



E#2: ENVIRONMENTAL SUSTAINABILITY

Human society and the global economy are inextricably linked to water, land, biodiversity, forests and minerals. Once considered inexhaustible, these critical resources and ecosystems are now under severe pressure from current rates of consumption, as a result of both population and unsustainable economic growth and operational models.

The rate of environmental degradation is outpacing the planet's ability to absorb the damage. Scientists estimate that humans are consuming 30% more resources than the planet can replenish each year.¹⁴ Misuse, on top of over-use, coupled with pollution and contamination are only worsening the state of the air, water and soil. It is estimated that 60% of global ecosystem services are degraded or are being managed unsustainably.¹⁵

We now know that we should target 1.5°C degrees as an absolute cap on global average temperature increases. Limiting temperature rises to 1.5°C versus 2°C could reduce the number of species facing a potential loss of 50% of their species range determined by climate factors.¹⁶ There are, however, different ways to get to the 1.5°C target, and the path we choose will have different implications for society and for biodiversity.¹⁷ If we achieve 1.5°C at

the expense of biodiversity, we will have redefined the term "Pyrrhic victory." Those populations that are the most dependent on environmental resources – which also tend to be the poorest – will be the first to suffer.

In 2009, the Stockholm Resilience Centre introduced the planetary boundaries concept, which focuses on the nine systems that regulate the stability of the earth¹⁸. They have found that four planetary boundaries have now been crossed: climate change, biosphere integrity, land-system change, and biogeochemical flows (phosphorus and nitrogen).¹⁹ Renewable and non-renewable natural resources are also under severe threat. When we cross a planetary boundary, we enter an area of high uncertainty and increasing risk, as the interactions of land, ocean, atmosphere and life provide the conditions upon which human societies depend.

Unless we act immediately and radically to reverse the situation, not only will we destroy our natural capital, but we will be unable to sustain current economic growth rates and the prosperity levels that the populations in developed countries enjoy, let alone extend them to developing nations.

A VISION WORTH PURSUING

"In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society."



EUROPEAN COMMISSION, Environment Action Programme to 2020²⁰

The level of action needed requires measures to:

1. Stabilise total demand for natural resources first, then reduce it in a context of a rising population, by substantially increasing natural resource productivity or, where possible, finding substitutes;
2. Drastically reduce the ecological impact per unit of production, and aspire to close to net zero impact; and,
3. Develop a circular economy that allows natural resources to be recovered, and to regenerate themselves.

The Paris Agreement and the 2030 Agenda and its 17 Sustainable Development Goals (SDGs) provide a unique opportunity to put an end to this deteriorating trend. In 2015, 195 countries unanimously decided to move away from a fossil fuel-based economy to a low carbon one. As we deploy immense efforts to transform the world's energy systems, we must also address the need to reverse the degradation of natural wealth and develop an economic model capable of using natural resources sustainably.

WATER SCARCITY AND POLLUTION

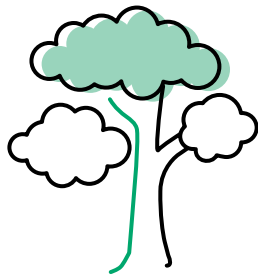
More than a billion people live in water-scarce regions today, and nearly half of the world's population is situated in potentially water-scarce regions at least one month per year.²¹ Water scarcity refers to physical shortage, although lack of access to water might be caused by lack of regular supply or by inadequate infrastructure. Climate change is another contributor to water shortages. About half of the world's population is projected to face water shortages by 2030 when demand will exceed water supply by 40%.²² The global water-supply crisis poses a serious challenge to society. Some argue that it is the greatest economic challenge²³. A third of the world's largest groundwater systems are in distress.²⁴

All companies, irrespective of their levels of water usage and where they are located, have a duty to improve water efficiency and minimise waste water. In 2016, 607 companies alone lost USD 14 billion as a result of water scarcity, drought, floods and other water-related risks.²⁵ Water scarcity poses a particularly severe financial risk to companies which are water-intensive and operate in water-stressed areas. Competition for access to water with local communities will intensify, and those unable to manage it risk losing their licence to operate.

