



**Natural
heritage**

**Interreg
Euro-MED**



**Co-funded by
the European Union**

Legal instruments and policies for natural heritage conservation in the Mediterranean coastal zone

Wednesday, 22nd May 2025
WEBINAR Online

The Policy Process some reflections about Global, OECD and EU Economic & Institutional Perspectives

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Past-President OECD-Wpbwe (biodiversity)
Italian Ministry of Environment - TA Sogesid, AEIF chief economist

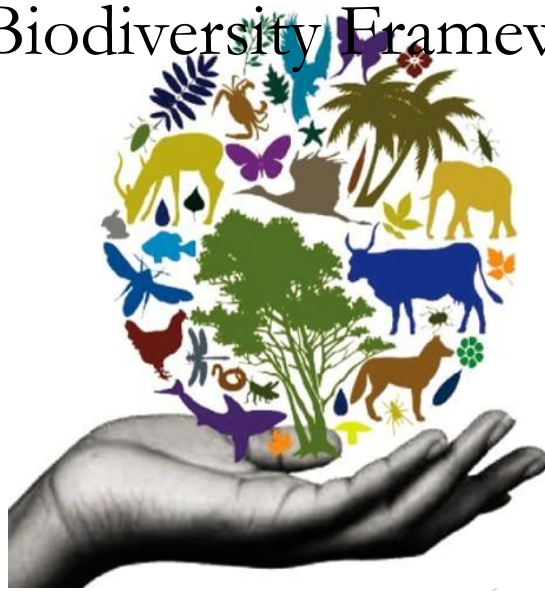
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Outline:

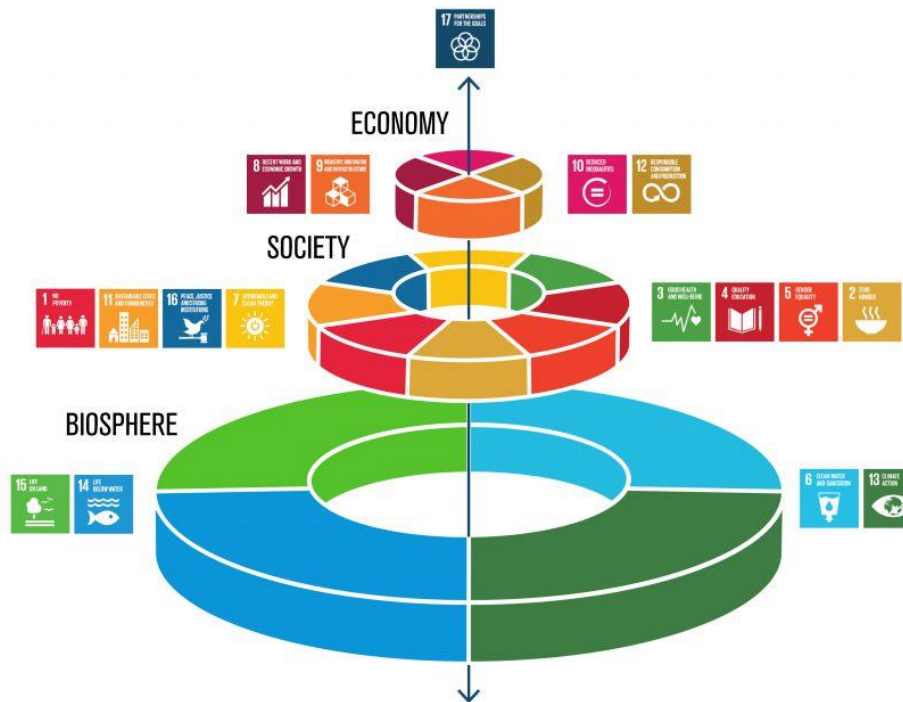
We have strong arguments:

- ▶ Natural Heritage/Capital
- ▶ Economics & biodiversity, Dasgupta review
- ▶ Conventions & Scientific Panels
- ▶ EU framework for sustainable finance
- ▶ 2010 Aichi Targets & 2022 Kunming-Montréal

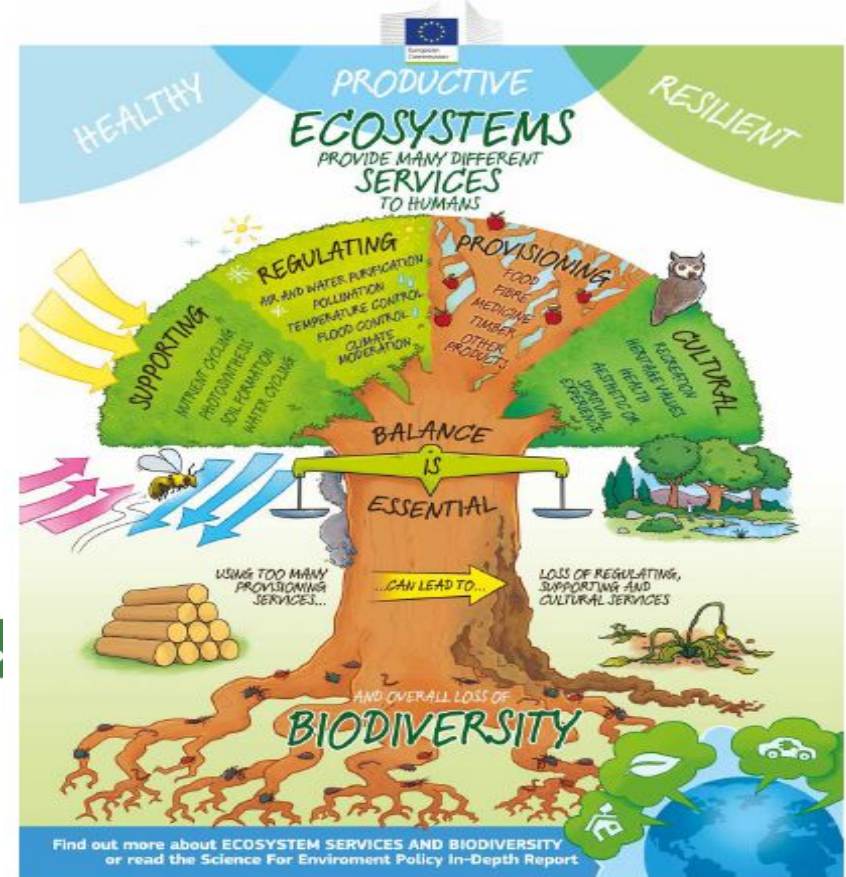
GBF Global Biodiversity Framework



NATURAL HERITAGE/CAPITAL CRUCIAL FOR SUSTAINABILITY



Stockholm Resilience
Center,
SDG reclassification
(by Rocstroem-Sukhdev)



