



THE WAY WE INVEST MATTERS

As the physical conditions for life and well-being on Earth are increasingly under threat, the finance industry plays an ever more imperative role in securing a sustainable future for all. Climate change is one 'planetary boundary', but it's only one of many factors impacting the natural systems which provide the foundation for societal and economic well-being.

WWF focuses on achieving Global Goals for Forests, Wildlife, Freshwater, Oceans, Climate & Energy and Food. There are several drivers which determine outcomes for these Global Goals, such as regulation, technological development and financial flows. The objective of the WWF Finance Practice is "to encourage a meaningful shift in Finance... in accordance with best available science and international agreements, and [to] drive change at speed and scale."

To bring about this change, we must align financial portfolios with science and financial decision-making must be:

- Science-based
- Geared toward absolute performance benchmarks
- Outcome-oriented
- Forward-looking
- Quantitatively measured
- Time-bound

By aligning financial portfolios with these characteristics, collectively we can build the foundations for systemic change and establish a new norm for financial regulation and responsible investing, including mainstream finance. In essence, alignment of portfolios will be measured by both the finance industry's positive and negative contributions to science-based sustainability objectives.

SUSTAINABILITY FRAMEWORKS

Sustainability frameworks break down the broad concept of sustainability into measurable and progressive objectives. Two of the most widely-recognised frameworks include Planetary Boundaries and the United Nations Sustainable Development Goals. A third is the Living Planet Index, though this is not forward-looking.



SUSTAINABLE DEVELOPMENT GOALS

The 2030 Agenda for Sustainable Development was adopted at the UN Summit in September 2015. It includes 17 Sustainable Development Goals (SDGs), seen today as the preeminent sustainability reference by diverse stakeholders, including many financial institutions. These 17 goals and their 169 targets are based on a combination of scientific evidence and public policy considerations.

www.un.org/sustainabledevelopment/sustainable-development-goals/

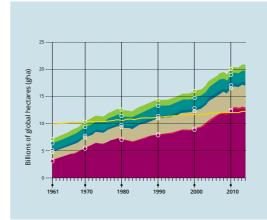


PLANETARY BOUNDARIES

Spearheaded by an international consortium of scientists, the Planetary Boundaries framework defines the carrying capacity of the nine environmental systems that sustain life on Earth. For each system, the framework identifies a measurable threshold, which represents a limit not to be transgressed, and current levels of pressure on the system. The model provides absolute targets for sustainability that could be applied as benchmarks in the public and private sectors. Planetary Boundary thinking compares current levels of consumption (or emissions) to the planet's carrying capacity and ultimate threshold. This framework supports the concept of "fair share" to distribute environmental impact and associated costs equitably among global actors. Allowed emissions per entity is one implementation of this concept.

www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html





LIVING PLANET INDEX

Though it does not set tangible sustainability targets, this WWF index tracks the state of global biodiversity since 1961 by measuring the population abundance of thousands of vertebrate species around the world. Ecological Footprint accounting tracks human impacts on the environment by quantifying changes in the global productive area required to meet competing demands for the sustenance of life, including food, fibre, timber and infrastructure.

wwf.panda.org/knowledge_hub/all_publications/living_planet_index2/





Forest productsGrazing landWorld biocapacity

International agreements relevant to WWF Goals include, for example: Agenda 2030; the Paris Climate Agreement (UNFCCC); the UN Convention on Biological Diversity; and the UN Convention to Combat Desertification.

PROPOSAL FOR CONCEPTUAL FRAMEWORK

The proposed Conceptual Framework for Aligning Finance for One Planet suggests a structured approach to help financial regulators and institutions assess both (a) environmental impacts on financial portfolios, i.e. financial risks and (b) financial portfolios' impacts on the environment*, which can be positive or negative.

The Aligning Finance for One Planet Framework brings together:

- Environmental indicators to evaluate investments' sustainability levels in absolute terms
- Existing methodologies to assess the [environmental] impacts of financial portfolios

In doing so, the Aligning Finance for One Planet Conceptual Framework identifies gaps in existing methodologies required to enable finance alignment with sustainability objectives.

