

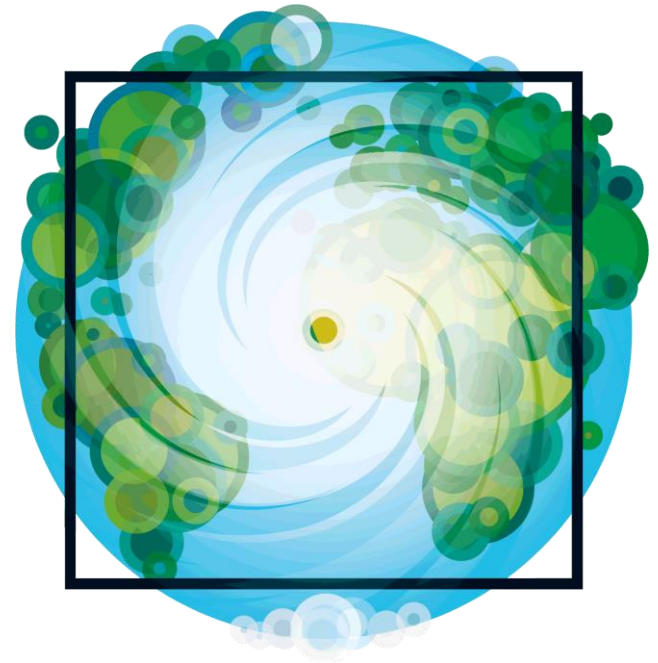
## **Disclosure and what's next – “blended” initiatives and a precautionary approach to financialization of biodiversity**

**Christoph Frischer**  
Environment Agency Austria

**Green Finance Conference**  
**16th-17th May, Luxemburg**

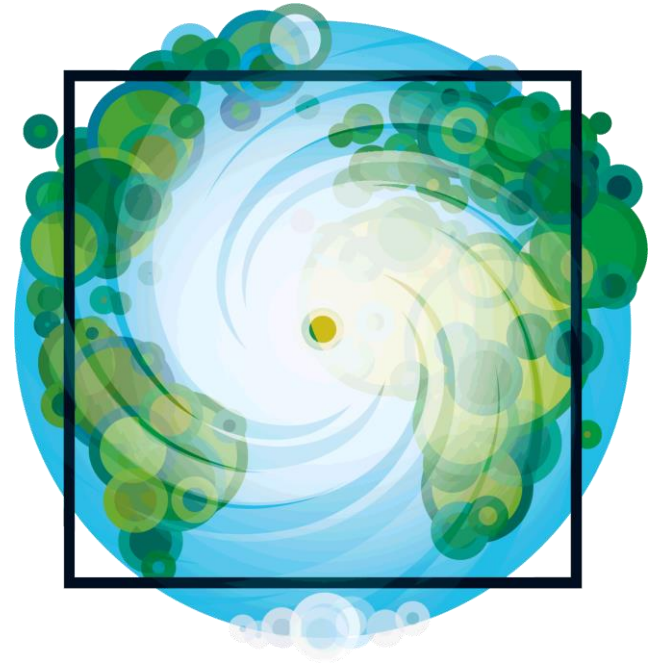
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- Introduction
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- The Austrian Green Finance Alliance
- Financing Biodiversity through nature markets?



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## Introduction



# WHY ALL THE FUZZ?

- Extinction rates: 100-times higher and rising; 25 % of surveyed species under threat of extinction
- Until 2100: 500,000 - 1,000,000 species will have gone extinct
- Living Planet Index 1970-2018: minus 69 %
- Extent of natural ecosystems: minus 47 %
- Total mass of wild mammals: minus 82 %
- 96 % of total mass of vertebrates on land is humans and livestock
- 82 % of fish stocks overfished

*[IPBES \(2019\)  
Global assessment  
report on  
Biodiversity and  
Ecosystem  
Services](#)*

*[WWF Living Planet  
Report 2022](#)*

*[Palomares et al.  
2020](#)*

# WHY ALL THE FUZZ?

[Smith et al \(2022\). Pollinator Deficits, Food Consumption, and Consequences for Human Health: A Modeling Study. Environmental Health Perspectives](#)

[Dryden & Duncan \(2023\). Climate Disruption Caused by a Decline in Marine Biodiversity and Pollution. International Journal of Environment and Climate Change](#)

