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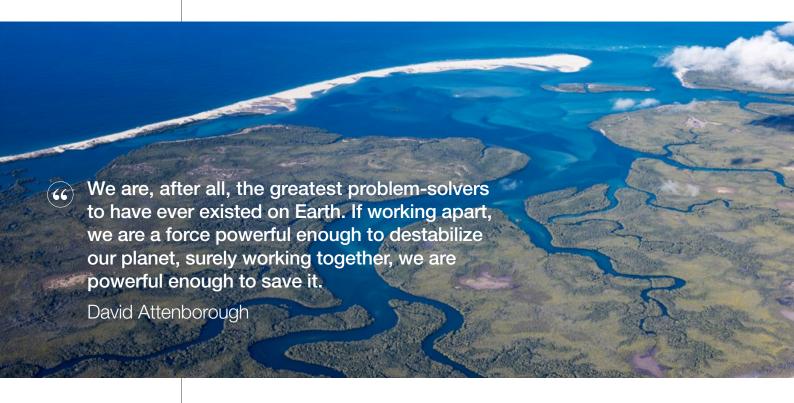
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## **Executive summary**



It is undeniable that human impacts on climate and nature have driven us towards a planetary emergency. Fortunately, there is still time to avoid the worst-case scenarios, but only just. Failure to adopt sustainable practices and investments put businesses and economies at risk. More than half the world's GDP - \$44 trillion - is at immediate risk due to nature loss. On the other hand, stalling this loss and making investments with naturepositive outcomes can create new business opportunities to the scale of \$10 trillion annually and create 395 million jobs by 2030. Investing in nature and nature-based solutions is therefore not only an ecological imperative, it is also is a socioeconomic one. Yet, despite the strong economic case and the increasing number of financing commitments, the investment gap remains large.

The private sector can and must play a leading role to close this gap. This white paper, authored by the World Economic Forum's Global Future Council on Nature-Based Solutions, takes a practical look at the investment landscape for nature and nature-based solutions. In doing so, it charts out two complementary pathways for private-sector stakeholders: one, to mainstream investments in nature that already demonstrate a positive business case by taking strategic and operational actions, and the other, where financial returns are not yet in place, to call on governments to create a fit-for-purpose enabling environment for investments in nature to become more financially attractive.

The private sector, corporates and financial organizations have a critical responsibility for

increasing investments in nature. Financial flows must be made compatible with climate and nature goals. Successful examples abound among innovative and traditional private-sector players alike. Now is the moment to extend and scale these early successes. We have laid out eight actions for which the private sector can already start mainstreaming investments in nature.

However, in most cases, current economic and financial norms and institutions are unable to value and create a positive financial return for nature-positive investment. Nature's ecosystem services are not valued or accounted for and polluting or environmentally degrading actions are not always effectively regulated, resulting in costs being externalized. To change this status quo, we have outlined eight actions that the public sector can take while business leaders advocate vocally and create pressure for these reforms.

Nature-positive strategies should be seen as opportunities for businesses and economies to thrive and not merely to survive the risks created by ignoring their impact on climate change and nature loss. Throughout these efforts, integrity and transparency will be key. We do not have the time or social trust to afford any more empty promises or commitments that are not backed with tangible action plans. Perhaps it takes courage to act when we might not yet have all the answers and perseverance to succeed, but the task at hand is clear with the conviction that business can create sustainable solutions to societies' greatest challenges.



# Investments in nature make economic sense

The science has never been clearer; the voices of citizens have never been louder. Nature is the soundest investment for economic resilience and human well-being.

#### 1.1 | The science is clear: there is a planetary emergency

Mutually reinforcing climate and nature crises threaten the human quality of life on a global scale. Climate change, alongside biodiversity loss, is now recognized as the biggest global threat to human economies and more importantly, to human survival, as highlighted by the latest Intergovernmental Panel on Climate Change report. 1.2 The World Economic Forum's Global Risks Report 2022 has again identified climate action failure and biodiversity loss in the top three most disruptive risks for the coming decade. 3 It is also undeniable that human actions, or rather inaction, are driving both crises. 4

Fortunately, there is still time to avoid the worst-case scenarios, but only if urgent action is taken now. Significant investments and

policy changes are required to transform current economic systems and value chains. While a range of actions are needed to achieve the Paris Agreement Goals of net-zero greenhouse gas (GHG) emissions by mid-century, including clean electrification and energy efficiency, all scenarios require carbon removals. To date, the only costeffective and readily available mechanism for such removals at scale is nature. What is more, when healthy, natural ecosystems can deliver a range of other benefits from food security to disease control on top of and beyond climate regulation, extreme weather mitigation and increased resilience and adaptation against the already inevitable impacts of climate change. Investing in nature's protection and restoration is therefore the soundest investment societies can make.

