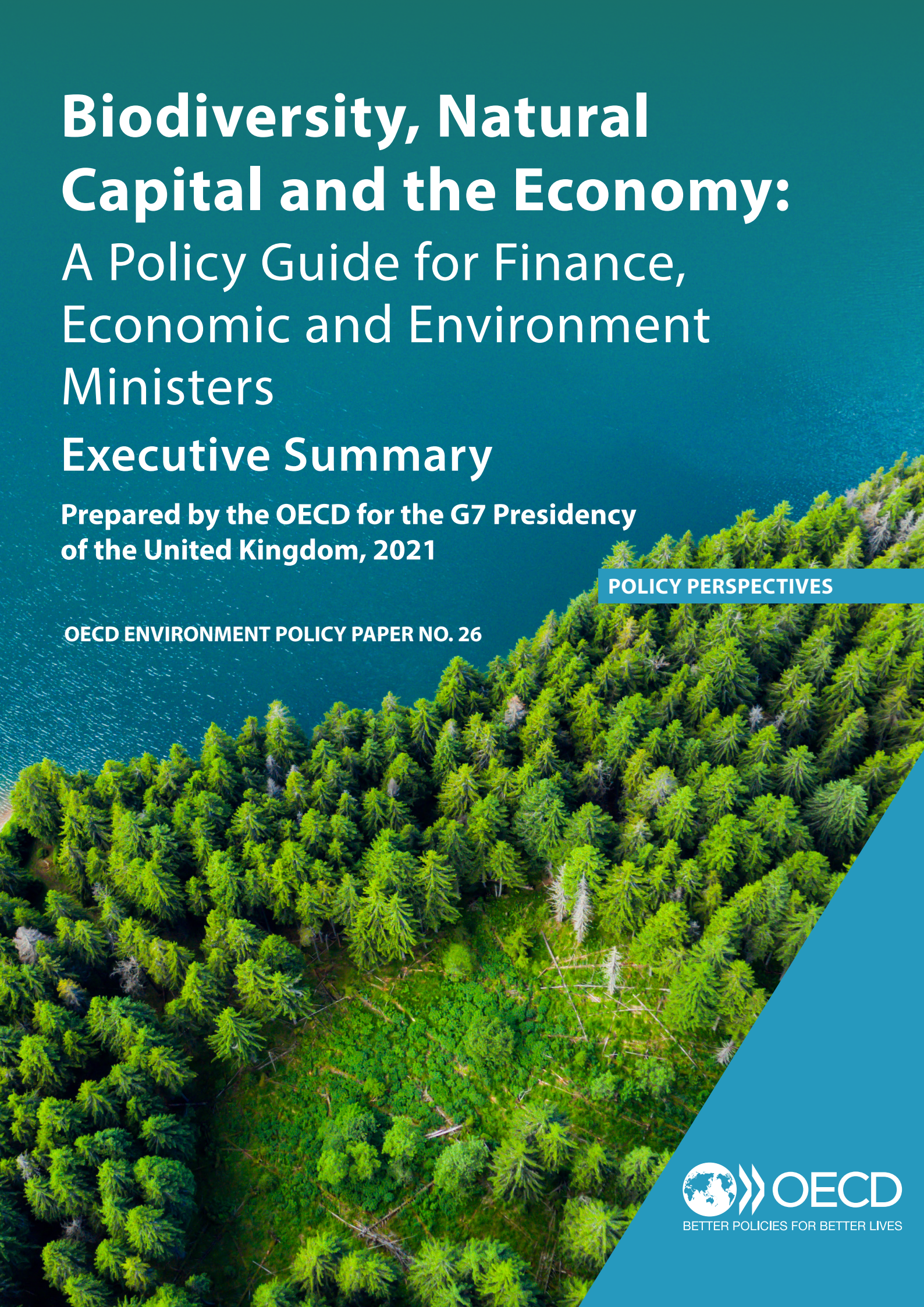
A Policy Guide for Finance, Economic and Environment Ministers