[Baumbach et al \(2023\). High economic costs of reduced carbon sinks and declining biome stability in Central American forests. Nature Communications](#)

# POTENTIAL SOLUTIONS

[Girardin et al \(2021\). Nature-based solutions can help cool the planet – if we act now. Nature Comment](#)

[Schmitz et al \(2023\). Trophic rewilding can expand natural climate solutions. Nature Climate Change](#)

[Eger et al \(2023\). The value of ecosystem services in global marine kelp forests. Nature Communications](#)

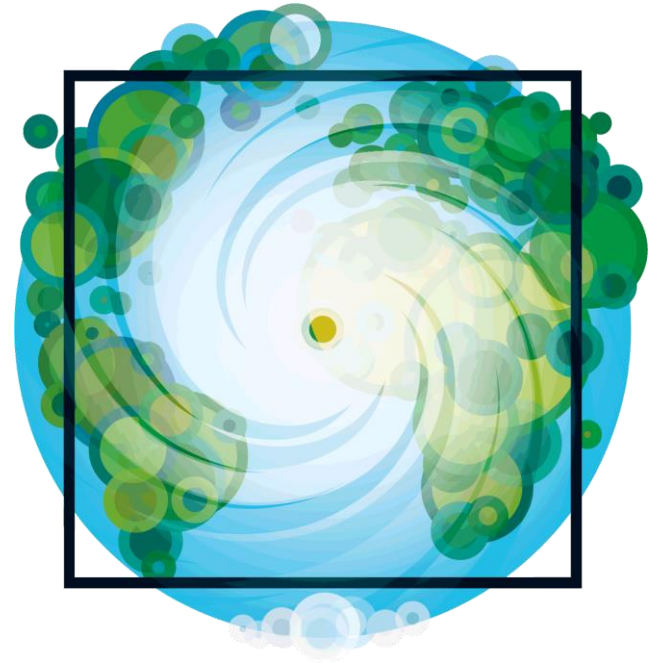
## ...OR ARE THEY?

[Eger et al \(2023\). The value of ecosystem services in global marine kelp forests. Nature Communications](#)

[Gallagher et al \(2022\). Seaweed ecosystems may not mitigate CO<sub>2</sub> emissions. ICES Journal of Marine Science](#)

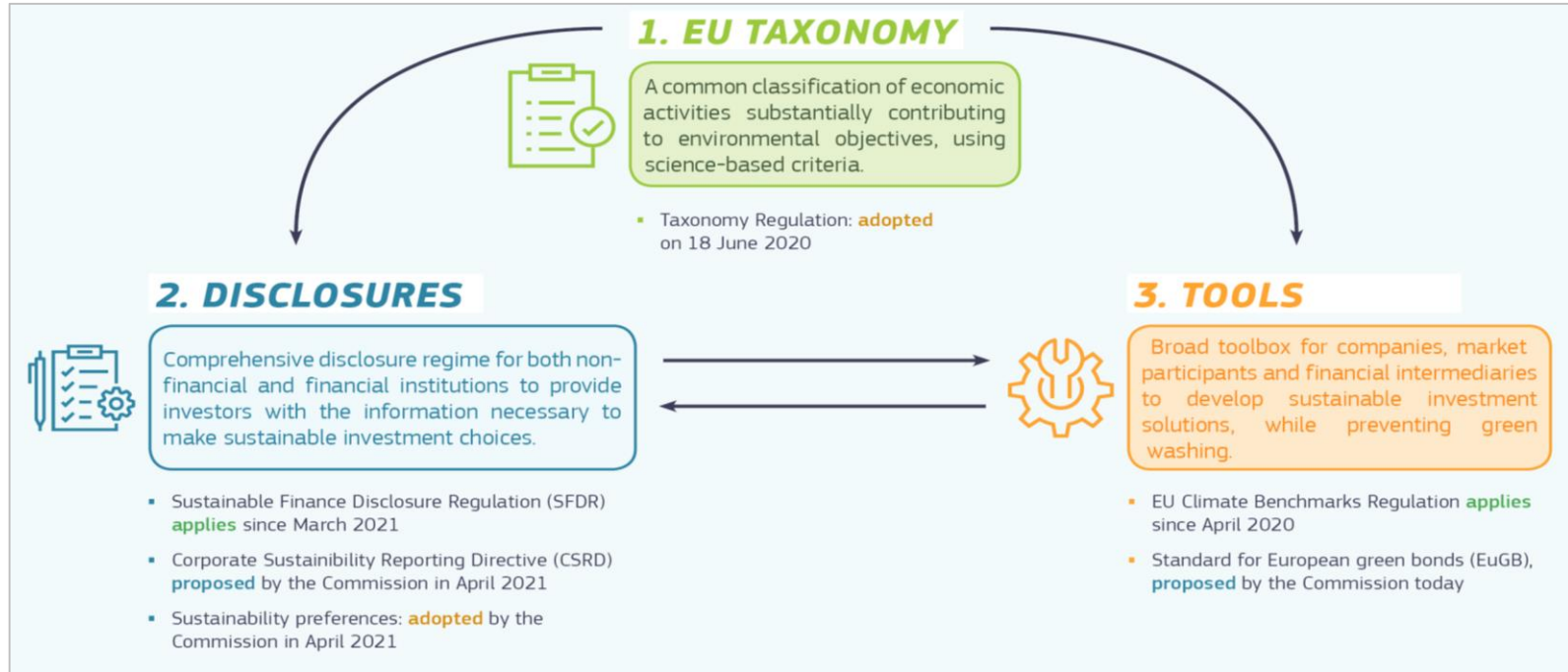
- > Ecosystems are complex adaptive systems
- > We do not (and might never) have complete information