## 1.2 Nature loss creates significant and growing economic and business risks

Every business and economy depends on resources drawn from nature. Whether this dependence is direct, such as for companies that rely on crops, fish, timber, fibre and rare earth elements, or indirect, such as for the insurance sector, which depends on a stable natural environment and service providers that rely on affordable and stable energy provision, all economic activities are at risk from nature loss.

Failure to adopt sustainable practices<sup>5</sup> and investments puts businesses and economies at risk:

#### Physical risks:

 Over 50% of the world's GDP is highly or moderately dependent on natural capital and ecosystem services.<sup>6</sup> By 2030, nature loss could cost 2.3% of global GDP (\$2.7 trillion) annually and some of the poorer countries, where drops in GDP may be more than 10%, would be hit hardest.<sup>7</sup>

- 52% of agricultural land is already degraded, costing the world \$400 billion per year in lost productivity, and it is predicted that land degradation could reduce global food productivity by 12%, increasing food prices by 30% over the next 25 years.8
- Insured losses from natural disasters reached a ten-year high of \$42 billion in the first six months of 2021.<sup>9</sup> Nature-based solutions, such as the maintenance of healthy mangrove forests and coral reefs could have significantly reduced these costs.

#### Transition risks:

The benefits of

protecting at least

30% of the world's

outweigh the costs

land and oceans

by a ratio of at

least 5 to 1.

- A growing number of multinational corporations and governments are being taken to court to ensure they abide by increasingly stringent environmental and social performance policies. 10,11
- Changes in trade policies have significant impacts on businesses whose products are affected, such as Europe's draft law requiring companies to prove that agricultural commodities destined for the bloc's 450 million consumers are not linked to any - and not just illegal - deforestation.12
- Consumers are demanding more of businesses and preferring products that guarantee deforestation-free or organic supply chains.<sup>13</sup> At the same time, the cost of capital might increase for organizations that are not sustainably managed, as lending rates are increasingly tied to environmental, social and governance (ESG) performance.14

Societal and economic risks:

- Nature loss destabilizes society with significant economic fallout. For example, the onset of infectious diseases and pandemics has been connected to ecosystem degradation.<sup>15</sup>
- The displacement of more than 98% of the 30.7 million newly displaced people in 2020 resulted from disastrous changes in the environment.16
- Marginalized, poor and youth populations contributing the least to climate change and nature degradation are those affected the most. They also face an additional burden from global policy responses to halt deforestation or mitigate and adapt to climate change, further exacerbating social inequities. 17 During Hurricane Katrina, over 80% of the lost homes in the US belonged to marginalized population groups such as Black communities, who are disproportionately located in areas that are physically vulnerable to climate hazards.<sup>18</sup>

## 1.3 | Nature-positive investments create new business opportunities and strengthen resilience

Governments and businesses that embrace nature-positive policies, practices and investments stand to gain. It is estimated that a nature-positive pathway could generate over \$10 trillion in new annual business value and create 395 million jobs by 2030.19 These benefits are often delivered over longer time frames and indirectly, meaning that benefits accrue to society at large rather than solely to the investor and are hence not yet captured in current economic models. Yet, if these improvements are accounted for, the benefits of protecting at least 30% of the world's land and oceans outweigh the costs by a ratio of at least 5 to 1.20

The shift in this direction is inevitable and already occurring. The question is not one of "if", but rather of "how effectively, efficiently and equitably". Early-mover companies and governments still have an opportunity to seize

competitive advantages, while those who lag may struggle to adapt as nature-positive actions quickly become the expected norm for business practice. Over the past decade, the MSCI Emerging Markets ESG Leaders Index outshone the broader MSCI Emerging Markets Index, with annualized gross returns of 6.3% versus 3.0%, a clear reflection of the profitability of ESG investing.21 Moreover, in a recent survey, most millennials, who will make up 75% of the job market by 2025, will not take a job with a company that lacks social responsibility values.22

These indicators demonstrate that investing in nature is one of the soundest investment options and that financial decisions that destroy nature increasingly impact financial bottom lines. Yet, the failure of current economic models to recognize this value is putting the world at high risk of a large-scale economic and social breakdown.



# Closing the investment gap

Businesses must act within their own operations and advocate to change the enabling environment for a nature-positive future.

