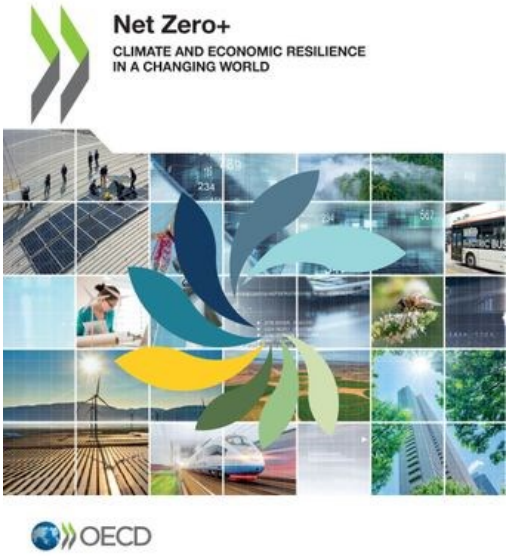
Multistakeholder high-level Dialogue Session on Partnerships for Climate Action and Biodiversity – 23 April 2024

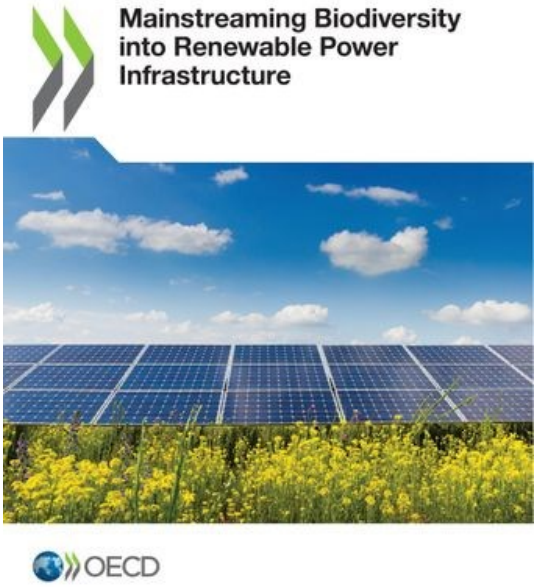
Related publications from across the OECD



Net Zero+
Climate and Economic Resilience in a Changing World

Climate policy making today demands balancing the need for immediate, accelerated climate action with essential responses to punctual crises such as the COVID-19 pandemic and Russia's war of aggression in Ukraine. Meeting this challenge requires a new approach centred on systemic resilience and the need to develop future-proof climate and economic policies that will endure potential diverse disruptions. This report offers policy makers a cohesive set of recommendations on how to build such resilience, derived from climate-relevant work from across OECD policy domains including economic and tax policy, financial and fiscal affairs, development, science and technology, employment and social affairs, and environmental policy, among others. It provides fresh insights on how to ensure the transition to net-zero emissions is itself resilient, while simultaneously building resilience to the increasing impacts of climate change. This report provides a synthesis of the OECD Net Zero+ project, covering the first phase of an ongoing, cross-cutting initiative, representing a major step forward for an OECD whole-of-government approach to climate policy.

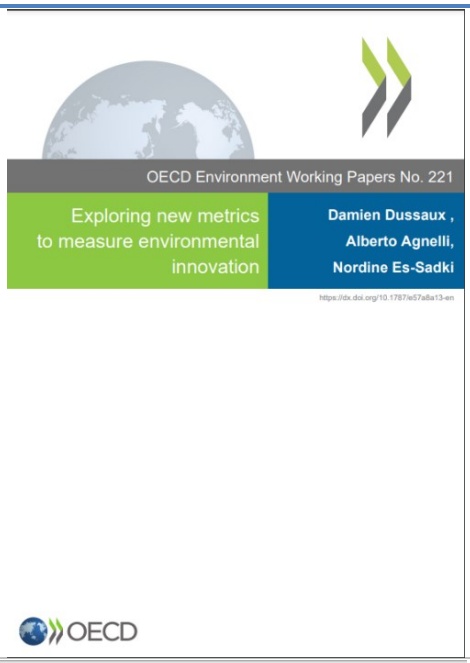
Find the report: https://www.oecd.org/environment/net-zero-da477dda-en.htm