## EU Taxonomy: Taxo 4 Biodiversity



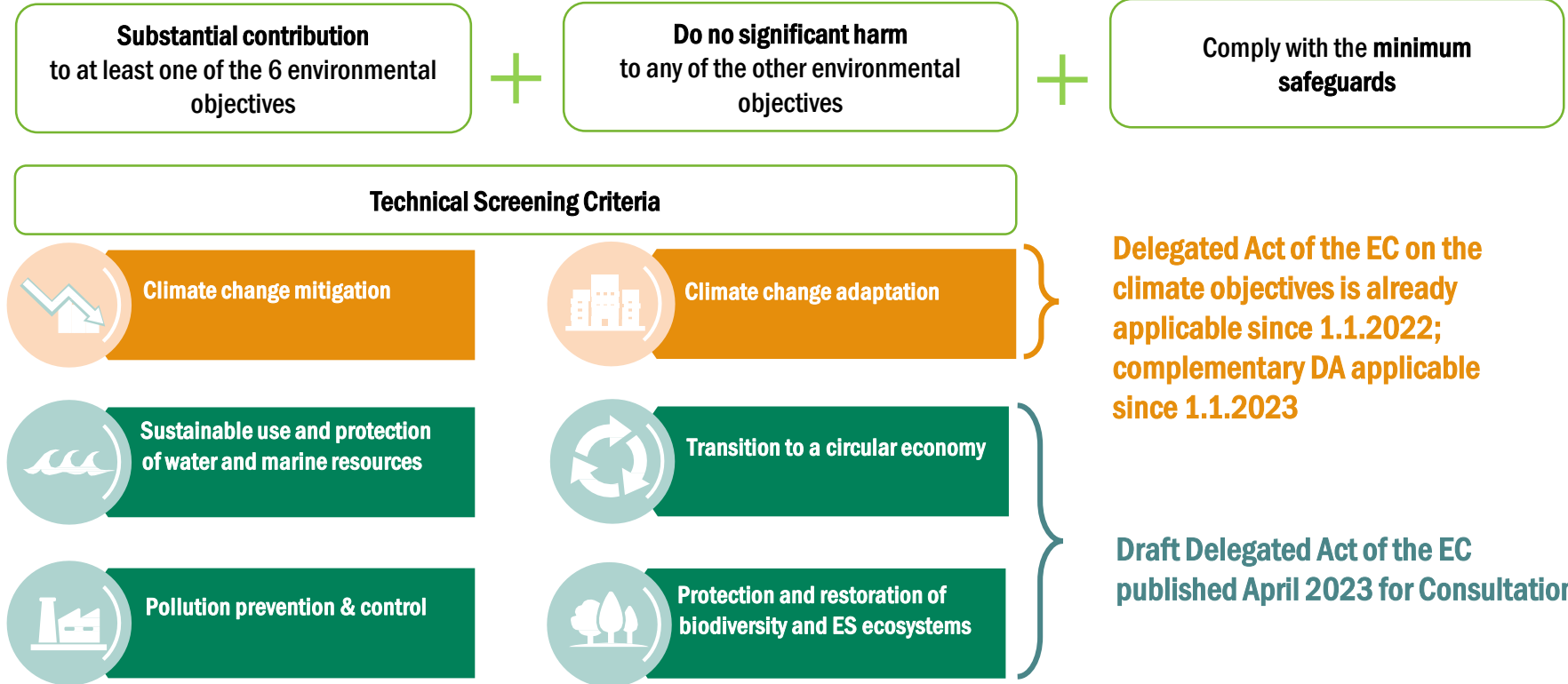


# TAXONOMY OVERVIEW



Source: European Commission (2021)

# TAXONOMY STRUCTURE



# TAXO 4 REPORT PSF & EC DRAFT DELEGATED REGULATION

## List of activities

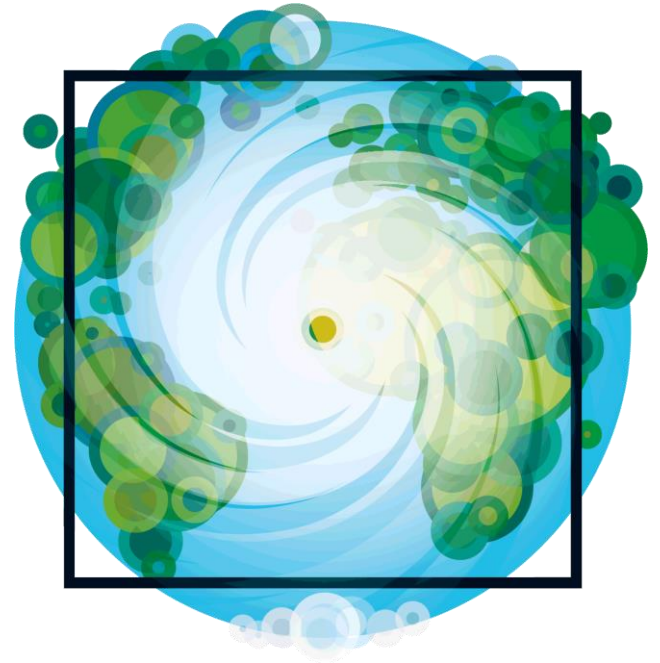
- Animal production
- Growing of non-perennial crops
- Growing of perennial crops
- Fishing
- Forestry
- Env. refurbishment of hydropower
- Bioenergy
- Conservation of habitats/ecosystems\*
- Restoration of biodiversity and ecosystems\*
- Environmental protection and restoration activities