E.C., Science for
Environment Policy
(2017) *Taking stock:
progress in natural
capital accounting.*

The 4 forms of capital (Herman Daly)

- ▶ **Manufactured capital:** plant and equipment that contribute to production (also called physical c., built c., industrial c., financial c., care for nuances in context!)
- ▶ **Human capital:** knowledge and experience that contributes to production (can be split into knowledge c. and human c., or intellectual c.)
- ▶ **Social capital:** institutions and relationships (formal and informal) that contribute to production - can be considered as institutions that are distinct from capital
- ▶ **Natural capital:** ecosystem states or processes, biological stocks, physical natural resources that contribute to economic provision/production

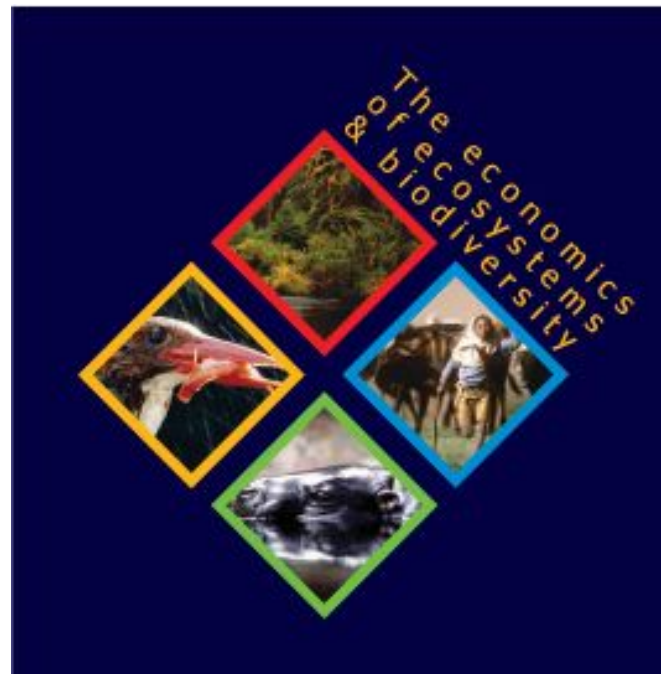
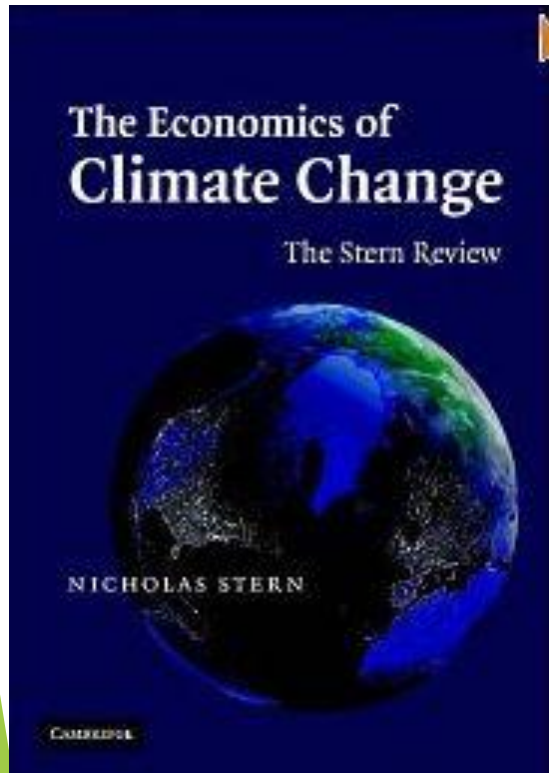
The 4 forms of capital (Herman Daly)

- ▶ **Manufactured capital**
 - ▶ **Human capital**
 - ▶ **Social capital**
 - ▶ **Natural capital:** the disregarded capital, the forgotten capital, rarely considered in company accounts and in government accounts
-
- ▶ Herman Daly (reminder):
 - ▶ U. Vermont - Senior economist at World Bank.
 - ▶ Daly & Cobb's Index of Sustainable Economic Welfare (or GPI, Genuine Progress Indicator).
 - ▶ President of ISEE (International Society of Ecological Economists).

The 4 forms of capital (Herman Daly)

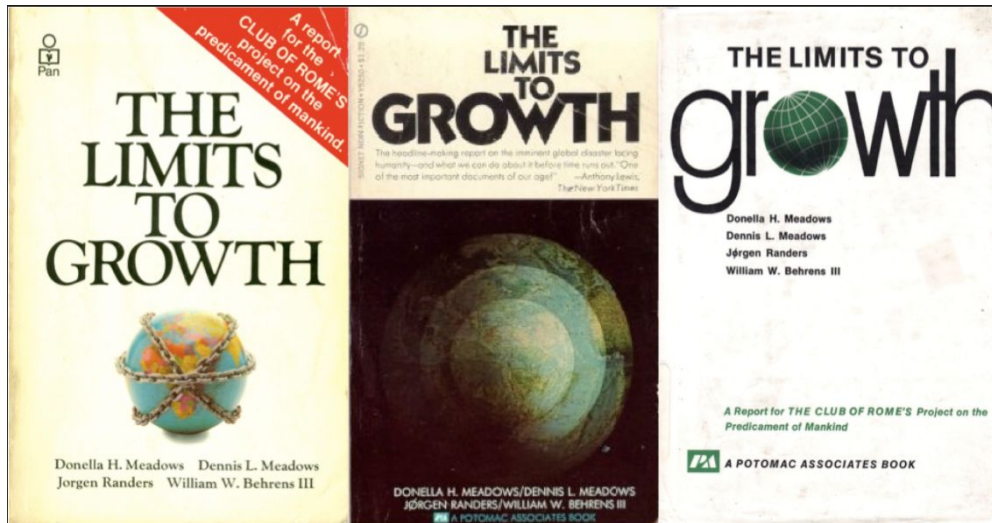
- ▶ Natural Capital vs Natural Heritage [EN]
- ▶ Capital Naturel vs Patrimoine Naturel [FR-IT]
- ▶ Not everything has a price; or can have a price; or should have a price
- ▶ But it must have a value; it must enter into private and public decision-making
- ▶ And Capital might be useful for communicating with CEOs and political leaders

Sustainable Development Economics (Green Growth, Green Economy, Resource Efficiency, Circular Economy, etc.)

