

September 8, 2023  
13:30 – 15:00

Marina Dumont  
Daniël Kan  
Mark Goedkoop

PRé Sustainability

## Bringing LCA results into the financial equation:

How biodiversity  
footprinting enables  
financial players to make  
new strategic decisions that  
include nature.



LCM 2023

THE 11TH INTERNATIONAL CONFERENCE ON LIFE CYCLE MANAGEMENT

6-7-8 september, 2023, Lille, France

# Today's agenda



**1** Biodiversity is declining

---

**2** The role of the financial sector

---

**3** Measuring as the basis for improvements

---

**4** Biodiversity Footprinting for Financials (BFFI)

---

**5** Application Cases

---

**6** Results and their modularity

---

**7** The wider landscape

---

# Biodiversity is globally declining at alarming speed

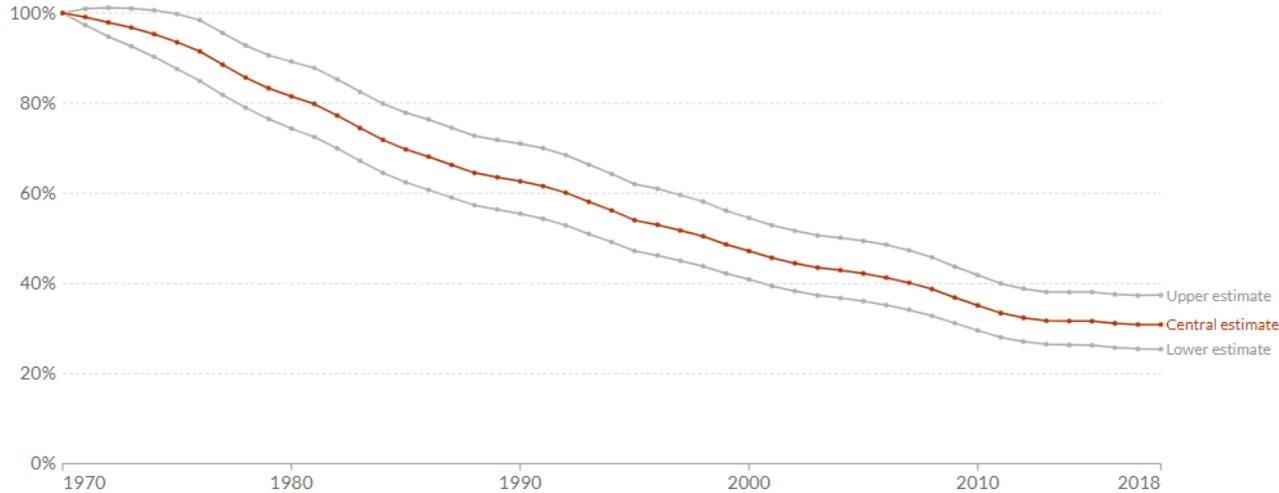
## Living Planet Index, World

The Living Planet Index (LPI) measures the average decline in monitored wildlife populations. The index value measures the change in abundance in 31,821 populations across 5,230 species relative to the year 1970 (i.e. 1970 = 100%).

Our World  
in Data

Change region/group

All together



Source: World Wildlife Fund (WWF) and Zoological Society of London

OurWorldInData.org/biodiversity • CC BY

1970 2018

CHART

TABLE

SOURCES

DOWNLOAD



Session by Mark  
Goedkoop:

Bridging the Gap  
Between  
Biodiversity  
Footprint Metrics  
and Biodiversity  
State Indicator  
Metrics

# The financial sector: allocator of resources



How do we decide upon  
investments today?



ESG Ratings

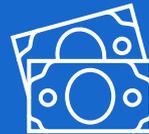
But what is ESG?