  - Conservation, including restoration, of habitats, ecosystems and species
- Accommodation activities
  - Hotels, holiday, camping grounds and similar accommodation

\* plus tourism

**Like a box of chocolates...**

...but is it enough?

## The Austrian Green Finance Alliance



## The Green Finance Alliance (GF-Alliance)



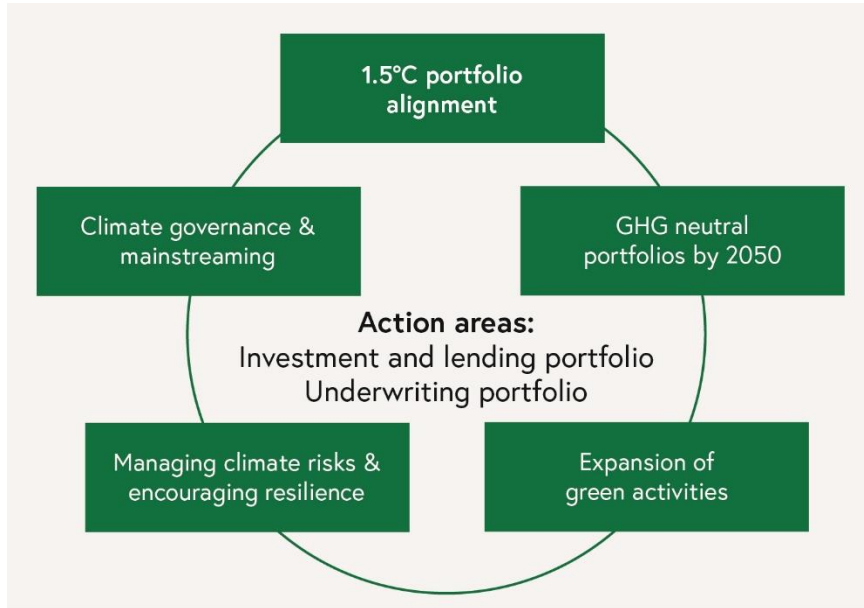
An initiative of the Federal Ministry of Climate Action (BMK) aimed at cultivating a sustainable financial market in Austria. Participation is voluntary and geared towards financial companies headquartered in Austria.

