

The Unbearable Lightness of Beings
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Not far from this Conference Centre lies the Manicouagan Crater—one of the largest impact craters on Earth. Its formation contributed to the Triassic–Jurassic extinction of species.¹

While that fourth mass extinction 200 million years ago was an Act of God, today's sixth mass extinction is the act of humanity. We've created a new era - the Anthropocene – in which our actions are changing our Earth's climate and destroying its biodiversity.

But what we create, we can also shape. A quarter of a century ago, the spirit of Montreal created a landmark multilateral agreement to reverse the damage to the ozone layer from CFCs. Montreal needs to do it again with the Global Biodiversity Framework.

The task is urgent. Current extinction rates are running more than 100 times the average of the past several million years.² Over my lifetime, wildlife populations have fallen by an average of 70%.³ Deforestation is relentless, running at a rate of 10 football fields a minute in the areas most critical for carbon storage and biodiversity. Last year, primary tropical forests the size of the Netherlands were destroyed.⁴

In the Anthropocene, our demands on the Earth's bounty are outstripping its capacity to regenerate. We are accumulating ecological deficits, drawing down our natural capital per capita by 40% since the early 1990s. The *Dasgupta Review* estimates that it would require 1.6 Earths to maintain our living standards.⁵

¹ <https://www.nature.com/articles/srep29609>

² <https://www.nature.com/articles/d41586-019-01448-4>

³ https://www.flpr.awsassets.panda.org/downloads/lpr_2022_full_report.pdf

⁴ <https://www.globalforestwatch.org/blog/data-and-research/global-tree-cover-loss-data-2021/>

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957629/Dasgupta_Review_-_Headline_Messages.pdf

The world has come to Montreal so that governments can summon the will to reverse these tragedies. I will focus today on how finance can contribute.

To do so, we must understand both the value of nature and the nature of value. Recent progress on addressing climate change points the way, although just as that is not enough for our climate, it will not be enough for all that live in it.

This is a crisis of value(s)

Ecologists have long recognised that nature is an asset that provides a flow of goods and services over time – termed **ecosystem services**. Whether it's clean air, fresh water, fertile soils, disease control or indeed a stable climate, we depend on nature for most economic activity.

For instance, the services provided by pollinators (such as bees) to global agriculture have been conservatively valued at more than \$200 billion annually. This is an example of **use value**. Bees also have a **non-use value** because we treasure their very **existence**. And they have a **bequest value**, as natural heritage to be enjoyed by future generations.

Around half of global GDP is estimated to be at least moderately dependent on natural assets. The World Bank calculates that annual global GDP could be up to \$2.7 trillion lower from 2030 in a scenario of the collapse of select ecosystem services provided by nature such as wild pollination, food from marine fisheries, and timber from forests.⁶

Some future **use value** cannot be measured *ex ante*, for example the potential role of species diversity in the discovery and production of drugs.⁷ Conversely, ecosystem destruction can have significant public health costs. Research links the destruction of nature and species to increased likelihood of the spread of infectious diseases, just as waves of malaria, HIV/AIDS, and Ebola have all been associated with deforestation.^{8,9}

⁶ <https://openknowledge.worldbank.org/bitstream/handle/10986/35882/A-Global-Earth-Economy-Model-to-Assess-Development-Policy-Pathways.pdf?sequence=1&isAllowed=y>

⁷ According to the World Health Organization, 11% of drugs considered basic or essential derive from flowering plants <https://www.nhm.ac.uk/discover/essential-medicines-powered-by-plants.html>

⁸ <https://www.nationalgeographic.com/science/article/deforestation-leading-to-more-infectious-diseases-in-humans>

⁹ <https://www.nature.com/articles/d41586-020-02341-1>

The fundamental problem is that too often, market values are taken to represent total value, and if a good or activity is not in the market, it is not valued. After all, markets rate Amazon as one of the world's most valuable companies, but the value of the vast region of the Amazon appears on no ledger until it is stripped of its foliage and converted into farmland.

This (implicit) view that all market outcomes equal value creation drives the destruction of nature and biodiversity in three ways.

First, because the value of nature is often widely dispersed, in the ***Tragedy of the Commons***, individuals, companies, and countries acting in their narrow self-interests undermine the common good by depleting a shared resource. Examples include the depredation of common grazing lands in 19th century England, the decimation of the Grand Banks fishery off Canada by the early 1990s, and the ongoing deforestation of the Amazon.

Second, the **tragedy of the horizon** feeds inaction because the most catastrophic impacts of nature loss fall largely on future generations. For an issue that can only be solved in the present, we must value the future.