Executive Summary

Prepared by the OECD for the G7 Presidency of the United Kingdom, 2021

POLICY PERSPECTIVES

OECD ENVIRONMENT POLICY PAPER NO. 26



OECD

BETTER POLICIES FOR BETTER LIVES

Natural capital underpins all economic activities and human well-being; it is the world's most important asset. However, humanity's demands on natural capital are unsustainable. The unprecedented and widespread decline of biodiversity is generating significant but largely overlooked risks to the economy, the financial sector and the well-being of current and future generations. This report, prepared by the OECD as an input to the UK's G7 Presidency in 2021, provides policy guidance for Finance, Economic and Environment Ministries to underpin transformative domestic and international action to halt and reverse biodiversity loss. The analysis focuses on four priority action areas for governments. First, adapting measures of national performance to better reflect natural capital, and mainstreaming biodiversity into strategies, plans, policies and projects. Second, better leveraging fiscal policy and economic instruments to support the conservation and sustainable use of biodiversity, including in COVID-19 recovery packages. Biodiversity-related tax revenues, for example, account for just 0.9% of all environmentally related tax revenues. Third, embedding nature-related dependencies, risks and impacts into the financial sector. Fourth, improving biodiversity outcomes linked to trade, including by reforming environmentally harmful and market distorting government support, which stands at more than USD 800 billion per year.

EXECUTIVE SUMMARY

Biodiversity underpins all economic activities and human well-being. It provides critical life-supporting ecosystem services, including the provision of food and clean water, but also largely invisible services such as flood protection, nutrient cycling, water filtration and pollination. Yet humanity is destroying natural capital at an unprecedented rate, posing significant but often overlooked risks to the economy, the financial sector and the well-being of current and future generations. The emergence of infectious diseases such as COVID-19, of which land-use change and wildlife exploitation are key drivers, is just one example of the various risks associated with humanity's mismanagement of natural capital.

As Professor Sir Partha Dasgupta's Review notes, we have failed to manage our global portfolio of assets sustainably, accumulating produced (physical) and human capital largely at the expense of our most important asset – natural capital. Our dominant development paradigm, narrowly focused on GDP growth, is not sustainable. While global GDP per capita increased by more than 60% between 1992 and 2014, natural capital stocks per capita declined by nearly 40%, undermining future economic growth and well-being. One million plant and animal species now face extinction. This is in part due to the characteristics of nature that make it easy to ignore: largely silent, invisible and mobile. These characteristics result in nature being undervalued or unvalued in markets, and mean that our impacts on nature largely go unaccounted for. The current imbalance between our demands on nature and its capacity to regenerate urgently needs to be addressed.

The UK's 2021 G7 Presidency comes at a crucial juncture. Strong leadership from the G7, through ambitious domestic action and international co-operation, is critical to address the multiple, interlinked crises we face: biodiversity loss, climate change, novel infectious diseases and their severe consequences for human well-being and the economy. G7 countries have an opportunity to drive change, with trillions of dollars mobilised through COVID-19 recovery packages, and UN CBD COP15 (where the post-2020 Global Biodiversity Framework will be adopted) and UNFCCC COP26 on the horizon. This Policy Guide, prepared by the OECD at the request of the UK G7 Presidency, is intended for Leaders as well as Finance, Economic and Environment Ministries. Based on the urgent case for action on biodiversity put forward in the Dasgupta Review (2021) and the OECD's 2019 report to the G7 Environment Ministers, among others, it provides the latest findings and policy guidance in four key areas: measuring and mainstreaming biodiversity; aligning budgetary and fiscal policy with biodiversity; embedding biodiversity in the financial sector; and improving biodiversity outcomes linked to international trade.

Measuring and mainstreaming biodiversity

Key messages

- GDP is an important measure of short run macro-economic performance and is correlated with some key determinants of well-being such as jobs and incomes. However, it was not designed to provide insights on all the different economic, social and environmental outcomes that matter for human well-being and sustainability. National measurement frameworks are needed that better integrate information on economic production, human well-being and environmental sustainability, such as the OECD Well-being Framework and inclusive wealth accounts.
- Natural capital accounting is essential for integrating biodiversity considerations into measures of national performance and policy appraisal, and integral to inclusive wealth accounts. At least 89 countries have implemented accounts consistent with the UN System of Environmental-Economic

Accounting (SEEA), the international standard for natural capital accounting. However, the majority of accounts are incomplete and only 34 countries have developed ecosystem accounts. Furthermore, natural capital is not given equal weight to economic data, highlighting the need to increase both the supply of and demand for natural capital accounts.