## 2.1 The investment case is clear, but the investment gap is large

In June 2021, G7 leaders once more acknowledged their duty to safeguard the planet and called for ambitious action to halve collective carbon emissions by 2030 and achieve net zero no later than 2050, mobilize \$100 billion per year in climate finance by 2025 and conserve or protect at least 30% of land and oceans by 2030.<sup>23</sup>

Such commitments are a promising start, but to meet climate, biodiversity and land degradation targets, a \$ 4.1 trillion financing gap in nature needs to be closed by 2050, with bold action starting immediately. <sup>24</sup> Closing this gap equates to quadrupling financing for nature-based solutions from current levels. Similarly, another study estimated that to capture the \$10 trillion available in all nature-positive business opportunities by 2030 would require \$2.7 trillion per year of redirected funding through to 2030. Public sector funds alone will not be enough. Private sector financial flows are also needed to create better outcomes for nature.

For this scale of private finance to flow, naturepositive action needs to deliver a positive financial return on investment. However, while all nature-positive investments have a positive economic case, only a handful currently offer a positive market return on investment. Most often,

the enabling environment needed for naturepositive action to deliver a financial return is not in place and public support schemes are not fit for purpose to deliver better production, a better environment and better lives. Financial and economic regulations do not capture negative market externalities or protect public goods from exploitation and most businesses are not yet creating the internal accounting systems to value nature. Still, some organizations are leading the way in nature-positive investments. Their actions are not always driven by a strong business case but by the belief that harming nature destroys business value and nature-based solutions will drive future business value. Yet, these few positive examples are not enough to close the financing gap.

Two action-oriented pathways can create the critical mass needed to accelerate systemic change: (1) business leaders take strategic actions within their own operations to demonstrate the business case for nature-positive investments and mainstream these cases, and (2) business leaders advocate for governments and international institutions around the world to redesign public support schemes and create the policy and regulatory conditions needed for investments in nature to become more financially attractive.

While all nature-positive investments have a positive economic case, only a handful currently offer a positive market return on investment.

## 2.2 Realizing current opportunities: Mainstreaming investments in nature that already demonstrate a positive business case

The private sector and corporate and financial organizations all have a critical responsibility to increase investments in nature. So far, these groups of stakeholders have taken part in a system that funds the destruction of nature. Deforestation, for example, can be a result of corporate supply chain and procurement decisions but also of financial institutions' decisions.<sup>25</sup> Approximately \$238 billion in credit was provided by banks and other financial institutions to deforestation-related commodity companies between January 2016 and June 2021.<sup>26</sup> Yet, these same actors have shown that they can also use their financial power to drive nature-positive outcomes, as demonstrated by the examples below.

Financial flows must be made compatible with climate and nature goals. Corporates can shift their procurement rules and supply chain investments to value nature-positive opportunities over harmful ones. Banks and investors, including

multilateral development banks, can decline unsustainable business while providing capital, de-risking investments and creating asset classes for nature-positive projects.

Successful examples abound among innovative and traditional private-sector players alike, with organizations successfully pursuing nature-positive investments that demonstrate a positive financial business case. They have succeeded in doing so by putting into place conditions that put a price on nature's ecosystem services and including these pricing considerations in their enterprise-level strategic and operational decision-making processes. The examples summarized in Figure 1 illustrate eight key actions around avoiding, reducing and restoring negative impacts on natural ecosystems, as well as transforming established business practices to address the fundamental drivers of nature loss and create systemic change.

#### FIGURE 1

#### Eight actions by the private sector can mainstream investments in nature

#### Action

#### **Examples**

## 01

Refuse business investments that might harm the environment and present legal or reputational risks

- Swiss Re, a global reinsurance company, declines insurance cover and investment to clients who pose harm with embedded processes that identify and avoid businesses with negative environmental impacts.<sup>27</sup>
- Unilever, a multinational consumer goods company, became the first consumer goods company to publicly disclose the suppliers and mills it sources from, both directly and indirectly, to eliminate deforestation from its supply chains.<sup>28</sup>
- HSBC, a multinational investment and financial services company, following the Equator Principles for the banking sector, created internal policies which prevent funding for potentially environmentally harming customers such as customers sourcing timber from high-risk countries whose products are not 100% certified (Forest Stewardship Council/Programme for the Endorsement for Forest Certification) or customers who are not certified by the Roundtable for Sustainable Palm Oil and do not report progress on protecting high conservation value and high carbon stock forests.<sup>29</sup>

## Avoic

O2 Identify, value and mitigate nature-related risks in enterprise operations

- L'Oréal, a French personal care company, identified that forest-related issues could put more than \$180 million, 1% of its operating expenses in 2018, at risk.
   Hence, it created a \$57 million impact investing fund to restore over 1 million hectares of damaged marine and terrestrial ecosystems.<sup>30</sup>
- Apple, a multinational technology company, in partnership with Conservation International and Goldman Sachs as the fund manager, created a \$200 million Restore Fund for nature-based climate solutions, with a highlight on zones that are important for biodiversity, as part of the company's efforts to be carbon neutral by 2030. It intends to do this by reducing its supply chain emissions by 75% by 2030 and offset the remaining 25%.<sup>31</sup> Early action avoids the risk of over-reliance on carbon offsetting as the prices of carbon credits are predicted to increase.

