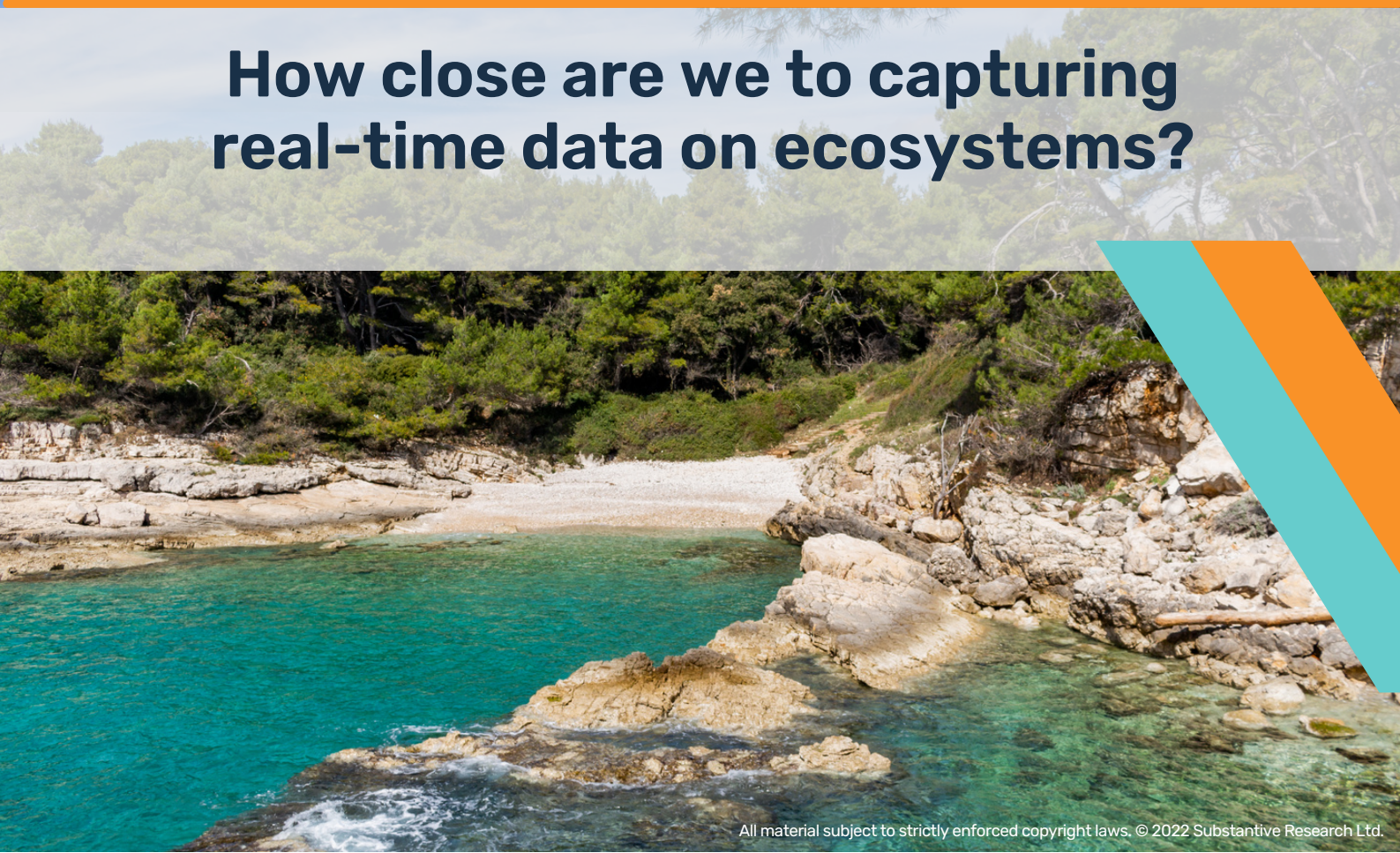


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RESEARCH

MEASURING BIODIVERSITY

**How close are we to capturing
real-time data on ecosystems?**





\$44 Trillion

**of economic value generation
is moderately or highly
dependent on nature**

Source: Nature Risk Rising, World
Economic Forum 2020

BIODIVERSITY IS THE VARIETY

of life on planet Earth, its importance to nature is as important as the diversification of portfolio assets for investors. It ensures the resilience of natural capital assets (like food, water, air, and energy) that are essential for human survival. This means that businesses are heavily reliant on nature for raw materials and resources.

Ecosystems are currently contributing \$44 trillion per year to the global economy, yet the UN estimates that more than one million plant and animal species are threatened with extinction. What are we doing for biodiversity conservation? More importantly, why is it so difficult to get enough data to measure biodiversity loss and its impact on the environment?

At Substantive Research, we have compiled and tagged ESG providers covering data, research, ratings and impact valuation into an industry-first TripAdvisor-like screener.

In our database, 20% of the providers tick biodiversity coverage in their data. However, a closer look at their coverage showed that the datasets are mostly related to climate risk. Less than a third of these data providers quantify biodiversity loss and provide biodiversity metrics - most of them with a focus on deforestation.

Given the complexity and scale of biodiversity, data is scarce but startup companies have been developing new technologies and tools to measure impact and biodiversity loss. We continue to search the market for new providers of biodiversity data, but we highlight three providers below who could help provide more clarity in this space right now.



Contact the team to have the list of providers we are highlighting this month.