- Efforts by governments have not yet been sufficient to halt and reverse biodiversity loss. Despite some incremental progress, biodiversity has not been mainstreamed in national economic planning, budgets and other policies and practices that affect biodiversity. When biodiversity is included in national strategies and plans, it is often limited to a generic mention or strategic direction, rather than clear targets and actions which are needed to bring about real change. Finance, economic and sectoral ministries must play a greater role.
- Synergies and trade-offs exist among biodiversity goals and other Sustainable Development Goals, for example, between the use of bioenergy for climate mitigation and its implications for land use change, food security and biodiversity. However, it is not common practice to systematically assess the alignment of different policy objectives. Furthermore, the lack of consistent and comparable data and indicators across countries to monitor biodiversity mainstreaming actions undermines transparency, accountability and the exchange of lessons learned.

Policy recommendations

- Implement a multi-dimensional measurement framework to assess national performance, including measures on the environmental dimensions of human well-being and the stocks of natural capital that underpin current and future well-being.
- Support the development and use of comprehensive natural capital accounts globally, for example under the SEEA, including through international co-operation and increased investment in data on biodiversity, ecosystem services and natural capital more broadly.
- Mainstream biodiversity into all relevant strategies and plans (e.g. national economic plans, national budgets, low-emission development strategies, national risk assessments, and development co-operation strategies), systematically integrate biodiversity and natural capital into programmes, policies and projects, and promote policy coherence by strengthening inter-ministerial co-ordination and setting clear time-bound targets, roles and responsibilities. Develop indicators that are consistent and comparable across countries to monitor progress on mainstreaming.
- Draw on the full suite of regulatory (e.g. pollution standards), economic (e.g. taxes, biodiversity offsets) and information (e.g. ecolabelling) instruments to internalise the external costs (and benefits) from firms and households. Setting and enforcing absolute limits on natural resource use or extraction (e.g. protected areas, tradable permits, and quotas) is particularly important where ecosystems could face tipping points or are of considerable ecological or cultural significance.

Aligning budget and fiscal policy with biodiversity

Key messages

- Evaluating and improving the alignment of budget and fiscal policy with biodiversity objectives is a critical step for addressing biodiversity loss. While an increasing number of countries are implementing elements of green budgeting, few countries have assessed the potential positive and negative impacts of their domestic and international spending on biodiversity. Few, if any, public development banks have done this either.
- Taxes, fees, payments for ecosystem services and other economic instruments are vital for incentivising more sustainable consumption and production, and can also raise revenue or mobilise finance. These instruments are often underutilised. Biodiversity-relevant tax revenues amount to only 0.9% of the revenue generated from all environmentally-relevant taxes in OECD countries, which in turn accounts for just 5.1% of total tax revenue.

- Governments continue to incentivise the destruction of nature through environmentally harmful support, including budgetary and fiscal transfers, encouraging unsustainable production across multiple sectors. To date, relatively few countries have undertaken national level assessments to systematically identify their public subsidies harmful to biodiversity or the environment more generally.
- Integrating biodiversity considerations into COVID-19 economic recovery measures can provide immediate jobs and boost longer-term economic resilience, human health and societal well-being. Ignoring biodiversity in economic recovery packages could increase the risk of future pandemics and economic shocks. However, recent OECD analysis finds that green measures are a small proportion (17%) of overall stimulus, and estimates that only 7% of green stimulus supports biodiversity.

Policy recommendations

- Align budgets and fiscal policy of governments and public development banks with biodiversity objectives by quantifying biodiversity-related expenditures, assessing spending that is harmful to biodiversity, and using other green budgeting tools such as cost-benefit analysis to nature-proof the economy.
- Scale up the use and ambition of economic instruments (such as biodiversity-relevant taxes, fees and charges, tradable permits, biodiversity offsets, payments for ecosystem services) to reflect the true costs of natural capital loss on the economy and human well-being.
- Identify and reform or remove environmentally harmful budgetary and fiscal support to agriculture, fisheries and fossil fuels, prioritising the most environmentally harmful and market distorting types of support.
- Urgently integrate biodiversity measures such as incentives for ecosystem restoration and sustainable land-use into COVID-19 economy recovery packages – and screen recovery measures for potential negative impacts – to create jobs while reducing the health, financial and macro-economic risks of biodiversity loss.