- Value natural assets
  and ecosystem services
  (e.g. pricing for carbon
  or water) to drive
  portfolio and operations
  decision-making
- Swiss Re applies an internal carbon levy, currently \$100 per tonne (t) of CO<sub>2</sub>, to steer its portfolio and change behaviour.<sup>32</sup> The levy will gradually increase to \$200/tCO<sub>2</sub> by 2030.
- Forico, an Australian forestry company, is implementing a natural capital accounting system to measure the benefits obtained from natural capital assets in financial terms and assess the impacts of the company's decisions and investments on natural capital assets.<sup>33</sup> This value is then presented in the format of a traditional corporate annual report with an environmental balance sheet, a profit and loss statement, and supporting notes. The net natural capital value of Forico's estate was conservatively estimated at \$3.37 billion, which the company intends to maintain or improve over time.
- O4 Strengthen supply chain resilience as a key performance indicator
- Natura & Co, a Brazilian-based multinational cosmetics group, is working with indigenous communities in the Amazon to sustainably manage and restore the forests from which it sources the ingredients to develop its cosmetic products.<sup>34</sup>
   In this way, it can guarantee the continued supply of the genetic diversity and ingredients it needs to continue providing and innovating its product lines.
- Kering, a French-based multinational luxury group, by partnering with
  Conservation International, is increasingly sourcing from and investing in
  regenerative agriculture to increase its supply chain resilience and adaptation to
  climate change, allowing the company to meet its climate targets without using
  carbon credits, which are expected to rise in price.<sup>35</sup>
- O5 Consider naturebased solutions as part of bottom-line improvement strategies
- Suzano, a Brazilian pulp and paper company, has increased its profitability by sustainably managing its plantation, thanks to the benefits offered by a more diverse ecosystem. These benefits include pest regulation, higher water retention and more productive soils.<sup>36</sup>
- Itaipu Binacional, a hydroelectric company belonging to Brazil and Paraguay, reduced its dredging costs and increased the security of its water supply by protecting and restoring forests in its catchment area, reducing erosion and sedimentation.<sup>37</sup>
- Rio Tinto, an Anglo-Australian metals and mining company, partnered with RESOLVE, a non-profit organization, to launch Regeneration, a startup that will remine legacy mine sites to extract valuable minerals and metals and use the earnings to fund nature-positive mining closure activities.<sup>38</sup> Recovered materials will be sold to manufacturing and retail companies seeking responsibly sourced minerals for their products while reducing the need for extraction from new mining sites. Regeneration will create and trade biodiversity and carbon credits through the rehabilitation of land. While not active yet, Regeneration will replicate Rio Tinto's mine remediation model for land conservation and RESOLVE's work on gold mine sites.<sup>39</sup>
- O6 Invest in R&D, technology and capability building to reduce the costs of sustainable alternatives and gain a competitive edge
- As part of its planet-positive journey, IKEA, the multinational furniture conglomerate, launched its innovative and user-friendly buy-back scheme, which allows customers to return their old IKEA products in exchange for a voucher for as much as 50% of the product's original value. The second-hand items are resold in IKEA stores or recycled into new furniture. This programme complements IKEA's efforts to design circular products, whereby over 9,500 of the company's products have been assessed for innovative circularity design and more than 14 million spare parts were offered to customers in 2020 to extend the life of IKEA's products.<sup>40</sup>
- British multinational automaker Jaguar Land Rover has designed a closed-loop aluminium production model, whereby it recovers and reuses approximately 30% of the aluminium used in its automobile production. This has allowed the company to reduce the carbon emissions of global vehicle production operations by 46% and decrease its reliance on virgin aluminium.<sup>41</sup>
- O7 Develop a specialized range of financing insurance and risk-sharing mechanisms, with longer-term horizons and layered income sources
- Rabobank, a Dutch global financial company, launched its Acorn programme, which provides farmers with upfront funds to invest in agroforestry. This creates "future" carbon credits that Rabobank can sell to corporate investors, such as Microsoft, seeking to offset their footprint, hence building a global, transparent carbon removal system for smallholder farmers who sequester carbon on their land.<sup>42</sup>

## 07 (continued)

Develop a specialized range of financing insurance and risksharing mechanisms, with longer-term horizons and layered income sources