Third, in a drift from moral to market sentiments, decisions are made according to utilitarian calculations with nature treated like any other commodity. Values are summed with no hierarchy or consideration of their distribution, encouraging trade-offs of growth today and crisis tomorrow, and of profit and planet. With much of nature not formally valued, the unbearable lightness of beings leads to their exploitation.

There is a worthy agenda, such as the UN's SSEA, to estimate nature's value, but caution is in order.

Any estimates of the use-value of nature are a strict *lower* bound on the value of nature. And there are fundamental challenges with using use values for decisions, including the risk of summing financial and social values to yield 'one true number' – a dollar figure – that is optimised in a mixture of the secular and the sacred. The more these highly subjective, but seemingly precise, numeric judgements are combined, the greater the

risks that nuance and sensitivity are lost, and that financial optimisation dominates the pursuit of the greater good.

The *nature of nature* means that any price can never reflect its true value. We need to count the value of nature in her own terms: by number of species, hectares of forest, hecta-litres of clean water. Stakeholders must focus their efforts to such ends and to improving mean species abundance. Even then, and to paraphrase Einstein, “**Not everything that is counted counts, and not everything that counts *can be* counted.**” A truth we know when we experience nature, feel the awe, and appreciate our place within its whole and across time.

Climate Change

With this context, the world’s efforts to address climate change—albeit belated and still inadequate—point to some of the solutions for nature and biodiversity. I urge you to heed these lessons if you wish to find the scale of capital necessary to reverse this crisis.

Governments finally summoned the will to begin seriously addressing climate change in Paris. At COP21, countries also agreed that financial flows need to align with a pathway towards low emissions, with the ambition of limiting warming to 1.5 degrees C. By COP26 in Glasgow, countries had taken steps towards making their commitments reality, such that the gap between the 1.5-degree objective and policies has closed by an estimated one full degree. 1.5 degrees is still alive, if barely.

In response, the financial sector is putting in place what’s required to enable the net-zero transition including:

- The development of the climate risk disclosure framework, the TCFD, and the setting of the pathway for its mandatory and comprehensive application through the International Sustainability Standards Board (ISSB);
- The commitment through GFANZ of over 550 major financial institutions from 50 jurisdictions to a net-zero transition consistent with the Paris agreement, starting with the setting and achievement of near-term targets.

- The creation of the GFANZ net-zero transition plan framework for financial institutions to translate their commitments into action. To help financial institutions determine which companies to back and which to avoid, GFANZ has also developed common expectations for the transition plans of real-economy companies.
- Some leading companies and financial institutions are already making being nature positive a strategic imperative, including through commitments to eliminate deforestation from their value chains, recognizing that there is no path to net zero that does not address deforestation and support nature-based solutions.

This reflects the fact that Nature and climate change are interdependent.

On the one hand, unless we achieve the objectives of the Paris Agreement, climate change will become the dominant cause of biodiversity loss.¹⁰

On the other hand, nature has historically provided carbon sinks to help balance the growing carbon emissions created by human activity. These sinks are now disappearing rapidly, such that deforestation currently accounts for 11% of annual global greenhouse gas emissions.¹¹

Climate scientists have long warned about adverse feedback loops that drive nonlinearities in global warming and nature loss. For example, wildfires caused by drought and higher temperatures convert healthy carbon sinks into destructive carbon sources. The permafrost, which stretches across the northern hemisphere including in my native Northwest Territories, is one of the world's largest carbon sinks, with its embedded, frozen carbon equivalent to four times anthropomorphic emissions since the Industrial Revolution. But the permafrost has begun thawing, a shift from carbon sink to source, consuming our meagre carbon budget—a process that is poised to accelerate.¹²

¹⁰ https://wwflpr.awsassets.panda.org/downloads/lpr_2022_full_report.pdf

¹¹ https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Full_Report.pdf

¹² <https://e360.yale.edu/features/how-melting-permafrost-is-beginning-to-transform-the-arctic>

In the face of such potentially catastrophic tipping points, risk management favours aggressive and early action to tackle climate change and reverse the relentless destruction of nature. To have a chance of limiting global temperature increases to 1.5 degrees C, deforestation must end this decade.

Moreover, the interdependence of climate and nature can transform vicious feedback loops into virtuous ones. Becoming nature positive by restoring forests, peatlands, mangroves, and wetlands could contribute up to one-third of the reduction in global emissions needed by 2030.¹³ Nature and biodiversity will also be essential to maintain resilience against the physical risks of climate change from the contributions of wetlands in mitigating the impacts of coastal flooding to that of forests in helping to mitigate the impacts from floods and droughts.^{14,15}

Although these imperatives are increasingly well-recognised, the world is not acting with the urgency that the twin crises of Nature and Climate demand.

Over the next year, significant progress on biodiversity and nature must be made.