Embedding biodiversity in the financial sector

Key messages

- Nature-related risks for companies, and their financiers and investors, are pervasive but poorly understood and largely invisible and mispriced. These include the dependency of company profitability on nature as well as the adverse impacts of business activities and financial decisions on nature. Nature-related dependencies, impacts and risks remain almost entirely uncompensated by the financial sector and investee corporations. This leads to capital misallocation, exposure of the financial sector to biodiversity-related risks, and adverse nature-related impacts that undermine societal well-being. Less than 1% of business models of the 3,500 companies representing 85% of global market capitalisation align with SDGs 14 and 15.
- Aligning finance flows with biodiversity goals requires policy makers, regulators, standard setters, investors and finance providers to pay greater attention to the biodiversity impact of finance. Embedding biodiversity in financial decision-making is necessary to reduce finance flows to harmful activities while increasing investment in nature-positive activities. This requires consideration of both the (i) financial materiality of nature-related financial risks resulting from dependencies on nature, and (ii) adverse environmental impacts resulting from financial decisions. Both financial dependencies and risks and biodiversity impacts will change over time. Yet most financial companies do not assess, manage or disclose their material financial risks related to biodiversity. Furthermore, few assess and address the biodiversity-related impacts of their investment decisions on people and the planet. The initiative to create a Task Force on Nature-related Financial Disclosures (TNFD) is an encouraging step in mainstreaming biodiversity impacts, dependencies and risks in the financial sector.

- Biodiversity-related risks are complex, context-dependent and are difficult to model due to e.g. uncertainties related to tipping points and regime shifts, future policy trends and complex transmission channels. To reflect these characteristics, continued efforts are needed to address associated measurement, data and modelling issues.
- Embedding biodiversity in the financial sector can also provide significant investment opportunities. This includes investment opportunities in activities to support a transition to more sustainable practices (the global ecotourism market for instance could reach USD 334 billion by 2027, up from USD 181 billion in 2019); it also requires unlocking investment in activities dedicated to biodiversity protection. Scaling up private investment in nature-positive activities faces outstanding barriers. Further efforts are needed to address systemic failures to view biodiversity as material to decision-making, lack of enabling conditions and pipelines of bankable projects, and data and measurement issues.

Policy recommendations

- Mainstream biodiversity risks, dependencies and impacts in the financial sector. Concrete steps include: (i) support the development of guidance for companies on better valuing natural capital in economic decision-making; (ii) embed biodiversity considerations into due diligence risk management processes to assess biodiversity impacts in line with the recommendations of the *OECD Guidelines for Multinational Enterprises;* and (iii) welcome and engage with the TNFD and its aims, including to enhance assessment, management and disclosures of biodiversity considerations and strengthen measurement, data standards and modelling.
- Better understand, assess and manage nature-related financial risks, and assess implications for financial stability, especially for central banks and financial supervisors. Given the complexity of nature-related risks, central banks could share emerging innovative practices and may wish to consider adopting a “precautionary” approach.
- Scale up private investment in nature-positive activities. Concrete actions include: (i) strengthen enabling conditions, apply investment policy principles while respecting local ownership rights, align incentives in domestic policy frameworks to improve the risk-return profile of projects supporting biodiversity goals; (ii) create pipelines of bankable biodiversity projects, gathering data on the returns and impacts of biodiversity projects; and (iii) collaborate with multilateral development banks, other development finance institutions and investors to establish suitable financial instruments, vehicles and funds. Blended finance is needed both for small-scale conservation or restoration projects that may not be readily profitable, as well as larger or more bankable projects that need to be scaled up.
- Embed biodiversity more broadly and foster systems innovation. This includes: embedding biodiversity goals in core public finance institutions and policy, including in climate finance facilities and national planning; and building digital infrastructure and harnessing digital finance and financial education to raise funding from and mobilise citizens.