- The Agoro Carbon Alliance, a subsidiary of Yara, a global agricultural chemical company, is supporting farmers to adopt sustainable agricultural practices by providing Farm Carbon Credits and agronomic and change-management expertise adapted to the local context.<sup>43</sup> Agoro Carbon is currently focused on existing agricultural land and it will expand to include activities such as the recovery of degraded pasture lands.
- Walmart, an American multinational retail corporation, will use finance lines from HSBC to offer its suppliers credit lines, early payment on invoices and other benefits for them to invest in sustainability.<sup>44</sup> The retailer will therefore have additional leverage to force the changes that it wants to see in its supply chain. This will increase overall transparency and overcome the funding bottleneck, which often hinders the dense global network of small suppliers from investing in sustainability, resulting in lower production costs.
- HSBC launched a number of indexes, the Euronext ESG Biodiversity Screened Index Series, which screen companies for biodiversity risk and these will include a number of offerings such as derivatives and structured finance products to attract investment.<sup>45</sup>
- The Forest Resilience Bond (FRB) is a financing mechanism developed by Blue Forest Conservation, a non-profit organization focused on financial innovation, in partnership with the World Resources Institute. 46 The FRB raised \$4 million in private capital to fund the upfront costs of forest restoration. Multiple beneficiaries of restoration, including the US Forest Service, the State of California and Yuba Water Agency, will share in the cost of reimbursing investors over time. Commercial lenders will receive a fixed return of 4% yearly, while concessional lenders will get 1% p.a. This innovative financing mechanism is expected to reduce the implementation period from 10 to 4 years.

#### 80

Agree on industry standards for disclosures and invest in measurement and monitoring tools to integrate biodiversity impact measurement into existing frameworks on climate change and ESG

- The International Financial Reporting System Foundation Trustees are launching the International Sustainability Standards Board to unify various voluntary disclosure guidelines from corporates, helping investors and other stakeholders to properly compare corporate sustainability performance and related risks.<sup>47</sup>
- The Taskforce on Nature-related Financial Disclosures (TNFD) is a risk management and disclosure framework for the finance and business sector to better report on and manage their nature-related risks from 2023 onward. The aim is to support a shift in global financial flows towards nature-positive outcomes. The TNFD has been given international political support through endorsement by G7 finance ministers. The 35 multistakeholder members of the taskforce will seek to build upon the structure and foundation of the Taskforce on Climate-Related Financial Disclosures.<sup>48</sup>
- The Science Based Target Network (SBTN) developed industry-specific methods and guidance for companies to set, measure and disclose science-based naturerelated targets, starting with and recognizing the importance of interim targets.<sup>49</sup>
- The Integrity Council for Voluntary Carbon Markets aims to make carbon credits more investable by making the market more standardized, transparent, well governed, verifiable and robust. To do so, it is developing a global benchmark – the Core Carbon Principles – to provide a market standard for high-quality credits by defining eligibility criteria for projects and methodologies, as well as an accounting system for co-benefits.<sup>50</sup>

**Note:** Figure 1 follows AR3T, SBTN's Action Framework, which covers actions to avoid future impacts, reduce current impacts, regenerate and restore ecosystems, and transform the systems in which companies are embedded.

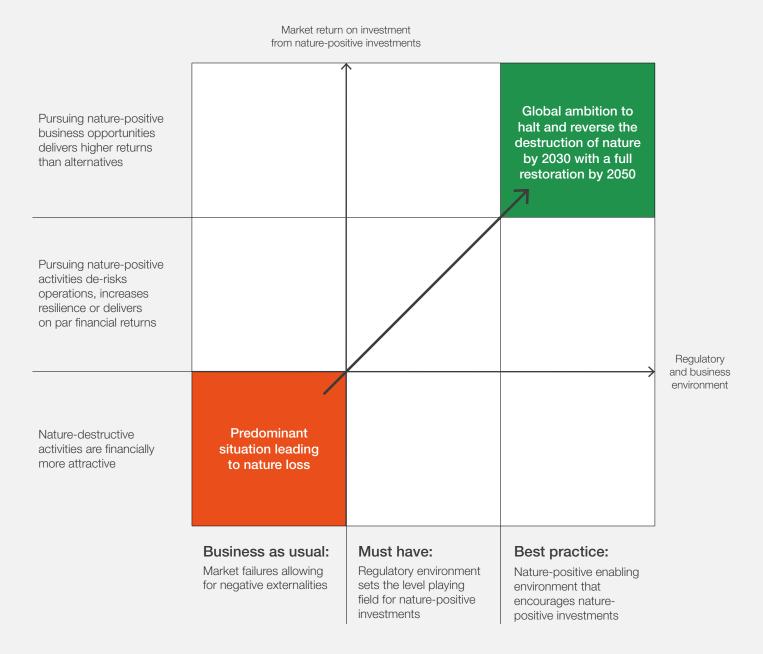
## 2.3 | Creating new opportunities: Strengthening the business case for nature-positive models by creating a fit-for-purpose enabling environment