* This two-fold impact is referred to as "double materiality" in the European Commission's "Guidelines on non-financial reporting: Supplement on reporting climate-related information" (2019)

SCIENCE-BASED SUSTAINABILITY TARGETS

While the level of sophistication varies, several targets, indicators and assessment tools are already available to companies, financial institutions, regulators and supervisors interested in assessing environmental impact.

Examples of science-based, forward-looking and quantitativelymeasurable sustainability targets are:

Greenhouse gas (GHG) emissions per economic activity in relation to a scenario for climate stabilisation (used by IPCC)



LEGEND

* Asset-level

Corporate-level Portfolio-level

Level of assessment

+ MSA: Mean Species Abundance of original species

++++ ISO 14097 standard will be available from 2021

NEC: Net Environmental Contribution

+++ Science-Based Targets planned for 2020

ENVIRONMENTAL ISSUES (UNIT)

CLIMATE CHANGE (kgCO2-eq)

WATER USE (km³ withdrawn)

LAND USE (km² of converted land)

AOUATIC BIODIVERSITY (MSA)*

TERRESTRIAL BIODIVERSITY (MSA)+

Doubling the global rate of improvements in energy efficiency to 2.9 per cent per year (used by SDG 7.3)



Sustainable freshwater use based on local or regional basins and projected changes in production and consumption (used by Water Risk Filter)



Conserving at least 30 per cent of coastal and marine seas by 2020 (used by SDG 14)



Mean Species Abundance (MSA), the minimum level of biodiversity required to maintain a resilient ecosystem (used by CDC Biodiversité)



Overfishing based on the carrying capacity of ecosystems (used by Fish Tracker)



TOOLS FOR ASSESSING FINANCIAL PORTFOLIOS

Numerous tools are available to assess sustainability risk to financial portfolios, as well as the relative sustainability performance of these portfolios. However, when it comes to assessing absolute sustainability **performance** in relation to science-based sustainability targets, existing tools remain very limited. A lack of fit-for-purpose targets and assessment methodologies hinders the present ability to systematically monitor and direct capital to measurably comply with sustainability frameworks.

Based on research and analysis of 20 methodologies**, most existing tools focus on risk and relative assessment to assess contributions or reductions, rather than absolute performance to physical limits or targets. Climate change appears to be the environmental topic for which the most comprehensive financial portfolio assessment methodologies currently exist. Only partial assessments are available for other goals such as forestry or freshwater.

** While WWF and Quantis have made an extensive scan for targets and tools/methodologies, this list is not exhaustive. We acknowledge that a lot of work is in progress that may not have been possible to include at the time of producing this documentation, and we welcome suggestions for additional tools and developments which can align finance with One Planet.

AT PRESENT, NO MATTER HOW **COMMITTED AN INVESTOR** OR GOVERNMENT IS TO LONG-TERM SUSTAINABLE **DEVELOPMENT, DECISION-**MAKERS ARE UNABLE TO **CONFIDENTLY ENSURE THAT** THE INVESTMENTS THEY MAKE SET THEM ON THE RIGHT **COURSE, AND AT A SUFFICIENT** PACE, TOWARDS THEIR DESIRED OUTCOME.

PERFORMANCE

Measuring potential impact on the asset/ company/portfolio

METHODOLOGIES

Shades of Climate Risk (CICERO) **∗ o** Climate Value-at-Risk (Carbon Delta) * o Climetrics (CDP, ISS) • •

Water Risk Filter (WWF) * o Water Risk Monetizer (TRUCOST) * 0 Water Risk Valuation Tool (NCFA) *

Global Forest Watch (WRI) * • •

ENCORE (NCFA) (Sector-level)