Improving biodiversity outcomes from international trade

Key messages

- International trade can lead to both positive and negative impacts for biodiversity. Positive impacts can come from increased efficiency of production, which reduces demand for land and other natural resources, and from increased availability of environmentally friendly goods, services and technologies. Negative impacts can arise from production shifts exacerbating pressures such as land use change and pollution, the introduction of alien species and trade in environmentally sensitive goods (e.g. timber and wildlife).
- The impacts of international trade on biodiversity are context dependent and difficult to track in global supply chains. Businesses and governments require better information and data on where and how a

traded product is produced, how it is transported and patterns of consumption, in order to understand their impacts on biodiversity and to help guide buyers and end-consumers towards sustainable consumption patterns.

- The biodiversity impacts of trade predominately stem from the location and process of production with negative impacts exacerbated by environmentally harmful support. Government support currently incentivises unsustainable production across multiple sectors. Across 54 economies, USD 345 billion per year in agricultural support (2017-19 average) was provided in ways that undermine the sector's sustainability. In 2019, 81 economies provided USD 478 billion in support to fossil fuels, also incentivising unsustainable production and consumption.
- Illicit wildlife trade is valued at USD 7-23 billion globally and services consumer demand. It has adverse impacts on biodiversity, driving protected species population declines and extinction. Unsustainable wildlife trade can also negatively impact rural livelihoods, cause the loss of culturally valuable species and increase the risk of zoonotic diseases. Lack of prioritisation by governments and competent authorities, legal loopholes and gaps in implementation of laws at a national level mean illegal wildlife trade often goes unpunished, while weaknesses in the financial systems mean the proceeds flow across borders. Corruption at maritime ports, airports and at land border crossings provides channels for the entry of a range of illicit products.

Policy recommendations

- Reform or remove environmentally harmful support to agriculture, fisheries and fossil fuels to improve the sustainability of production and reduce the negative impacts of trade on biodiversity, prioritising the most market distorting and environmentally harmful types of support e.g. in agriculture, market price support, payments based on output and payments based on unconstrained variable inputs; and in fisheries, payments that reduce the costs of inputs, especially fuel.
- Tackle illegal wildlife trade by closing legal loopholes, addressing corruption, improving the prosecution of environmental crimes, combatting the associated financial flows (e.g. through stronger beneficial ownership transparency) and fostering co-operation among law enforcement authorities, locally and internationally. Work with key countries and expert bodies to design interventions that address the underlying issues of consumer demand for illegal wildlife trade products.
- Improve the traceability and sustainability of supply chains including by facilitating uptake of technology (e.g. remote sensing, block chain and geospatial data) and implementing Responsible Business Conduct standards and instruments, such as the OECD FAO Guidance on Responsible Agricultural Supply Chains. This will help guide businesses and end consumers towards sustainable consumption patterns.
- Assess (qualitatively and quantitatively) the impacts of Free Trade Agreements on biodiversity *ex ante* to inform and help shape the design of FTAs as well as identify "pressure points" where additional consideration or policy interventions may be required, such as reforming or removing harmful support or increasing international assistance.

Biodiversity, Natural Capital and the Economy: A Policy Guide for Finance, Economic and Environment Ministers

Nature underpins all economic activities and human well-being. It is the world's most important asset. Yet humanity is destroying biodiversity at an unprecedented rate, posing significant but often overlooked risks to the economy, the financial sector and the well-being of current and future generations. This report provides the latest findings and policy guidance for G7 and other countries in four key areas: measuring and mainstreaming biodiversity; aligning budgetary and fiscal policy with biodiversity; embedding biodiversity in the financial sector; and improving biodiversity outcomes linked to international trade. The report shows how Finance, Economic, and Environment Ministries can drive the transformative changes required to halt and reverse the loss of biodiversity.

This Policy Paper was prepared as an input document for the United Kingdom Presidency of the G7 in 2021.

The OECD Environment Policy Paper series

Designed for a wide readership, the OECD Environment Policy Papers distil many of today's environment-related policy issues based on a wide range of OECD work. In the form of country case studies or thematic reviews across countries, the Papers highlight practical implementation experience.

Visit our website
www.oecd.org/environment/resources/biodiversity/

Join the discussion on Twitter
@OECD_ENV

Contacts
Edward Perry: edward.perry@oecd.org;
Katia Karousakis: katia.karousakis@oecd.org

OECD
BETTER POLICIES FOR BETTER LIVES

OECD Environment Directorate,
May 2021