In most cases, current economic and financial norms and institutions do not consistently value and create a positive financial return for naturepositive investment. Nature's ecosystem services are not valued nor accounted for and polluting or environmentally degrading actions are not always effectively regulated, resulting in the costs being externalized and public policies and incentives which too often create perverse and harmful outcomes. Of the \$540 billion agricultural subsidies per year (15% of total agricultural production value), 87% is price-distorting and environmentally and

socially harmful.<sup>51</sup> Only 10.6% of COVID-19 stimulus funding from major economies will have a positive impact on climate and nature,52 despite prior studies demonstrating that green projects create more jobs, deliver higher short-term returns per dollar spent and lead to increased long-term cost savings compared to traditional fiscal stimulus.53 This means that, ultimately, environmentally harmful actions are often supported with public resources, making them cheaper and more competitive than nature-positive investments in the short term. The transition necessary is illustrated in Figure 2.

#### FIGURE 2

The regulatory and business environment needs to change to enable nature-positive business opportunities to deliver a competitive financial return



By joining coalitions focused on specific geographies or ecosystem types, the private sector can advocate for policy interventions that create a naturepositive enabling environment.

Businesses that want to implement naturepositive strategies are not supported or incentivized with an enabling environment. For example, in low-income countries, input subsidies represent on average the largest share of public budgets allocated to agriculture, often leading to the over-application of inputs or monocultures, while expenditures for sustainable agricultural infrastructure such as irrigation and storage, land management and environmental protection are limited.54 And, globally, unsustainable products and emission-intensive commodities (e.g. beef, milk, rice and sugar) receive the most support. These subsidies are often provided without any conditions or constraints to protect against potentially public-value destructive actions and hence come with significant negative externalities for nature and health. Similarly, globally, governments spend more than \$500 billion on subsidies for fossil fuels.55 These subsidies artificially lower the price of fossil fuels, making renewable energy less competitive. This leads to overconsumption, making energy industries such as power generation and transport more competitive and creating negative environmental and health impacts, taking the world further away from reaching the goals of the Paris Agreement.<sup>56</sup> These subsidies are also ineffective in alleviating inequity. In Indonesia, for example, prior to reforms, the richest decile of households consumed 40% of subsidized petrol, while the poorest 10% of households consumed less than 1%.57 Such public schemes distort the market and discourage companies from investing in healthier, more sustainable, equitable and efficient production systems. As long as these perverse subsidies remain in place, investments in sustainable, equitable and nature-positive practices will not increase and livelihoods and economic stability remain at risk.

In this market context, it is also highly unlikely that lower-income countries would elect to conserve globally critical biodiversity areas rather than exploit them for short-to-medium term economic gains. Globally, there is no market mechanism to compensate for the protection of biodiversity hotspots, but there are revenue-

generating opportunities from prioritizing extractive investments in these regions. The global framework for providing results-based finance for conserving forests, Reducing Emissions from Deforestation and Forest Degradation (REDD+), under the United Nations Convention on Climate Change, remains largely untried due to limited market demand for jurisdictional-scale forest carbon credits.<sup>58</sup>

To change this status quo, the public sector needs to step up and think about its legacy, while business leaders need to advocate vocally and create pressure for these reforms. Policy-makers need to create the right enabling environment with regulations and incentives. They also need to invest in the support systems that encourage private sector investments to flow into activities that preserve natural ecosystems, which deliver the public goods people rely on for their economic prosperity and human survival. By joining coalitions focused on specific geographies or ecosystem types, the private sector can advocate for policy interventions that create a nature-positive enabling environment. For example, by joining the Ocean Risk and Resilience Action Alliance, which connects the finance and insurance sectors, governments and non-profits, companies can be in a strong position to advocate with the 10 countries that are part of the alliance for the policies needed to drive investment into ocean-focused, nature-based solutions.59

The real economy and financial sectors can help motivate and shape this change and activate different levers that signal their readiness to transition, such as setting netzero or nature-positive targets or pricing negative externalities (e.g. imposing an internal carbon tax). Such signalling will help de-risk actions carried out by governments and policy-makers as they see that economic actors and society at large are ready for systemic change. Collective action from all organizations and sectors is required to reach the global ambition for a prosperous future. Figure 3 provides examples of eight actions that the private sector can call for the public sector to enact in order to provide a level playing field for nature-positive investments.