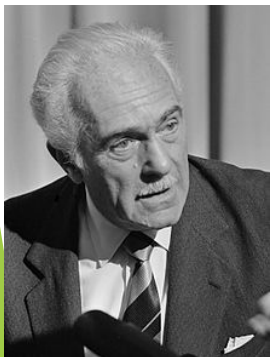


- Nicholas Stern (2006), "The Economics of Climate Change - The Stern Review ", HM Treasury, London
- Pavan Sukhdev ed. (2010 e 2011), "TEEB - The Economics of Ecosystems and Biodiversity", vol.1 "TEEB: Ecological and Economic Foundations", vol.2 "TEEB in National and International Policy Making", Earthscan, London
- E. Von Weizsaecker et al. (2009), "Factor 5 - Transforming the Global Economy through 80% Improvements in Resource Productivity", Earthscan, London (original: VonWeizsaecker-Lovins-Lovins (1999). Factor 4: Doubling Wealth Halving Resources.

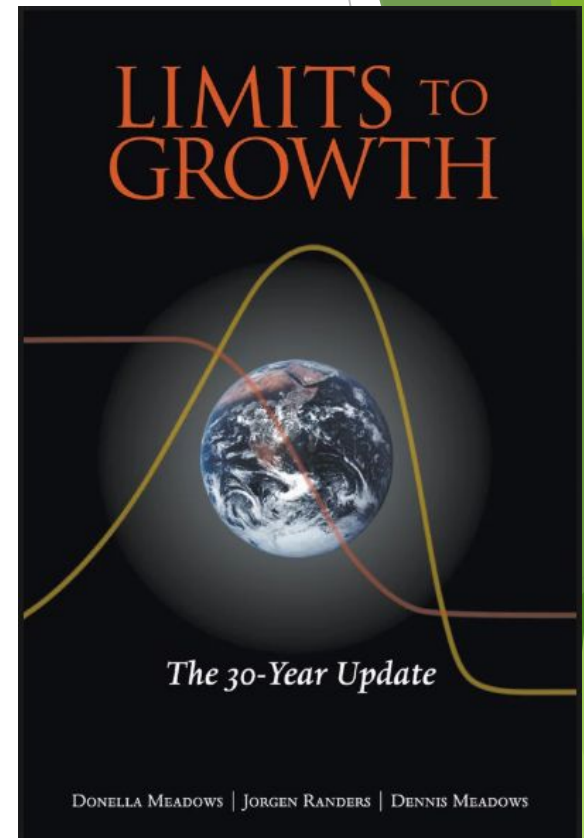
Club of Rome (1968): the MIT study 1972 - Oct. 2018: 50 years celebration in Rome



1968

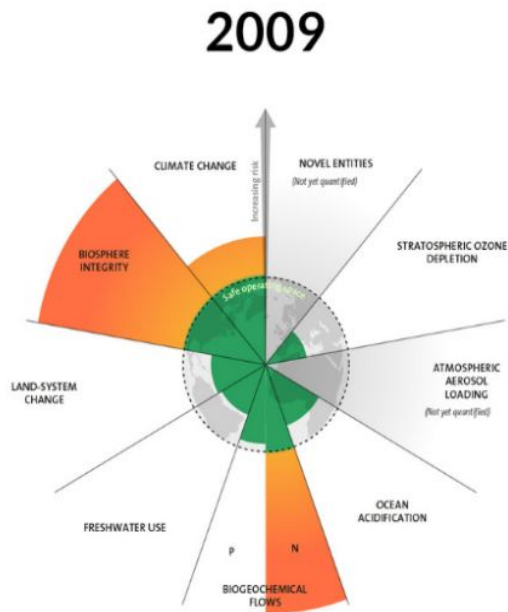


“It is not impossible to foster a human revolution capable of changing our present course”.
Aurelio Peccei.

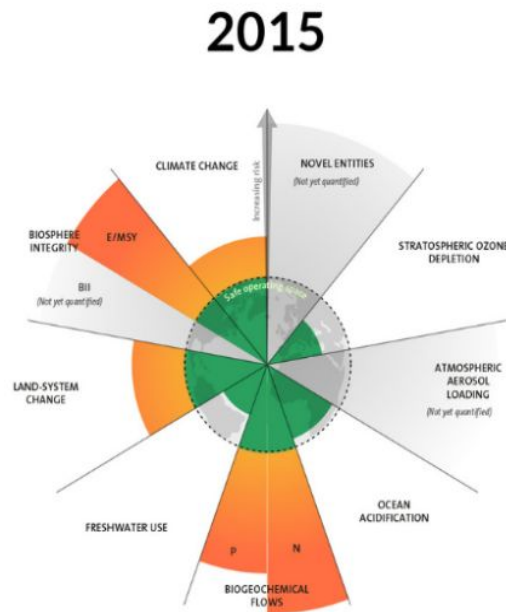


2018

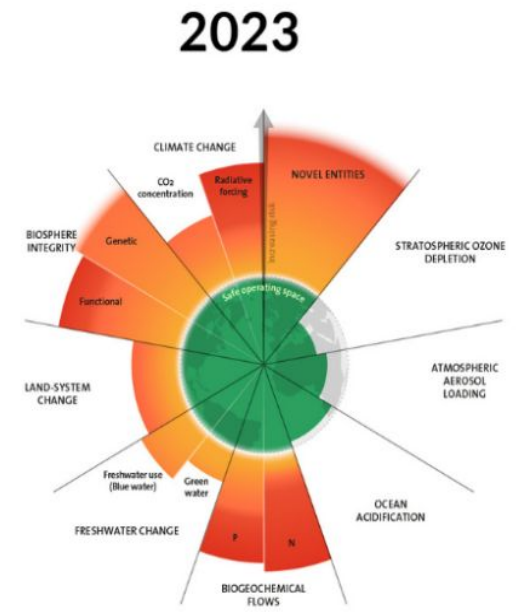
6 of the 9 identified relevant ecosystems appear now as having crossed the planetary boundaries: a) Climate Change; b) Biosphere Integrity (i.e. biodiversity); c) Land-System Change; d) Freshwater; e) Biogeochemical Flows (i.e. nitrogen and phosphorous); f) Novel entities.