- measures a company's resilience to financially material Environmental, Societal and Governance risks
- provide a window into **one facet of risk to financial performance.**
- not a general measure of corporate "goodness"
  
- **Important: based on qualitative evaluations! + most models (underlying data) are not transparent!**

Source: <https://www.msci.com/our-solutions/esg-investing/esg-ratings/what-esg-ratings-are-and-are-not>



Banks



Investments



Increasing regulatory  
pressure

# Measuring is the basis for improvement



## Climate change

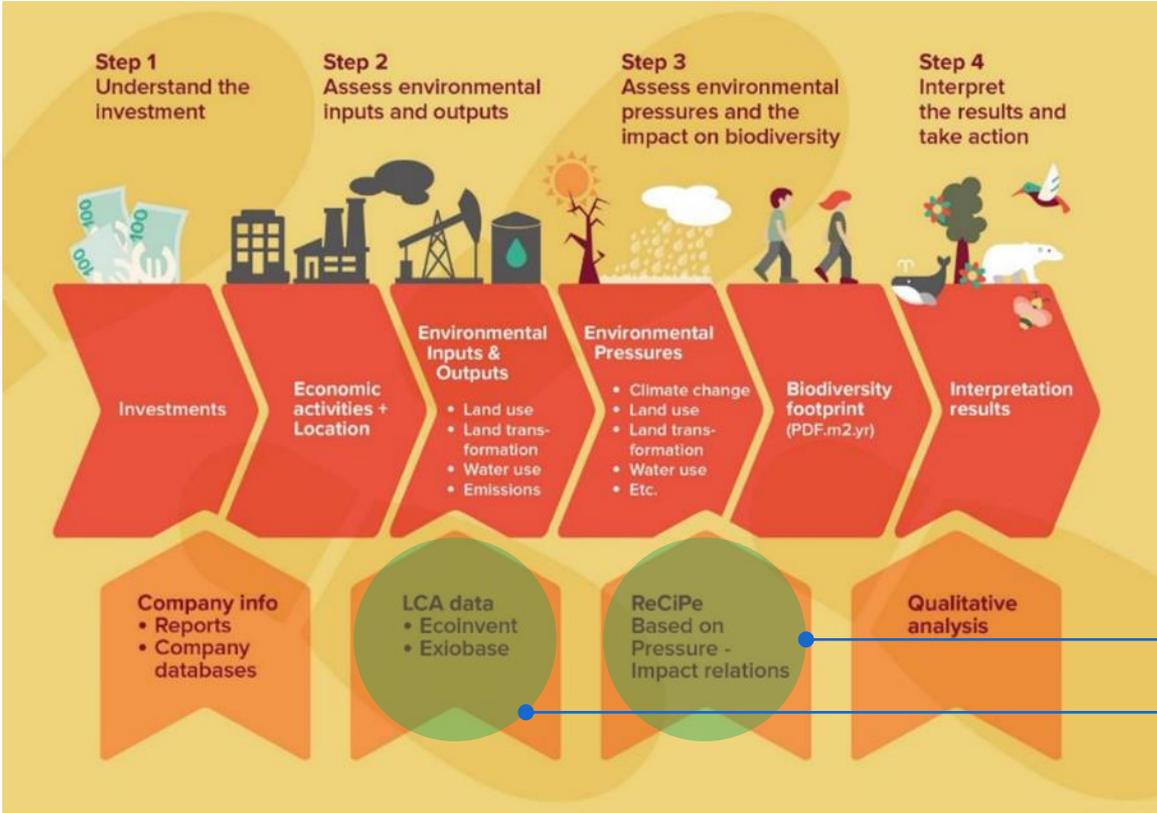
- Relatively clear what needs to be measured
- Limited number of substances are assessed (even though many factors also influence)
- Emissions have global impact
- Data can be found in many corporate reports and statistics or databases

## Biodiversity

- No consensus on the metric we want to assess
- Many drivers have impact on biodiversity; big differences per region, multiple time scales
- Data scattered over many sources
- Important drivers may be difficult to quantify