# Least advanced

#### Action Example

O1 Enact policies to prohibit environmentally destructive behaviour and invest in enforcement

- Indonesia, one of the world's leading producers of tuna, imposed a moratorium on illegal foreign fishing boats and invested in a task force responsible for strict enforcement.<sup>60</sup> This drove commercial fishing to shrink by 25% and fishing weight by boat to reduce by 40% (as foreign ships were larger), allowing fish stocks to recover and grow by 72% between 2013 and 2017.<sup>61</sup> Meanwhile, Indonesia's seafood export volume and value increased by 7% and 17%, respectively, between 2016 and 2017, benefiting the local economy and fishermen.
- China passed the Yangtze River Protection Law for a 10-year fishing ban in the Yangtze, China's longest river, to restore the fish population, which has dwindled in recent years, with many species on the verge of extinction due to overfishing and water pollution.<sup>62</sup> The Chinese government complemented the policy with \$2.44 million for monitoring and enforcement.
- Repurpose and reform subsidies and taxes to provide public goods
- Costa Rica leveraged low global oil prices to put in place a fossil fuel tax without burdening consumers and directed part of tax revenues to payments for ecosystem services generated by landowners.<sup>63</sup>
- In 2014, Indonesia completely removed its fuel subsidies, which led to a 30% fuel price increase. To avoid impacting vulnerable households, the government launched a social assistance scheme to help families with young children and/or those in need of health assistance. Following the reform, the state budget benefited from savings of more than \$15.5 billion and diesel and petrol consumption decreased by 6% and 9%, respectively. The reform was also followed by major budget increases in health insurance programmes, affordable housing, clean water access (\$12 billion) and investments in infrastructure (\$4.1 billion).<sup>64</sup>
- Recognize natural capital and ecosystems services as part of public asset management programmes and infrastructure solutions
- Recognizing that healthy soil is the basis of climate resilience and food security, the Indian state of Andhra Pradesh has centred its agricultural and rural development policy on Zero Budget Natural Farming, which promotes agroecology practices. After four years of implementation, 90% of farmers surveyed reported a 17% increase in yields and a decline in costs, thereby improving livelihoods, with incomes jumping by 50% and soil biodiversity multiplied by 7.65
- The US's Bipartisan Infrastructure Deal will invest over \$50 billion to build the nation's resilience against climate change, including a substantial increase in funding towards reforestation, ecosystem conservation and coastal resilience. In addition, \$16.5 billion will be invested in the environmental remediation of abandoned fossil fuel sites, affirming that nature and climate are the country's most fundamental infrastructure.<sup>66</sup>
- O4 Reshape disclosure and performance systems
- The EU Commission adopted a sustainability-related disclosures regulation for the financial services sector, requiring sustainability disclosures obligation for all financial market participants (e.g. asset managers, investors, insurance companies and pensions funds). The regulation also imposes disclosure obligations related to potential negative externalities on the environment and the social justice of investment decisions, advice and products.
- Shenzhen, China's technology hub, became the first city to calculate its total Gross Ecosystem Product, a measure that places a value on all goods and services produced by ecosystems, as China is looking to play down the importance of its GDP growth rate and focus on more holistic measures of development.<sup>68</sup>
- Develop transparent
  action plans for national
  determined contributions
  (NDCs) and national
  biodiversity strategies
  and action plans
  (NBSAP) supported by
  policy coherence across
  ministries and integrated
  geospatial maps
- China's Ecological Conservation Red Line initiative a policy underpinned by a rigorous scientific approach to identify high-priority areas for biodiversity, climate resilience, ecosystem services and disaster risk reduction – has delineated biodiverse areas covering over 25% of the country's territory.<sup>69</sup>

#### 06 Legislate on transparency of supply chains and invest in monitoring

- France adopted a first-of-its-kind due diligence legislation preventing deforestation-linked commodities from entering its markets and the United Kingdom is now developing its own, making it a legal requirement for companies to address deforestation within their supply chains.<sup>70</sup>
- An EU-wide regulation has been proposed which sets mandatory due diligence rules for operators placing deforestation-related commodities on the EU market - soy, beef, palm oil, wood, cocoa and coffee and some derived products, such as leather and chocolate.71 Any commodity entering the market would need to be strictly traceable, with geographic coordinates for its production area, allowing enforcement authorities in member states to monitor operators' compliance.