Members of the Green Finance Alliance (GF-Alliance) pledge to align their core business portfolios and operational ecology with defined climate targets.

GF-Alliance members become pioneers in the transformation of the Austrian financial industry into a Paris-compatible business model.

Members of the initiative have to meet predefined criteria. The GF-Alliance accompanies them step-by-step on the path to meeting their climate targets.

## Core business: Five target dimensions & two action areas



- Measures and detailed criteria are defined for each target dimension and action area.
- These criteria are based on current international climate protection standards and science-based methods.
- Annual monitoring and reporting by GF-Alliance members.
- The action areas investment and lending portfolio as well as underwriting portfolio are supplemented by the action area operational ecology.



## Governance



## Strategic Management

Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology | Department VI/3 – Green Finance and Sustainable Economy



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**Information on green finance activities:**  
[www.bmk.gv.at/green-finance](http://www.bmk.gv.at/green-finance)

**Requests on the Green Finance Alliance:**  
[greenfinance@bmk.gv.at](mailto:greenfinance@bmk.gv.at)

## Coordinating Office

Environment Agency Austria | Green Finance



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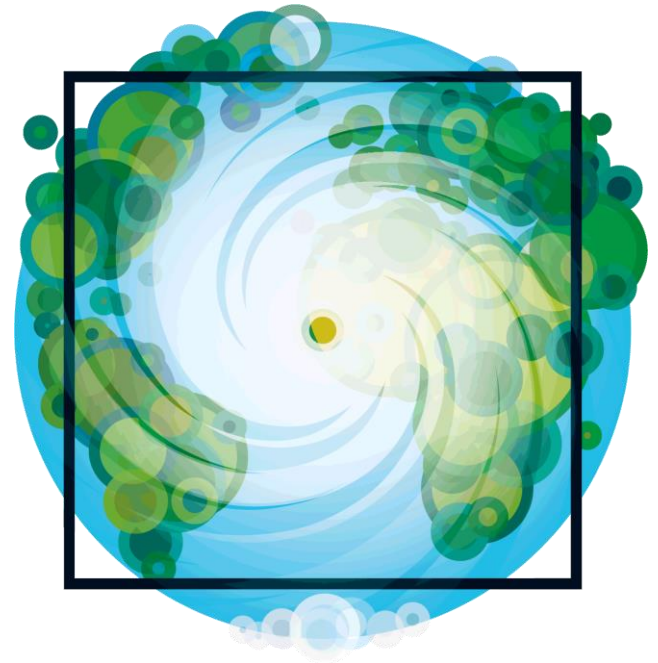
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## Financing Biodiversity through nature markets?



## KUNMING-MONTREAL FRAMEWORK – FOCUS ON FINANCE

[...] progressively **closing the biodiversity finance gap of 700 billion** dollars per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for Biodiversity. – *GOAL D*