7 boundaries assessed,
3 crossed



7 boundaries assessed,
4 crossed



9 boundaries assessed,
6 crossed

- ▶ The last contribution to the work on natural capital, ecosystems services, biodiversity and economics, in the frame of sustainable development:

The Economics of Biodiversity:

The Dasgupta Review (2021)

<https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review>

- ▶ Requested by the UK Government G7 Presidency 2021, also in view of the UN-CBD COP of Kunming & Montréal

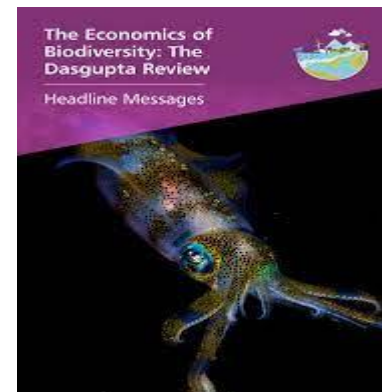
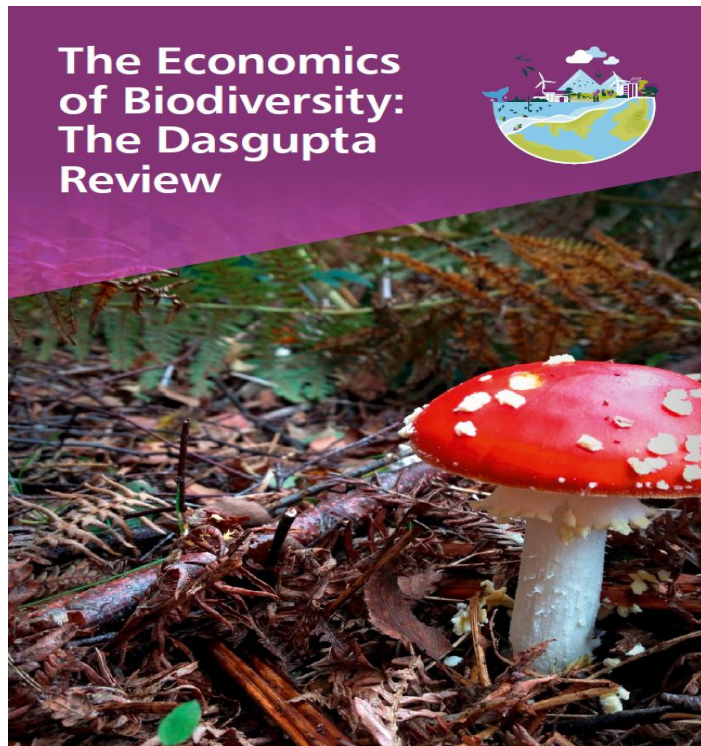


The Economics of Biodiversity:

The Dasgupta Review Headline Messages

1. **Our economies, livelihoods and well-being all depend on our most precious asset: Nature.** (We are **part of Nature**, not separate from it. ...)
2. **We have collectively failed to engage with Nature sustainably, to the extent that our demands far exceed its capacity to supply us with the goods and services we all rely on.**
3. **Our unsustainable engagement with Nature is endangering the prosperity of current and future generations.**
4. **At the heart of the problem lies deep-rooted, widespread institutional failure.** (A conservative estimate of the total cost globally of **subsidies that damage Nature** is around 4 to 6 trillion US\$ per year. And we lack the institutional arrangements needed to protect global public goods, such as the ocean or the world's rainforests. ...)
5. **We need to change how we think, act and measure success.**
6. **Three broad transitions needed:**
 - i) **Ensure that our demands on Nature do not exceed its supply, and that we increase Nature's supply relative to its current level.**
 - ii) **Change our measures of economic success to guide us on a more sustainable path.** (integrate natural capital into state and company accounting ...)
 - iii) **Transform our institutions and systems** – in particular our **finance** and education systems – to enable these changes and sustain them for future generations.

The Economics of Biodiversity: the Dasgupta Report for the G7 2021



Aichi Target 3

Strategic goal A. Address the underlying causes of biodiversity loss through mainstreaming

Target 1: By 2020, ... People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2: By 2020, ... biodiversity values are integrated into national and local development and poverty reduction strategies and planning processes and national accounts ...

Target 3: By 2020, ... incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, .

Target 4: By 2020, ... Governments, business and stakeholders have plans for sustainable production and consumption and keep the impacts resource use within safe ecological limits.

NB Bad news! Aichi Target 3 not achieved by 2020.

Postponed and transformed in Kunming Target 18 by 2030
(target postponed but better than abandoned ... and quantified)

The Kunming-Montreal Global Biodiversity Framework has
23 action-oriented Global Targets for urgent action over the decade **to 2030.**

Area 3. Tools and solutions for implementation and mainstreaming

TARGET 18

Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, **harmful for biodiversity**, in a proportionate, just, fair, effective and equitable way, while substantially and progressively **reducing them by at least \$500 billion per year by 2030**, starting with the most harmful incentives, and **scale up positive incentives** for the conservation and sustainable use of biodiversity

The Kunming-Montreal Global Biodiversity Framework has 4 long-term Global Goals for 2050 for biodiversity. **Summing up:**

GOAL A Ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; Human induced extinction of species is halted, and, the extinction rate and risk reduced tenfold - genetic diversity within species

GOAL B Sustainably use and management of biodiversity -sustainable development for the benefit of present and future generations

GOAL C Benefits from the utilization of genetic resources shared fairly and equitably - traditional knowledge protected

GOAL D Means of implementation - closing the biodiversity finance gap of \$700 billion per year and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework

3 Scientific International Panels

IPCC (Intergovernmental Panel on Climate Change)

[at WMO Genève]

UN-FCCC [Bonn]

IPBES (Intergovernmental science-policy Platform for Biodiversity & Ecosystems Services) [Bonn]

UN-CBD [Montréal]

IRP (International Resources Panel) [at UNEP Paris]

No International Convention [the Global Convention on Plastics in preparation at UNEP Nairobi a possible option?]