**But those reasons are not good enough not to start!**

# Biodiversity Footprinting for Financials (BFFI)



**Our ideology:**  
Open-source data and methods

# Practical use cases of a biodiversity footprint



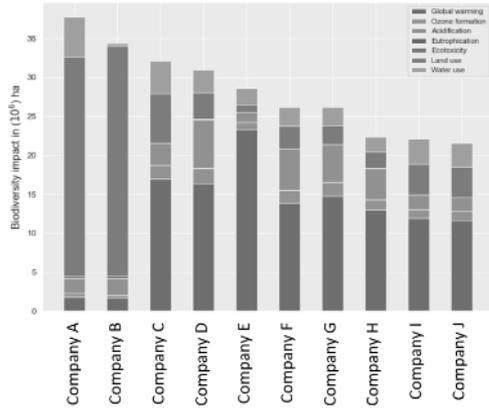
**Portfolio-level**  
Biodiversity impacts of entire portfolios of financial institutions,  
e.g. for loans, listed equity, government bonds etc.

Granularity  
decreases

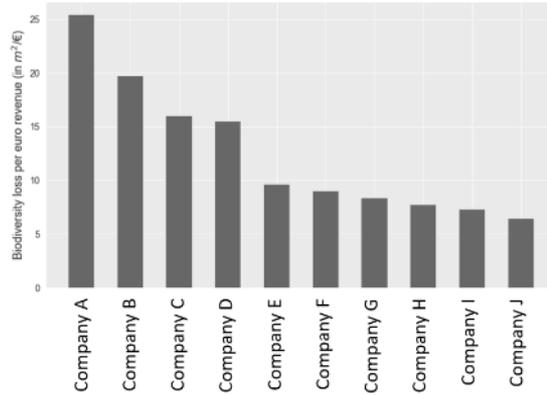
**Company-level**  
Corporate Biodiversity Footprinting  
Assessing the impact of an investment in more detail

**Project-level**  
Biodiversity impacts of project sites, e.g., solar park, dairy farm,  
production site etc.

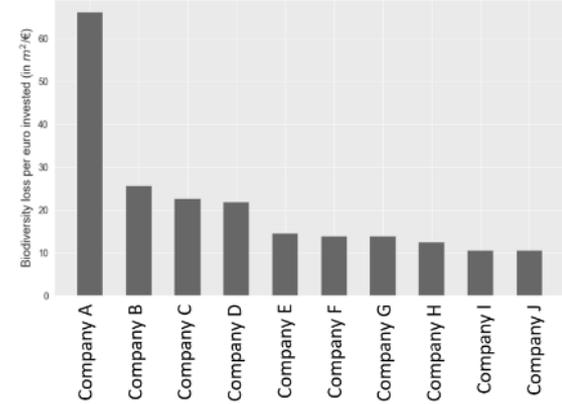
# Modularity of the results (portfolio)



Top 10 biodiversity loss in MSCI World Index (entire companies)



Top 10 biodiversity loss per euro revenue (for comparability)



Top 10 biodiversity loss per euro invested (for comparability)

## MONETIZATION

Expressing environmental damage in Euros (or other)



## ECOSYSTEM DEPENDENCIES

Expressing dependencies with local ecosystems



## POSITIVE IMPACT (NATURE RESTORATION)

Experiment with measuring positive impact instead of negative impact

Calculation basis

Add-ons for further insights

# Limitations & critics



DATA GRANULARITY

RESOURCES

UNCERTAINTY

# Wider regulatory landscape: way forward



The EU  
Taxonomy

Corporate  
Sustainability  
Reporting  
Directive  
(CSRD)

Taskforce on  
Nature-related  
Financial  
Disclosures (TNFD)



Our way forward  
Biodiversity impact  
database  
+  
Biodiversity impact  
tool for financials (incl.  
access to database)

Do you have  
any questions?

We're all ears.



# Thank you



**Marina Dumont**  
**LCA Analyst**

dumont@pre-sustainability.com

[www.linkedin.com/in/marinadumont](https://www.linkedin.com/in/marinadumont)

Contact us for [biodiversity impact measure trainings!](#)

Also visit our website specifically for biodiversity impact assessment:  
<https://www.biodiversity-metrics.org/>

Get started for free on: <https://bioscope.info/>