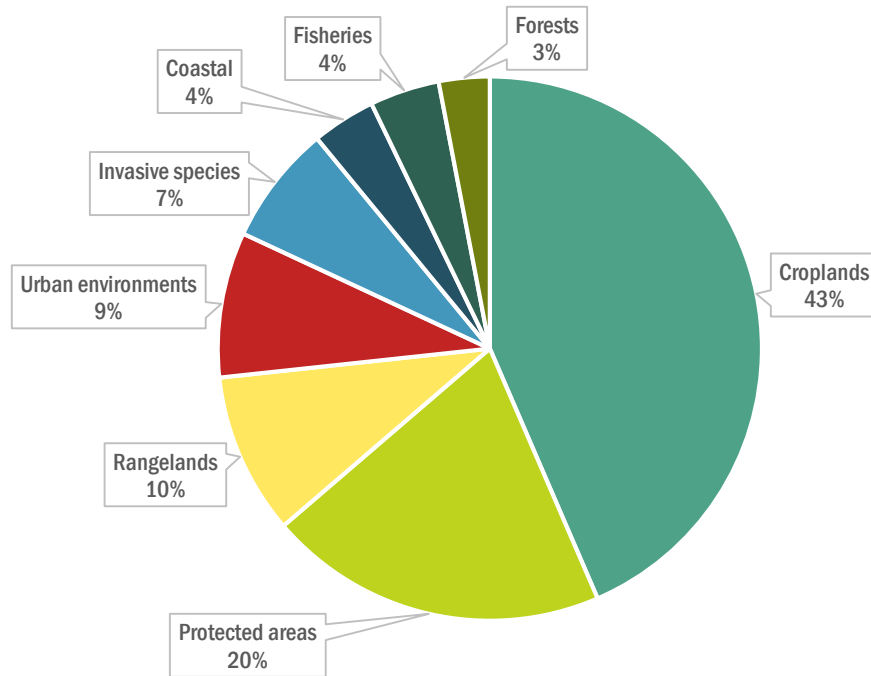
[...] **eliminate, phase out** or reform incentives, including **subsidies, harmful for biodiversity** [...] while substantially and progressively reducing them by at least **500 billion** United States dollars per year by 2030 [...] – *Target 18*

[...] by 2030 **mobilizing at least 200 billion** United States dollars per year, including by:

c) Leveraging **private finance** [...]

d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, **biodiversity offsets and credits**, benefit-sharing mechanisms, with environmental and social safeguards – *Target 19*

# FINANCING GAP



Total financing need: 845 bn USD p.a.

Finance Gap: 711 bn USD p.a.

To close the gap:

**Minus** 274 bn harmful subsidies in agriculture, forestry & fisheries

-> reduction of 2/3 from 2019

-> biggest share in agriculture

**Plus** 406 bn positive flows

-> 4-times as much as 2019

-> biggest share in offsets (~30 %)

Source: [Deutz et al. 2020](#),  
*Closing the Global Biodiversity Financing Gap*

# THE POTENTIAL OF BIODIVERSITY MARKETS

Revenue potential of NbS: USD 204 bn p.a. in 2050

Revenue potential of biodiversity credits: up to USD 43 bn p.a. in 2050

[IPR Forecast Policy Scenario + Nature, 2023](#)

Potential for Biodiversity offsets markets: growing from USD 9.2 bn in 2019 to USD 168 bn in 2030

[Deutz et al. 2020, Closing the Global Biodiversity Financing Gap](#)