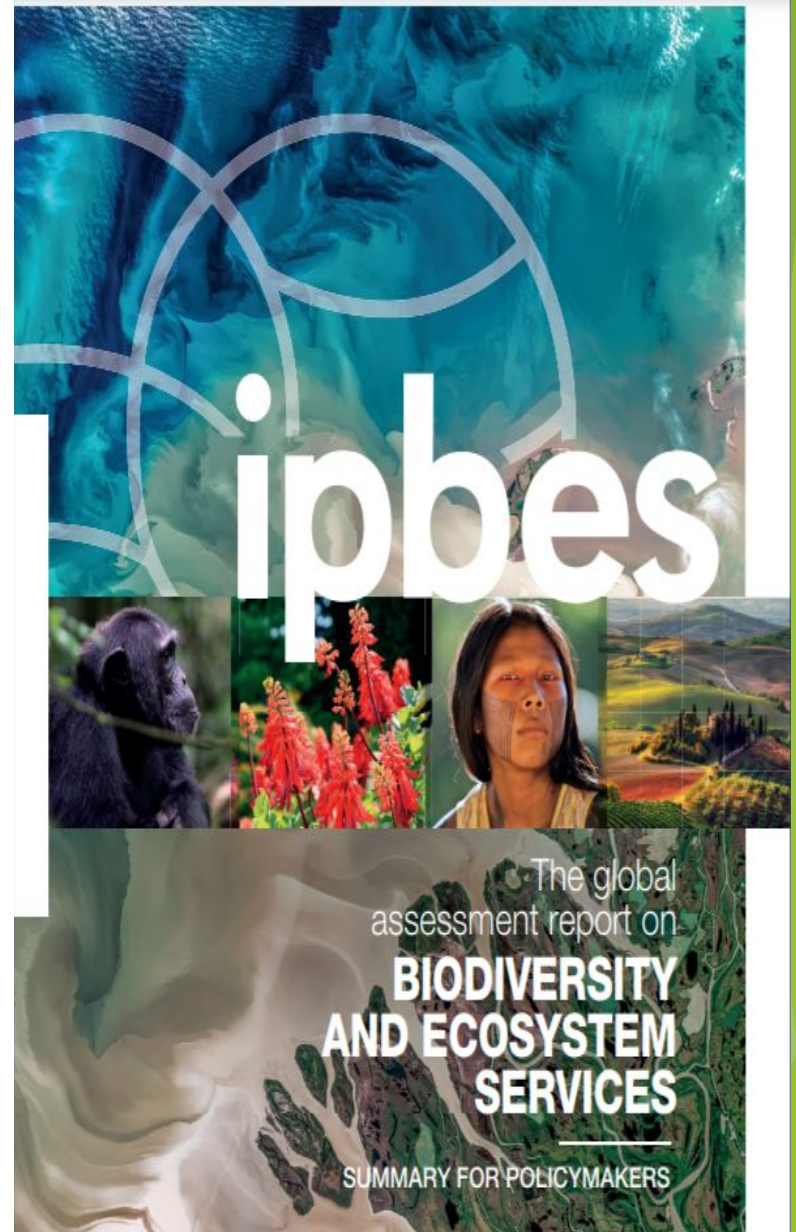


ECOSYSTEMS AND HUMAN WELL-BEING

Synthesis



MILLENNIUM ECOSYSTEM ASSESSMENT



Perspective scenario analysis
by
Plan Bleu for environment &
development of
Mediterranean
Think Tank
supporting MAP
(Mediterranean Action Plan)
of the Barcelona Convention
of UNEP

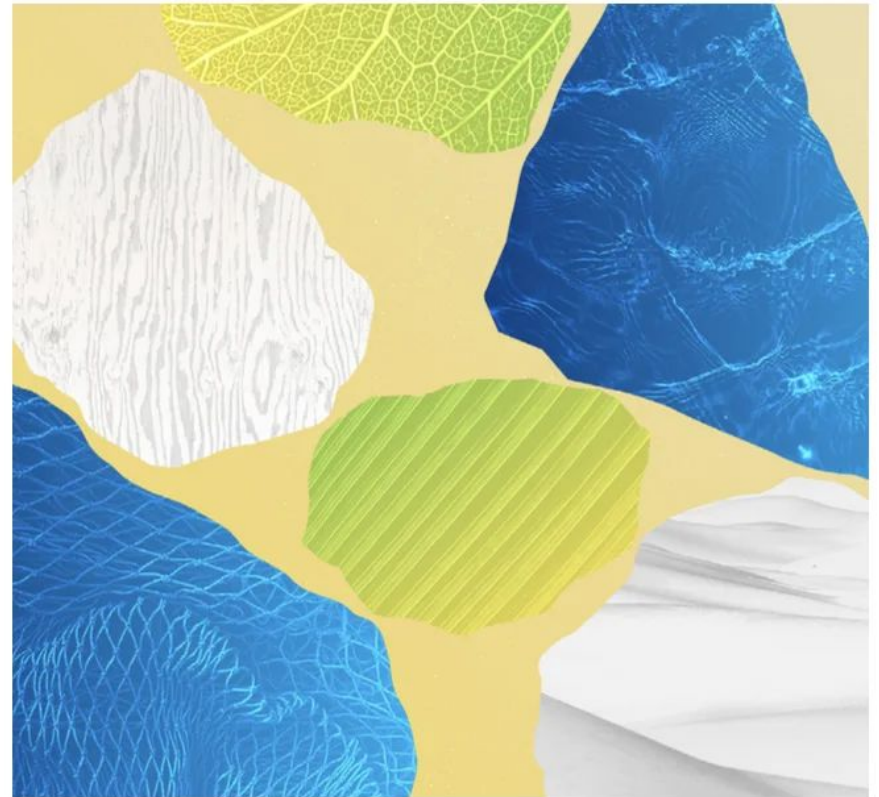
Full report
MED-2050-REPORT-EN.pdf

Resumé
RESUME-MED-2050-EN.pdf

MED 2050

THE MEDITERRANEAN BY 2050

A foresight by Plan Bleu





Scenario 1: Inertia,
marginalisation of the
Mediterranean, and pragmatism

Scenario 2: Colliding crises and
forced adaptations

Scenario 3: Growth at all costs in a
fragmented Mediterranean



Scenario 4: Euro-Mediterranean
partnership for a blue-green transition



Scenario 5: Another sustainable
development model specific to
the Mediterranean

Scenario 6: The
Mediterranean sea:
global commons



Mediterranean Strategy for Sustainable Development (MSSD)

The updated MSSD for 2026-2035 is in preparation at Plan Bleu

The [Mediterranean Strategy for Sustainable Development \(MSSD\) 2016-2025](#) provides an integrative policy framework for all stakeholders, including MAP partners, to translate the [2030 Agenda for Sustainable Development](#) and the [Sustainable Development Goals \(SDGs\)](#) at the regional, sub-regional, national and local levels in the Mediterranean region.