Mainstreaming Biodiversity into Renewable Power Infrastructure

The report reviews evidence for the impacts of solar power, wind power and powerlines on biodiversity and ecosystem services. The report highlights the role of governments in advancing science, technology and innovation to better protect biodiversity while scaling up renewables, for example through integrating biodiversity early into planning and adopting well-designed mixes of regulatory (e.g. standards; permitting requirements), economic (e.g. R&D subsidies) and other instruments (e.g. biodiversity-explicit tenders). Examples of where innovation is helping to deliver better outcomes for biodiversity in renewable power expansion are: i) co-location of renewable power infrastructure with other economic activities/infrastructure (e.g. integrating solar panels into transport infrastructure; agrivoltaics) to reduce overall land demand and seek synergies; ii) enhanced collection and sharing of biodiversity data to inform biodiversity-friendly renewable power development and iii) AI-assisted monitoring and operational curtailment of wind turbines (e.g. automated shutdown of wind turbines when sensitive bird or bat species are detected).

Find the report: https://www.oecd.org/publications/mainstreaming-biodiversity-into-renewable-power-infrastructure-357ac474-en.htm

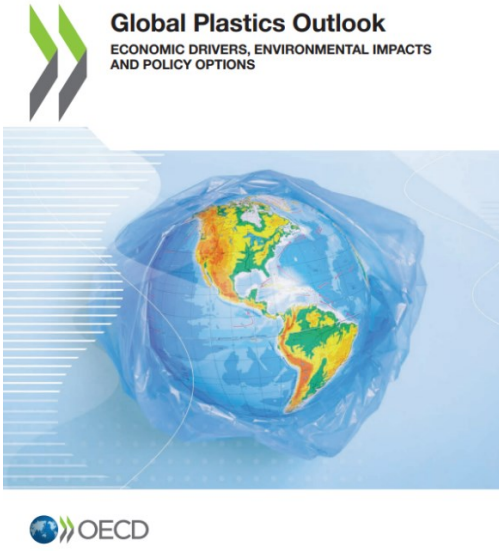


Exploring new metrics to measure environmental innovation

Practitioners are increasingly interested in tracking progress on environmental innovation. However, many metrics used to quantify innovation do not cover all sectors and countries and are not necessarily available for detailed categories of technology domains. These traditional metrics may involve high data collection costs, especially when conducted on a large scale. They only partially consider innovations that reach the market and do not account for breakthrough innovations that represent a substantial leap forward in their respective field or industry. This issue is particularly relevant for environmental innovation, where rapid and large-scale uptake is critical to address the climate, biodiversity and pollution crises.

To fill this gap, the OECD has developed new metrics across the innovation process, for example, to measure commercialised climate change-related innovation using patent assignment data and to measure breakthrough environmental innovation using venture capital data.\

Link to working paper: https://www.oecd.org/environment/exploring-new-metrics-to-measure-environmental-innovation-e57a8a13-en.htm



Quantifying innovation to reduce the environmental impacts of plastics

Innovation is key to reducing the environmental impacts of plastics. The OECD has developed plastics innovation metrics using patents and trademarks to quantify trends over time and across countries to establish preliminary empirical links between policies and innovation outcomes.

Plastic waste prevention and recycling innovation has increased slightly more rapidly than overall plastics innovation. In contrast, innovation in bioplastics has witnessed a significant slowdown in recent years. Environmentally relevant plastics innovation is concentrated in OECD countries and China. However, top inventor countries do not specialise in the same technologies. The OECD's work shows that recycling regulations may have triggered innovative activity in plastic recycling.

Link to Global Plastics Outlook Chapter: https://www.oecd-ilibrary.org/environment/global-plastics-outlook_bb1ff6fa-en

Link to working paper: https://www.oecd.org/environment/quantifying-environmentally-relevant-and-circular-plastic-innovation-1f6dbd07-en.htm