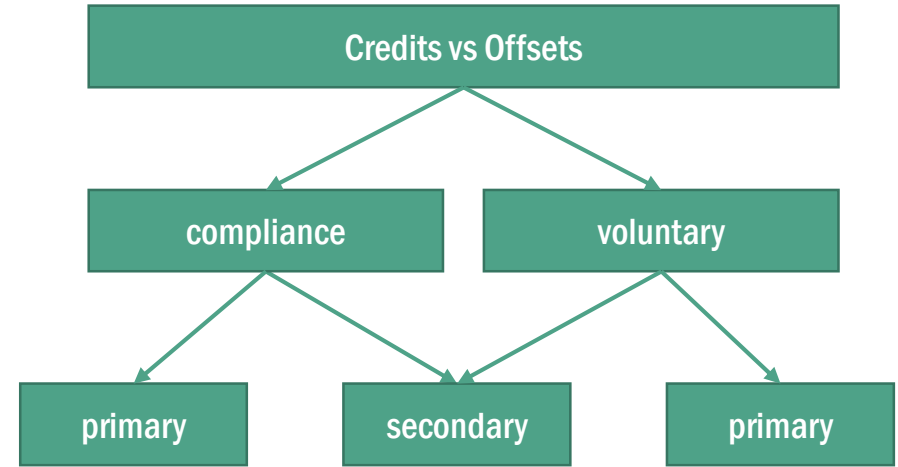
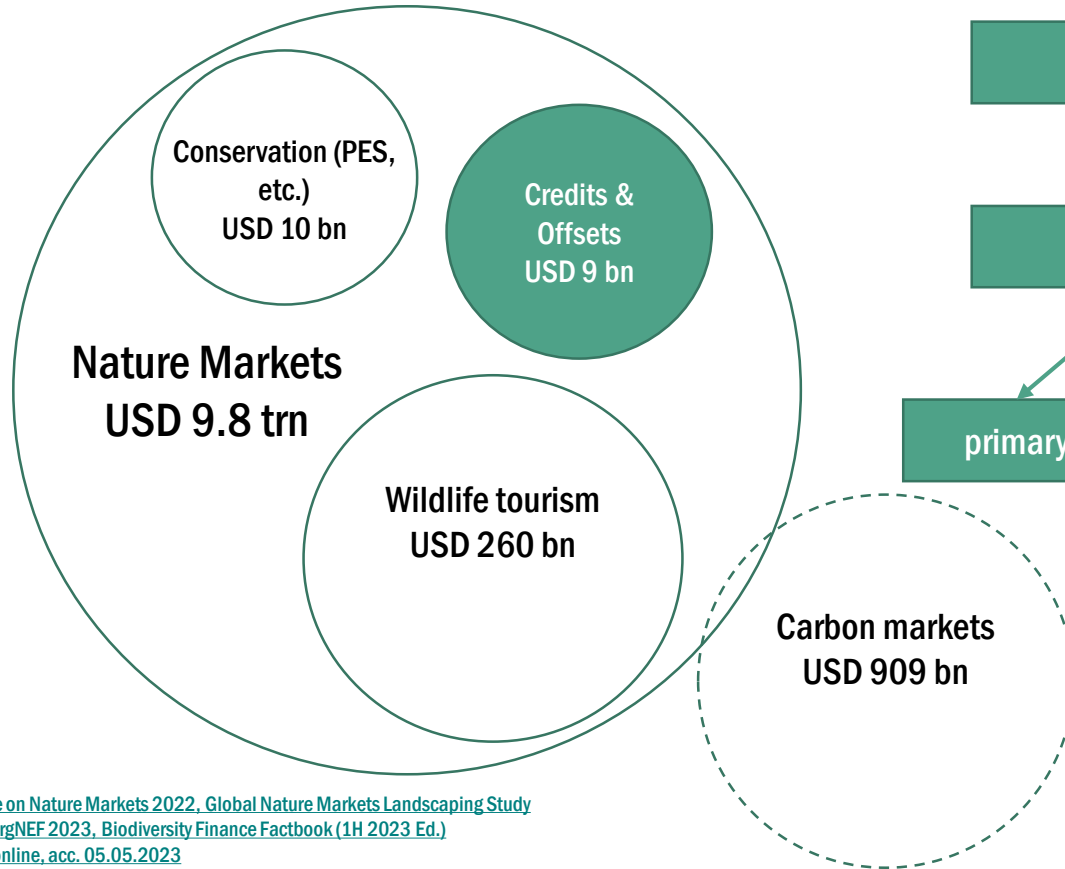
*“Global assets in biodiversity-related investments may rise 20-fold to more than \$400 billion by 2030 [...]”*

[Bloomberg Green Newsletter, 03.05.2023](#)

*“Moving from a business-as-usual pathway to a nature-positive economic model can create over \$10.1 trillion of business opportunities.”*

[WEF Biodiversity Credits Briefing Paper, 2022](#)

## WHAT MARKET ARE WE TALKING ABOUT



## CHALLENGES & SOLUTIONS FOR THE BIODIVERSITY CREDIT MARKET

Challenge	Proposed solution
Defining and quantifying a unit of biodiversity	Basket of metrics
Ensuring cost-effective credits	Mix of: set prices (cost-plus), stacking together with carbon (using carbon price), price discovery on markets
Channelling finance to Indigenous Peoples and Local Communities	Profit sharing agreements from the conception phase on & extending into potential secondary markets; Setting minimum price floors