As a strategic document, the MSSD serves to:

- adapt international commitments to regional conditions;
- guide national strategies and stimulate regional cooperation in the achievement of sustainable development objectives.

EU FRAMEWORK FOR GREEN and SUSTAINABLE FINANCE

GREEN and SUSTAINABLE FINANCE (1)

- ▶ Governments are trying to green since the 90's
- ▶ Firms are trying to green since the 2000's
- ▶ Finance are trying to green since the 2010's

- ▶ What do we call Finance:
 - ▶ - Banks
 - ▶ - Insurances
 - ▶ - Institutional Investors
 - ▶ - Regulators & Authorities (Central Banks, Stock Exchange Authorities, Pension Funds Auth., Antitrust, ...)
 - ▶ - ...

GREEN and SUSTAINABLE FINANCE (2)

- ▶ Double aim:
 - ▶ - increase investment for SD and Environment (climate, biodiversity/nature, pollution, ...)
 - ▶ - green the financial system, the framework conditions
- ▶ Double materiality principle:
 - ▶ - Impact of firms on climate change and biodiversity/nat.cap.
 - ▶ - Impact of climate change and biodiversity/nat.cap. on firms

SUSTAINABLE FINANCE (SF) in EU (1)

- ▶ European Strategy on Sustainable Finance 2018 Jan.
(prepared by experts from the financial community)
- ▶ European Commission Action Plan on SF 2018 Mar.
- ▶ Four priorities:
 - ▶ 1. **EU taxonomy** for sustainable investments (technical screening criteria for environmentally sustainable economic activities);
 - ▶ 2. **EU Green Bond Standard** (firms; banks; governments);
 - ▶ 3. **Climate benchmarks** (minimum standards for the methodology of "EU Climate Transition" and "EU Paris-aligned" benchmarks, and improving the transparency of benchmarks on ESG factors and Paris alignment);
 - ▶ 4. (Financial Reporting Directive 2013: P&L-CapStatement-Fin.Statement)
Reforming NFRD (**Non-Financial Reporting Directive**) 2014 (metrics allowing improving disclosure on e.g. climate-related and SDGs information - obl. vs vol).
CSRD Corporate Sustainability Reporting Directive 2022. Minimum contents.
- ▶ Omnibus package 2025 (simplify CSRD-CSDDD-Taxonomy²⁴CBAM) at EFRAG.

SUSTAINABLE FINANCE (SF) in EU (2)

- ▶ Work led by the European Commission (DG Fisma with and other relevant DGs Env, Tren, Empl, ...)
- ▶ Technically supported by TEG (Technical Experts Group, formed of experts of the financial community);
- ▶ TEG recently transformed in PSF (Platform on Sustainable Finance), widened to experts from industries and civil society)
- ▶ and MSEG (Member States Experts Group, each country: 1 from Ministry of Finance, 1 from Ministry of Environment)
- ▶ Wisdoms of the European Commission:
 - ▶ - a strategy prepared with the financial community and IGOs with clear definition of issues, state of the art, directions, ambition, priorities
 - ▶ - an action plan rapidly ready, and an accelerated agenda
 - ▶ - start with one pillar (Environment), especially climate, then enlarge (can't do everything at the same time)
 - ▶ - leadership by DG for finance and TEG by financial community
 - ▶ - proposal at UN of an IPSF (International PSF): financial markets less segmented, China taxonomy, Indonesia taxonomy, etc.

EU Taxonomy for Sustainable Investments

- ▶ How do we choose the criteria for defining an investment as “green” or “sustainable”?
- ▶ 17 SDGs
- ▶ 3+1 pillars of Sustainable Development:
 - ▶ Economic-Social-Environmental + Governance
- ▶ Issue of “green” and “greener”
- ▶ Green Sectors: - water - waste – air – renewables – energy efficiency - green agriculture (e.g. organic) - sustainable transport - green buildings
- ▶ Natural Gas vs Coal and Oil – Nuclear – Chemicals – Transport - ...
- ▶ Where do we start from:
- ▶ NACE sectors (17 Categories) - ATECO (21 Sections)²⁶
- ▶ (Statistical classification of economic sectors and subsectors)

EU Taxonomy

https://ec.europa.eu/info/publications/sustainable-finance-teg-taxonomy_en



Summary Report

- Key concepts
- How investors and firms may apply it



Technical Annex

- Criteria in detail (and motivations)
- Mitigation of CC + Adaptation to CC + No significant harm to other Env. Objectives



Taxonomy spreadsheet

- Summary of criteria
- Conversion tables among economic classifications

EU Taxonomy on Sustainable Investments - 6 environmental objectives

AT A GLANCE

The EU Taxonomy is a tool to help investors, companies, issuers and project promoters navigate the transition to a low-carbon, resilient and resource-efficient economy.

The Taxonomy sets performance thresholds (referred to as 'technical screening criteria') for economic activities which:

- make a substantive contribution to one of six environmental objectives (Figure 1);
- do no significant harm (DNSH) to the other five, where relevant;
- meet minimum safeguards (e.g., OECD Guidelines on Multinational Enterprises and the UN Guiding Principles on Business and Human Rights).

The performance thresholds will help companies, project promoters and issuers access green financing to improve their environmental performance, as well as helping to identify which activities are already environmentally friendly. In doing so, it will help to grow low-carbon sectors and decarbonise high-carbon ones.

The EU Taxonomy is one of the most significant developments in sustainable finance and will have wide ranging implications for investors and issuers working in the EU and beyond.



EU Taxonomy on Sustainable Investments – 3 technical screening criteria



Climate Finance at UN-FCCC: 100 B\$ by 2020

OECD the most advanced measurement (target finally reached in 2022)

Cop29 Baku 2024: 300 B\$ by 2035; and 1.300 B\$

(“mobilize” - “take the lead” - public/private - DCs/TCs/LDCs - ...)

Who will measure?

Biodiversity Finance at UN-CBD:

Cop16 Cali 2024 (Rome queue feb.25): 200 B\$ by 2030

(interim 20 B\$ by 2025)

again: “mobilize” - “take the lead” - public/private - DCs/TCs/LDCs - ...)