First and above all, governments must make concrete their professed commitments to protect nature, by adopting an ambitious Global Biodiversity Framework here in Montreal that does for nature what the Paris Agreement did for climate. While '30 for 30' may not be perfect, establishing an ambitious North Star for nature—and particularly one that is focused on the near term—can spur the necessary near-term policies including creating clear guardrails for the private sector.

Second, parties to the Convention on Biodiversity should also establish a mandate within Goal D and Target 15 to align financial flows with nature goals. With this mandate in place, governments can then establish credible policies that hold finance and other sectors to account for aligning with the goals of halting and reversing nature loss and scaling nature-based solutions. Building on this mandate, the ISSB should quickly progress a common sustainability disclosure framework that integrates the relevant

¹³ <https://www.pnas.org/doi/10.1073/pnas.1710465114>

¹⁴ <https://www.nature.org/media/oceansandcoasts/mangroves-for-coastal-defence.pdf>

¹⁵ <https://www.eea.europa.eu/highlights/forests-can-help-prevent-floods>

work of the Taskforce on Nature-related Financial Disclosures with the climate-related disclosure standards built on the TCFD. Authorities should commit to mandatory adoption of these standards once they are completed. The ISSB has moved at light speed, but it took seven years to map the TCFD for climate risks into mandatory standards. Our planet no longer has that luxury.

In addition, supervisors should develop expectations for how financial institutions manage the risks from degradation of nature and biodiversity. In these respects, GFANZ welcomes the initiative of the Network for Greening the Financial System.

Further, as net zero commitments move from targets to action, private finance must ensure that their transition plans include clear policies on deforestation and protecting nature and restoring biodiversity.

Make no mistake, these measures can unlock flows of capital that dwarf the capacity of governments.

Finally, authorities should support the efforts of the private sector to scale high-integrity carbon markets. Allow me to expand briefly.

Esoteric debates mean we've been dithering instead of supporting natural climate solutions, with the perfect becoming the enemy of the good. While carbon credits can provide (literally) vital funding for nature-based solutions and climate transitions in emerging and developing economies, at present there are few incentives for companies to invest in them until after their work of decarbonisation is largely complete. As a consequence, hundreds of billions of dollars of funding from companies to projects and communities in emerging markets and developing countries lie fallow.

This ignores both the time value of carbon and the rising risk of natural tipping points.

We must rapidly progress efforts to bring both high integrity and *high volume* to voluntary carbon markets so that carbon credits can fulfil their potential of reducing emissions¹⁶ and supporting biodiversity, mitigation, and adaptation objectives.

¹⁶ <https://www.carbonbrief.org/in-depth-qa-the-ipccs-sixth-assessment-on-how-to-tackle-climate-change/>

To this end, GFANZ is supporting initiatives including the Integrity Council for the Voluntary Carbon Market (ICVCM) work to ensure high integrity in the **supply** in voluntary carbon markets. The Core Carbon Principles must now be finalised to ensure consistent global standards for the quality and integrity of credits. These efforts can be reinforced by establishing robust market infrastructure, such as the Global Carbon Trust.

Similar high integrity is needed on the demand side. To preserve nature and maximize our carbon budget, reductions of absolute emissions and compensation for ongoing emissions must happen in parallel, not in sequence, in a “High Ambition Path to Net Zero.”¹⁷

And we should consider seriously proposals to ensure that companies can credibly use limited high-quality credits as part of their net-zero strategies, notably the Provisional Claims Code of Practice of the Voluntary Carbon Markets Integrity Initiative (VCMI). Any such framework, if it were adopted, must distinguish between Scopes 1 and 2, and Scope 3 emissions, as the VCMI proposal does.

The carbon market could deliver huge co-benefits for the planet, indigenous peoples, and local economies. However, the premiums for these co-benefits are unlikely to be captured fully in carbon markets, so there is merit in exploring the potential utility of biodiversity credits.

It is time for the spirit of Montreal to inspire as it did when governments finally took action to protect the Ozone Layer 25 years ago.

Governments must now agree on the goals. A Paris moment for nature will involve a clear set of commitments from governments to halt and reverse nature loss on an accelerated timeline, and they should set an objective to align all financial flows with the goals of a new Global Biodiversity Framework.

¹⁷ https://assets.bbhub.io/company/sites/63/2022/03/High_Ambition_Path_to_Net_Zero.pdf

Then they must then quickly follow through with policies to translate these global commitments into national frameworks and standards, because only that will drive real change on the ground.

With these conditions in place, finance will reduce exposures to nature-related risk and increase funding for nature-based solutions.

The world was defenceless in the face of the meteorite that hit Manicouagan. But the nations gathered here can help thwart the mass extinction that we are all driving, by appreciating the value of nature and helping finance leverage the nature of value.