Water risks go beyond shrinking water supplies. Increasing pollution is degrading both freshwater and coastal aquatic ecosystems. Despite improvements in some regions, particularly in accessing water – since 1990 more than 2.6 billion people have gained access to an “improved” drinking water source – water pollution is on the rise.²⁶ The most prevalent water-quality problem globally is eutrophication caused by high-nutrient loads, mainly phosphorus and nitrogen. Essentially all goods-producing activities generate pollutants as unsought by-products. Many industries – some of them known to be heavily polluting, such as leather and chemicals – have moved from high-income countries to emerging-market economies, often with inferior environmental and labour protections. More than 80% of sewage in developing countries is discharged untreated, polluting rivers, lakes and coastal areas.²⁷

Bad governance, lack of means, and widespread corruption distort policies and budgets for drinking water and sanitation, and delay good water-management and water-infrastructure projects.





ENVIRONMENTAL SUSTAINABILITY: OBJECTIVES AND TARGETS

Our overall objective is to improve the environmental impact of our investments. We have two targets to improve our water and forest footprints in the next three years:

- 1 -

To improve the water efficiency of our investment portfolios, in particular in water-stressed areas, as well as to measure and disclose the water footprint of our portfolios;

We will encourage water-intensive sector companies operating in water-stressed areas to significantly improve their water efficiency while ensuring water access to local communities.

- 2 -

To support global efforts to halve forest loss by 2020 and end forest loss by 2030. Our target is for relevant companies in our portfolios to comply with:

No Deforestation, No Peat and No Exploitation (NDPE) commitments by 2020 for agricultural commodities (palm oil, soy, paper, timber and beef products).

NDPE commitments by 2030 from non-agricultural sectors (mining, metals, infrastructure, etc.).

We have also set a series of internal sub-targets regarding air, soil, oceans, biodiversity and waste to support our overall objective and our two high-level targets. These are areas we are already working on, but the sub-targets will help us improve our understanding of what our contribution should be across our investments, e.g. biodiversity or adaptation; to improve our current assessment of companies' performance on plastics waste or sustainable fisheries; or to enhance information availability and quality from companies and policymakers in order to start assessing and comparing companies' performance in these areas.

LAND AND FORESTS

Forests are critical for soil conservation, carbon sequestration, regulating weather systems and global biodiversity. More than 1 billion people depend on forests for their livelihoods, and they play a crucial role in sustainable agriculture, food security, water and in providing vital medicines.²⁸ According to World Resources Institute (WRI) research, 30% of global forest cover has been cleared, while another 20% has been degraded.²⁹ Most of the rest has been fragmented, leaving only about 15% intact.³⁰

In spite of lower deforestation rates in some regions, the world's forests remain under immense pressure, mainly from agriculture. Over a third of the land estimated to be suitable for further expansion for agriculture is used for crop production. However, any land expansion from now onwards will compete with the need to protect forests and already damaged ecosystems.³¹ In the tropics and subtropics, 40% of land-use change is caused by large-scale commercial agriculture, whereas local small-scale agriculture accounts for 33%.³²

Besides better regulation and tackling illegal logging³³, private-led certification schemes and commitments to zero deforestation can make a difference. In 2014, the New York Declaration on Forests was endorsed by 36 national governments, 53 companies and 54 civil-society organisations. An increasing number of companies are working towards eliminating deforestation from their supply chains. The Consumer Goods Forum (CGF), which represents 400 companies in 70 countries, aims to achieve zero net deforestation by 2020 through the responsible sourcing of key commodities – soy, palm oil, paper and pulp and cattle.³⁴ Today, however, implementation lags commitments and deforestation in the Amazon is back on the rise.³⁵

BNP Paribas Group endorsed the Zero Net Deforestation objective established by the Soft Commodities Compact, a joint initiative overseen by the CGF and the Banking Environment Initiative, whose signatories aim to eliminate deforestation from the downstream and upstream supply chain no later than 2020.³⁶ BNP Paribas Group has been a member of the Roundtable for Sustainable Palm Oil since 2011, and has implemented a palm oil and a wood and pulp policy across our investments. In 2018, BNPP AM endorsed the Cerrado Manifesto³⁷, seeking to work with local and international players to halt deforestation mainly from soy plantations and native vegetation loss in the Cerrado region of Brazil.

BNP Paribas Asset Management is the source for all data in this document as of March 2019, unless otherwise specified.

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