Kunming-M. GBF 2022: EHS: -500 B\$ within 2029.

Who will measure?

OECD BD Finance

<https://www.oecd.org/en/topics/policy-issues/finance-and-investment-for-environmental-goals.html>

Finance for biodiversity - across all sources, public, private, domestic and international - needs to be scaled up and aligned with biodiversity objectives, including those under the UN Kunming-Montreal Global Biodiversity Framework. Target 19, for example, calls for finance flows to biodiversity to increase to 200 B\$ per year by 2030.

In 2020, the OECD estimated global biodiversity finance to be 79-92 B\$ a year. The OECD supports governments by providing evidence-based analysis on scaling up biodiversity finance across all sources.

This includes:

- biodiversity tagging and green budgeting,
- tracking economic instruments and the finance they mobilise, and
- scaling up positive incentives to encourage the private sector to internalise externalities.

The OECD work also involves:

- reforming incentives harmful to biodiversity,
- tracking biodiversity-related development finance, and
- helping central banks, financial supervisors and policy makers assess biodiversity- and broader nature-related financial risks.

Ahead of the Global Biodiversity Stocktake in 2026, the OECD will provide an updated analysis on progress towards the 200 B\$ biodiversity finance target.

OECD ongoing work

Finance and investment for environmental goals

Finance and investment for climate goals

Finance and investment for biodiversity

Finance and investment for water

Finance and investment for greening SMEs

<https://www.oecd.org/en/topics/policy-issues/finance-and-investment-for-environmental-goals.html>

CHALLENGES

Looking for funds available ... (1)

Natural heritage experts know better and may help to complete ...

EU Regional Policy (Cohesion Fund + Structural Funds)

EU CAP and Fishery

EU Green Deal Next Generation - NRRP (National Recovery & Resilience Plans)

Ex. PNRR Italy: Mission: Green revolution and ecological transition

Component: Land and water protection

Program: Marine habitats seabeds more protected thanks also to the use of new technologies - 400 M€ to be spent until 2026 (0,4 out of 194,4 B€)

EU Nature Restoration Regulation (supporting the restoration of ecosystems for people, the climate and the planet)

EU research: Horizon 2020 - Horizon Europe . Life - ...

CHALLENGES Looking for funds available ... (2)

Natural heritage experts know better and may help to complete ...

Funds from Ministries - Regions/Provinces/Lander/Dpmts/ ... - Cities

Funds from Natural Parks - Regional Parks - City Parks - Natura 2000

Funds from:

Environmental NGOs - Local Development NGOs - Local Authorities

And at the same time:

- Get in contact with experts who participate in the preparation of EU directives/regulations/laws/strategies, budgets/plans/programs, even if one would prefer to deal with natural heritage ...

- Regrettably there will be a competition between financing Natural Heritage and other Nature components

- But also between Nature and other Environmental elements

- And between Environment and Eco/Soc targets

CHALLENGES 3

Demonstrate the good scientific ecological arguments in favour of natural heritage, natural capital, nature, ecosystems services, ..., *protection and enrichment*

But also all cases in which there is an avoided cost

And an economic benefit

We have to integrate externalities (external environmental costs) in private and public accounting and reporting.
And if there is no clear cost/price estimate, we must have integrated ecological values/estimates in private and public decision-making processes

RESERVE SLIDES

Some considerations on public and private reporting (accounting)

Issues from a policy-maker (-preparer) perspective

1.EVERY DAY

- Companies/businesses/firms are practicing resource efficiency and circular economy every day across their value chains: it saves materials and energy, it reduces costs, it maximises profits.
- Profits as primary and legitimate priority of businesses.
- Why the cumulative impact of individual behaviours does not correspond to a social optimum? Public intervention may be justified.

Issues from a policy-maker (-preparer) perspective

2. EFFORT

- Many enterprises « making the effort » of SD, Climate and rarely Biodiversity Reporting (Non-Financial Reporting, Environmental, Circular Economy and Resource Efficiency, Sustainability, CSR, ESG, etc.) would appreciate that everybody « makes the effort ».
- WBCSD CEO at OECD making the point.
- Risk of companies coming back on their commitment (disclosure and industrial secret).
- There is an issue of fairness - competition - transparency.
- There is an issue of comparability thru time, thru firms, thru sectors, thru countries, ...

Issues from a policy-maker (-preparer) perspective

□ 3. BEST PRACTICES (linked to effort issue)

- Strength, exemplarity, usefulness.

- We need to recognize and valorize the 5-10% of best practices showing the way.

- But what about the remaining 95-90%...

- EU-Ecolabel had the pragmatic principle to give the label-medal to the best market 20%.

- French State Secretary Poirson indicated 25% for G7 Coalitions.

- We need to bring with us all the economy.

Issues from a policy-maker (-preparer) perspective

4a. EVOLUTION OF REPORTING

- Traditional reporting of businesses today is not the same as 30, 50, 100 years ago.
- Profit&Losses, Capital Statement, Financial Statement have evolved thru time. Because of:
 - - business needs and research findings;
 - - transparency and comparability needs (from public and investors);
 - - data availability improvements (IT).

Issues from a policy-maker (-preparer) perspective

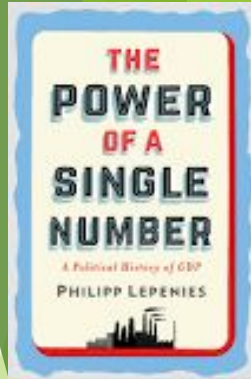
4b. EVOLUTION OF REPORTING

- After 30 years of reflection at OECD and elsewhere, the time seems ripe to develop a fourth sheet for SD/CE/RE, Climate and Natural Capital.
- Nobody will oppose minimum contents of *traditional financial reporting*. They are adapted to size, conditions, knowledge, ..., but we have minimum contents.
- Why should we oppose minimum contents for *non-financial reporting*, starting with circular economy and resource efficiency, climate, biodiversity and natural capital.
- But we now have apparently new opposition (NFRD-CSR-D-OmnibusPackage)

Issues from a policy-maker (-preparer) perspective

5. EVOLUTION OF REPORTING - PUBLIC

- Countries/States/Governments as well do not calculate their budgets and accounts as 30-50-100 years ago.
- GDP didn't even exist 100 years ago.
- The 1929 crisis, Kuznets and the American Congress.
- The 1944 decision on the standard for GDP (Meade).
- State accounting and Environmental accounting at UN Statistics.
- Evolution thru time, again because of:
 - - Governments needs and research findings;
 - - transparency and comparability needs (from taxpayers and voters);
 - - data availability improvements (IT).
 - - improvements, fine-tuning, adapting to new needs.