## CAUTIONARY TALES - DO WE WANT MARKETS FOR BIODIVERSITY

„[...] in very few settings imaginable, is nature waiting for financialization“

„Many nature-based ventures remain ‚alternative‘ – they are not mainstream are still illiquid, and require far more ‚narrativ‘ than conventional asset classes.“

[Ouma et al. 2018. Rethinking the financialization of ‚nature‘](#)

„While a plurality of mechanisms to channel finance for investments in nature is required, including market-based mechanisms, we are concerned that [...] fiscal policy measures or direct cash transfers, are often perceived as politically intractable and therefore largely sidelined.“

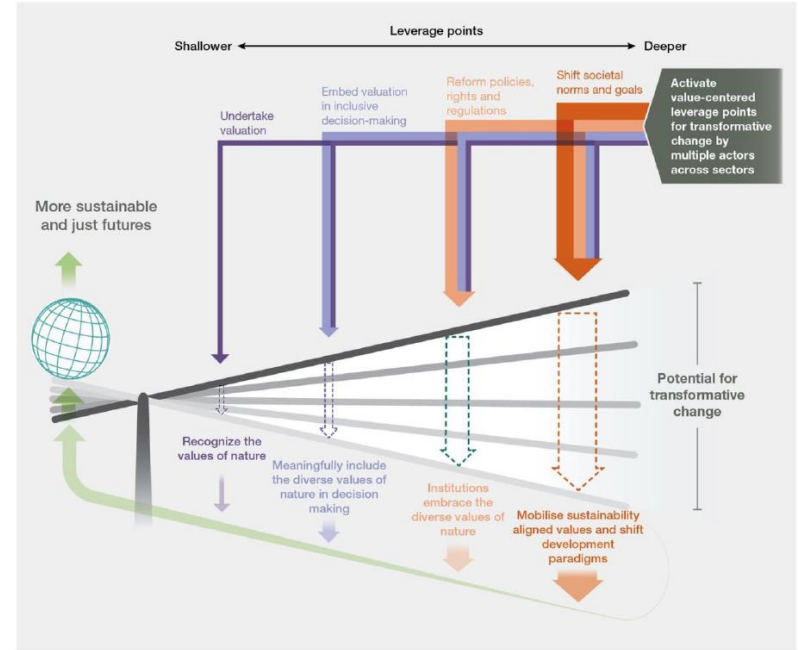
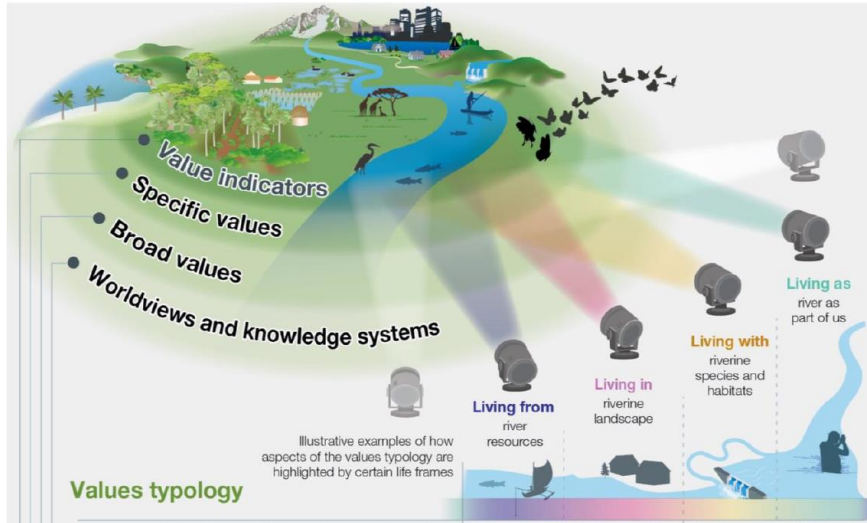
[Chausson et al. 2023. Going beyond market-based mechanisms to finance nature-based solutions and foster sustainable futures](#)

„[...] we argue the deprioritisation of public funding for nature conservation and restoration has been premature.“

„[...] to position private sector conservation finance as a panacea to resolve fundamental problems of free-riding and natural degradation at multiple scales would be naive.“

[Kedward et al 2022, Nature as an Asset Class or Public Good? The Economic Case for Increased Public Investment to Achieve Biodiversity Targets](#)

# A WAY FORWARD



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