Measuring impact on the planet, in comparison with peers, at sector level

METHODOLOGIES

PERFORMANCE

Carbon Impact Analytics (Mirova, C4) * • • Energy transition alignment (TRUCOST) •• NEC** (Sycomore AM, Icare, Quantis) * • • Climetrics (CDP, ISS) • •

NEC** (Sycomore AM, Icare, Quantis) * • •

SCRIPT (Global Canopy) * ○

Global Biodiversity Score (CDC) **∗•**

Planet Tracker, Fish Tracker (Inv. Watch) • Global Biodiversity Score (CDC) * o

PERFORMANCE

Measuring impact on the

planet, with respect to its

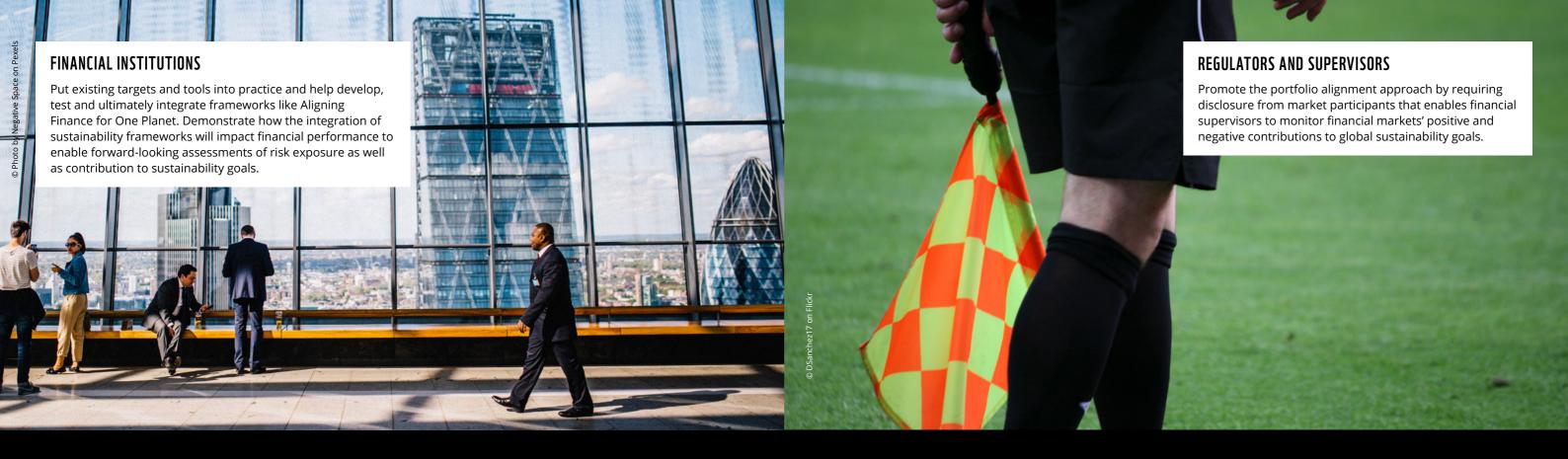
METHODOLOGIES

physical limits

PACTA (2°C Investing Initiative) * ◆ Science-Based Targets for Financial Institutions**** o

ISO 14097 reporting standard ++++ ◆

No absolute target or assessment tool identified



CALL FOR ACTION AND FURTHER DEVELOPMENT

As time is running out for many sustainability targets, action and development must go hand in hand – learning by doing. We therefore call for action from key stakeholders.

WWF developed the Aligning Finance for One Planet framework to enable financial institutions and regulators to assess portfolios' positive and negative contributions to the systemic transition that is needed to ensure sustainability. **Asset owners** with long-term liabilities have a key role in driving demand for data and tools related to portfolio alignment. **Financial regulators and supervisory agencies** are equally crucial for their ability to require and facilitate such developments. **Data and service providers** have an instrumental leveraging capacity in providing relevant information that measures companies' contributions to sustainability targets. While there is a clear need for further development of the Aligning Finance for One Planet framework, there is just as clear a need for immediate action to align financial portfolios with science-based sustainability goals.