#### 07 Create a formal carbon pricing scheme (and replicate for other natural services through

Services schemes)

Payments for Ecosystem

- Colombia taxes \$5 per tonne of emitted carbon on companies that produce or import fossil fuels. The levy yielded revenues of \$148 million in 2017, which were directed towards the National Environment Fund. 72 In 2018, the country adopted its climate law, which outlines provisions for the establishment of an Emissions Trading System, which will complement the existing carbon tax and be aligned with Colombia's national GHG emission reduction targets.73 Colombia is also part of the Pacific Alliance and the Carbon Pricing in the Americas initiative to explore regional carbon pricing.
- California's Cap-and-Trade Program aims to help the state achieve an 80% emissions reduction from 1990 levels by 2050.74 It covers 80% of California's GHG emissions by focusing on large power plants, large industrial plants and fuel distributors. The total amount of emission allowances under the cap decreases annually and is distributed via a combination of free allocation and auctioning, for which there was a floor price of \$17.71/tCO<sub>2</sub>e in 2021, with a 5% increase annually. Industry operators can use eligible offsets, i.e. generated in the US according to an approved offset protocol to meet up to 4% of their compliance obligations between 2021 and 2025.
- Queensland, in Australia, has set up the \$500 million Land Restoration Fund (LRF) to go beyond the National Emissions Reduction Fund (ERF), which focuses on generating carbon credits for farming and land-use activities at the lowest price.75 The LRF will include land-sector projects that deliver clear co-benefits for biodiversity, coastal ecosystem health and economic and social sustainability. Unlike the ERF, the LRF will use the valuing and pricing of co-benefits to drive higher prices and incentivize sustainable land and agricultural management practices, and improve project feasibility when the carbon credit prices do not cover project costs.

#### 80 Develop blended finance and public-private partnerships approaches, with strong support from multilateral development banks, to attract and de-risk privatesector investments

- To expand its protected areas, South Africa has introduced a first-of-its kind biodiversity tax incentive into its legislation. The tax incentive allows landowners such as farmers or communities, who commit to setting aside and managing their land as protected areas, to receive a fiscal benefit. The tax break frees up the cashflow needed by landowners to cover the often costly financial commitments related to responsibly managing protected areas and address the potential loss of production income, while ensuring the continued commercial viability of activities compatible with protected areas, such as eco-tourism. It is estimated to contribute close to 10% additional finance in closing South Africa's biodiversity finance gap.
- Mexico Quintana Roo's 100-mile stretch of the Mesoamerican Reef is the world's first natural asset protected by an insurance policy based on its economic value to the region through storm protection and tourism. To put in place the insurance mechanisms, the regional government developed a public-private partnership arrangement to de-risk private sector interests and optimize natural public assets. In this arrangement, a trust fund collects money from hotel and tourism concession taxes to purchase an annual parametric insurance policy for the coral reef from insurance companies in case of hurricane-induced coral reef damage and to fund ongoing maintenance.
- The Inter-American Development Bank partnered with the Global Environment Facility to establish a \$5 million Climate-Smart Agriculture Fund for Latin America and the Caribbean. The fund seeks to unlock greater private-sector investment in sustainable land use and climate-resilient agribusiness to reduce GHG emissions and enhance biodiversity. It does so by offering risk-tolerant capital with long tenors to catalyse private investment by cushioning early losses and providing a concessional tranche of resources. The fund's investments will focus on the restoration of degraded land through practices such as reforestation, sustainable agricultural management and water efficiency investments.

## Acting boldly with urgency

Members of the council urge corporates, investors and governments to create and strengthen market-based mechanisms for valuing nature.

With diverse backgrounds and perspectives, we have collaborated as members of the World Economic Forum's Global Future Council on Nature-Based Solutions over the past year. We discovered that we share the same sense of urgency for businesses to act and use their financial clout to deliver better outcomes for nature and society. We concluded that nature-positive strategies should be seen as opportunities for business to thrive in future and not merely to survive the risks created by ignoring their impact on climate change and nature loss.

We therefore call on companies and investors to:

- Understand, value and disclose your impact and dependency on nature so that nature-destructive investments become a thing of the past
- Adopt nature-positive strategies as a norm in your decision-making, in a way that redefines your purpose and enables you to become more competitive and resilient
- Lead and innovate to fast-track revenuegenerating investments in nature and develop options to finance the transition

In this report, we provide examples of private and public sector leadership investing in nature. These examples present opportunities to learn from the proven business cases and to engage with civil society organizations, think tanks

and academic institutions with expertise in the development of nature-based solutions.

However, we also recognize that for private sector action to scale and mainstream, we need to reshape the current economic and policy institutions that do not value nature and promote its destruction. We therefore call on business leaders to advocate that governments:

- Enact policies to protect nature and reform subsidies to value and provide public goods, recognizing natural assets' role in providing them
- Reshape disclosure and performance measurement systems and legislate on transparency
- Create formal pricing mechanisms for carbon and ecosystem services and support blended finance approaches to crowd-in private sector investments

Throughout these efforts, integrity and transparency will be key. The world no longer has the time or the social trust for empty promises or commitments not backed by tangible action plans. It surely takes courage and perseverance to act when we might not yet have all the answers, but the task at hand is clear with the convincing case that business can create sustainable solutions to many of societies' greatest challenges.

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