BHS Biodiversity Harmful Subsidies

Key points 1

- 1) Removing BHS should be seen in the frame of EHS
- 2) *EHS should be seen in the frame of EFR*
- 3) Removing EHS-FFS-BHS, would need much less EFS
- 4) *National catalogues/inventories by Fra/Ger/Ita/Fin/Swe/Swi)*
Fra-Swi-GerNat BHS (tend to EHS)
GerEnv-Ita-Fin-Swe EHS
[research project on EHS by Vva for EC-Env
research project on EFR by Ieep for EC-Env]
- 5) OECD work: Pine database, FFS-Fishery-Agr.Subsidies inventories and companions, BHS, Peer Reviews, Greening Budgets, ...
 - 6) *Maybe G7-G20 work*
- 7) Certainly BHS in UN-CBD framework (Aichi Tgt 3, GBF Tgt 18)
 - 8) *Maybe FFS in UN-FCCC framework (ec. instr. rather disregarded)*

BHS Biodiversity Harmful Subsidies

Key points 2

9) BHS often are FFS and viceversa (possible mutual reinforcement)

10) *Less EHS-FFS-BHS means less need of EFS-RENFS-BFS*

11) link to science and link to global goals (SDGs, Ipcc & Fccc, Ipbes & Cbd, Irp)

12) *BHS alone (or EHS or FFS) alone (single measure),
or in the frame of EFR (Ecological/ Environmental/ Green Fiscal/ Tax Reform), or in the
frame of GTR (General Tax Reform)*

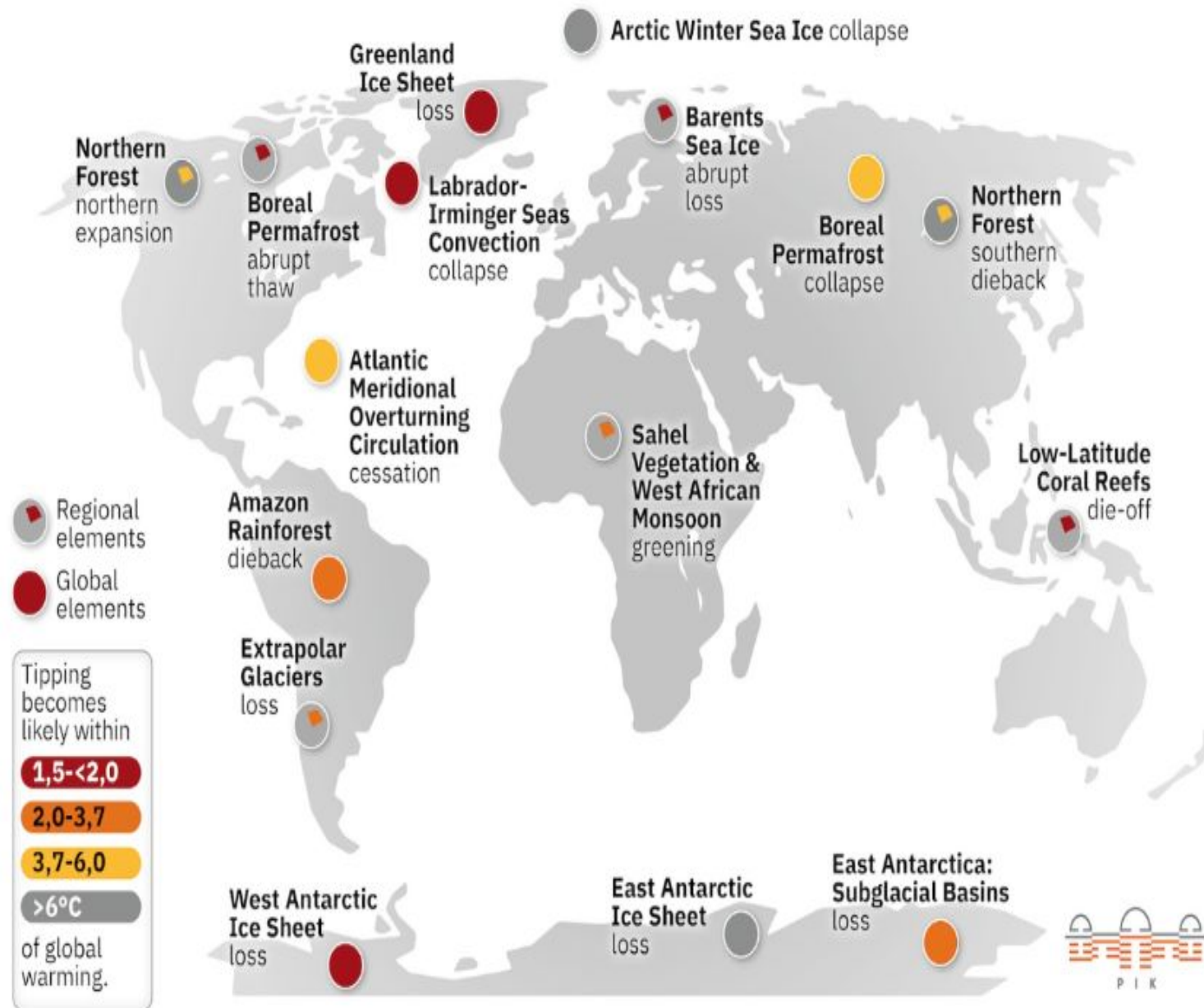
13) we can (we must) help the poor and the vulnerable citizens-consumers, maybe
also some vulnerable industrial & agricultural sectors, but not by under-pricing the
environment, we have direct instruments

14) *clear compensations: abate distortionary taxes, abolishing EHS-FFS-BHS restore a fair
market, e.g. abate labour taxes*

15) transitional nature of compensations

16) *EU taxation unanimity rule reform; in the meanwhile we can work on EU enhanced
cooperation, “coalition of the willing” approach or “like-minded countries” approach (Dutch EU
Presidency attempts thru the years)*

Most Tipping Points provoked by climate change impact biodiversity
Can we identify something specific related to Natural Heritage?



PIK: Potsdam
Institut für Klima
(chaired by
Rockstroem and
Edenhofer) in
Berlin