BIODIVERSITY IN NUMBERS



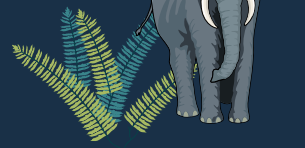
87%
of the ocean
area is dying

31%

of fish stocks are either
fished to capacity or
overfished



Crop pollination
contributes around
\$300 billion
every year to the
annual global food
production.



Wild animal
populations have
declined by
68%

**Two thirds of wetlands and
50% of all rainforests have
been destroyed**



80%
of the world's
terrestrial biodiversity
live in forests



Sources: WWF Living Planet Report, 2020 & Citi GPS, 2021

WHAT IS BEING DONE BY REGULATORS?

Clearer regulatory guidelines on how to measure the four components of biodiversity loss (ecosystem diversity, genetic diversity, interaction diversity, and species diversity) will lead to better disclosures on biodiversity impact. With standardised metrics, countries and corporates can start measuring biodiversity loss to increase transparency on nature-related topics. **Better access to more accurate data will pioneer more effective ways to conserve and restore nature.**



The second iteration beta framework of the Taskforce on Nature-related Financial Disclosures (TNFD), first released in March, has now been released. The new guideline features its approach to metrics and recommends additional guidance on impact evaluation and sector classification alignment with the ISSB, SASB and TCFD. While this disclosure framework remains voluntary, analysts are convinced that it will follow TCFD's footsteps when policy makers adapt the guidelines to make it mandatory. Corporates and financial institutions are also expected to adhere to the guidelines soon after the final framework is released on September 2023.

In June 2022, the European Commission published its proposal for an EU nature restoration law to attempt to restore 20% of the EU's land and sea by 2030 and repair all ecosystems in need of restoration by 2050.



The UK also brought in the Environment Act of 2021 to introduce a binding target on species abundance for 2030. It includes a 10% Biodiversity Net Gain condition in all planning permissions granted to help reverse the decline in British species.



COP15, the UN-led Biodiversity Summit, is also scheduled in the latter part of 2022 where world leaders are expected to set new goals and action targets to improve the effectiveness of their biodiversity conservation efforts.

HOW MUCH MONEY IS BEING INVESTED INTO BIODIVERSITY CONSERVATION CURRENTLY?

Asset managers need accurate data to integrate biodiversity-related metrics throughout their investment process. However, the lack of standardisation in the data collection and methodologies is making it challenging for them to consider biodiversity in their portfolios. With the public's clamour for sustainable funds, as well as the amount of investment pouring into the industry, how are asset managers incorporating nature into their strategies?

ShareAction's 2020 survey of 75 asset managers (40 from Europe, 25 from the Americas, 9 from the Asia Pacific, and 1 from Africa), indicates that **no asset manager had a stand-alone, dedicated policy to cover biodiversity risks within their portfolios**. Most of the asset managers surveyed also identified legal and regulatory risks as the most material when asked about biodiversity risk. Another key finding is that as a result of the lack of data, 65% of the respondents have assessed biodiversity-related risks through the use of widely accepted ESG scores from third-party vendors. **This heavy reliance on third-party data means that ESG ratings and data providers play a very critical role in assessing biodiversity risks within the industry.**

PUBLIC VS. PRIVATE SECTOR INVESTMENT

According to the UN, the public sector is currently investing around \$115 billion to Nature-based Solutions with 46% of the funds allocated to protecting biodiversity and landscapes. On the other hand, the private sector contributes an additional \$18 billion per year through biodiversity offsets, sustainable supply chains and impact investments. But according to a study from the Paulson Institute, a financing gap of \$598 billion - \$824 billion per year is still needed to fund broad action on biodiversity.

PUBLIC		PRIVATE	
	\$112B		\$18B
		Agriculture, Forestry & Fishing	\$7B
			Sustainable Supply Chain
			\$5B
			Biodiversity Offsets
			\$3B
			Conservation Investments
			Other
			ODAs
			\$2B
Protection of Biodiversity and Landscape	\$53B	Water Resources, Conservation and Land Management, Pollution Control	\$17B
		Pollution Abatement, Wastewater Management, and Environment, Protection	\$11B
		Environmental Policy and Other	\$8B

Source: State of Finance for Nature, UN Environment Programme 2021

SO WHAT CAN BE DONE NOW?

The current landscape of ESG data is vast, a whole slew of startups have developed their methodologies on how to gather information and calculate various metrics, manage risks and monitor companies' progress against specific environmental goals. ESG data providers have started using alternative data to measure biodiversity - some are currently using geospatial and satellite imagery to monitor landscapes over a period of time. Others have developed specific indicators for measuring the extent of degradation different business activities have on several species. Web-based tools have also been made available for free online to help investors understand their portfolio exposures.

The key thing to do right now is to be informed of where to get reliable data on biodiversity, be updated on new developments in the space, and be introduced to new data suppliers in the market. Substantive Research's ESG Mapping Tool can help in this area!



PLEASE CONTACT OUR TEAM FOR A DEMO



WHO ARE WE?

Substantive Research was launched in 2015 and has grown rapidly to become a trusted partner to asset managers globally where we are best known for offering an independent and impartial discovery and comparison service across the entire external investment research and market data universe.

In the past year, we have expanded our coverage into the ESG space as a response to our clients' desire for us to map the ESG data / research marketplace, carry out due diligence and help in market discovery of this rapidly evolving space. We have developed an industry-first ESG Provider dashboard that provides a searchable database of 160+ ESG research and data providers with thematic and coverage filters to match client preferences. We have also incorporated ESG research into our research discovery product to help asset managers navigate through the oversaturated market.



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