GLOBAL BIODIVERSITY SCORE

Assessing the biodiversity footprint of companies and financial assets

26th of January, 2023

Ask your questions on Mentimeter

Go to www.menti.com and enter the code: 8146 8212

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26th of January, 2023

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Agenda

16:00-16:10		*Opening of the webinar and welcome participants*
16:10-17:20	The Global Biodiversity Score and its environment	• Context of the biodiversity footprint • Methodology of the Global Biodiversity Score (GBS) • The B4B+ Club • Biodiversity Footprint Assessment & SBTN's stepsTNFD & proposals for financial institutions • GBS trainings
17:20 – 17:30	Common standard	Towards a common standard for biodiversity footprint
17:30-17:45	Case study: Pre-feasibility study to assess GRTgaz's biodiversity footprint	• Kevin Mozas, Blooming

CDC Biodiversité

Violette Pradère
Project officer – Finance

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CDC Biodiversité, a company dedicated and committed to biodiversity

- Private subsidiary of the Caisse des Dépôts et Consignations Group, the biggest public financial institution in France.
- CDC Biodiversité is a **French consulting & engineering firm specialized in positive actions for biodiversity, biodiversity sustainable management (biodiversity offsets), and the measurement of corporate biodiversity footprint.**

CDC Biodiversité has a wide range of services for different stakeholders with the aim of protecting biodiversity

Long-term restoration and ecological management

- ✓ Ecological compensation actions for companies
- ✓ Voluntary ecological restoration actions
- ✓ Provision of long-term land investments for the conservation of natural areas
- ✓ Promoting biodiversity in cities

Training and research

- ✓ **Research and publication on economics & biodiversity topics**
- ✓ Realization and presentation of training modules for all economic actors

Studies and engineering

- ✓ **Strategy and integration of biodiversity into economic models**
- ✓ **Development and implementation of biodiversity footprint measurement solutions for public and private actors**
- ✓ **Creators of the Global Biodiversity Score**

Team members

Joshua Berger
Head of the Biodiversity Footprint Department

Development

Margaux Durand
PhD candidate

Patricia Zhang
Project officer

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B4B+ Club

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Project officer – B4B+ Club

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Local authorities

Joao Pereira da Fonseca
Project officer – GBS for local authorities

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Research officer

Finance

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Project officer - Finance

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Research officer

Gabriel Robin
Research officer

Julie Bonnet
Research officer

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Biodiversity footprint: context and overview

Violette Pradère
Project officer – Finance

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Context : a massive loss of ecological integrity

65% Global average terrestrial MSA

32% Global terrestrial MSA loss

2010

9.5%
Global terrestrial MSA loss between 2010 and 2050

58.5% Global average terrestrial MSA

32% Global terrestrial MSA loss in 2010

2050

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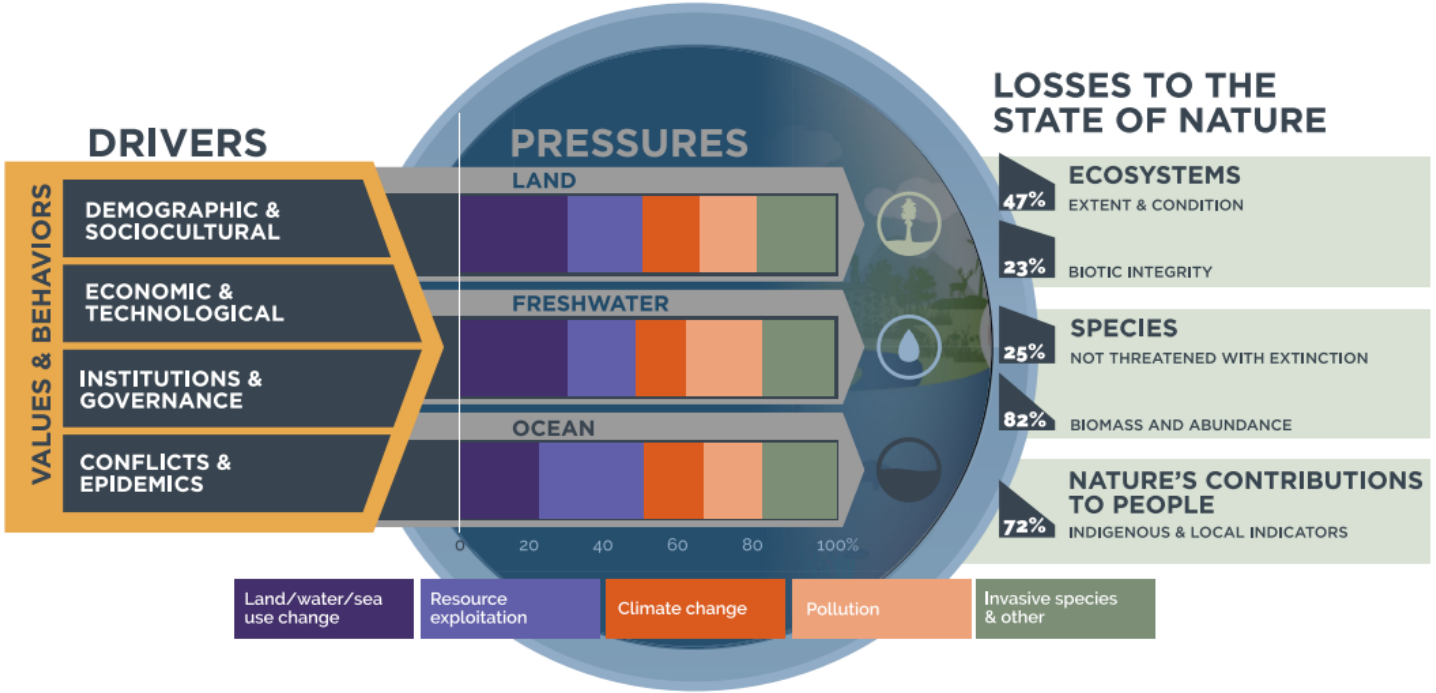
5 main pressures are causing biodiversity erosion

> Indirect drivers translate into direct pressures resulting in a loss of biodiversity



Source: SBTN Initial Guidance

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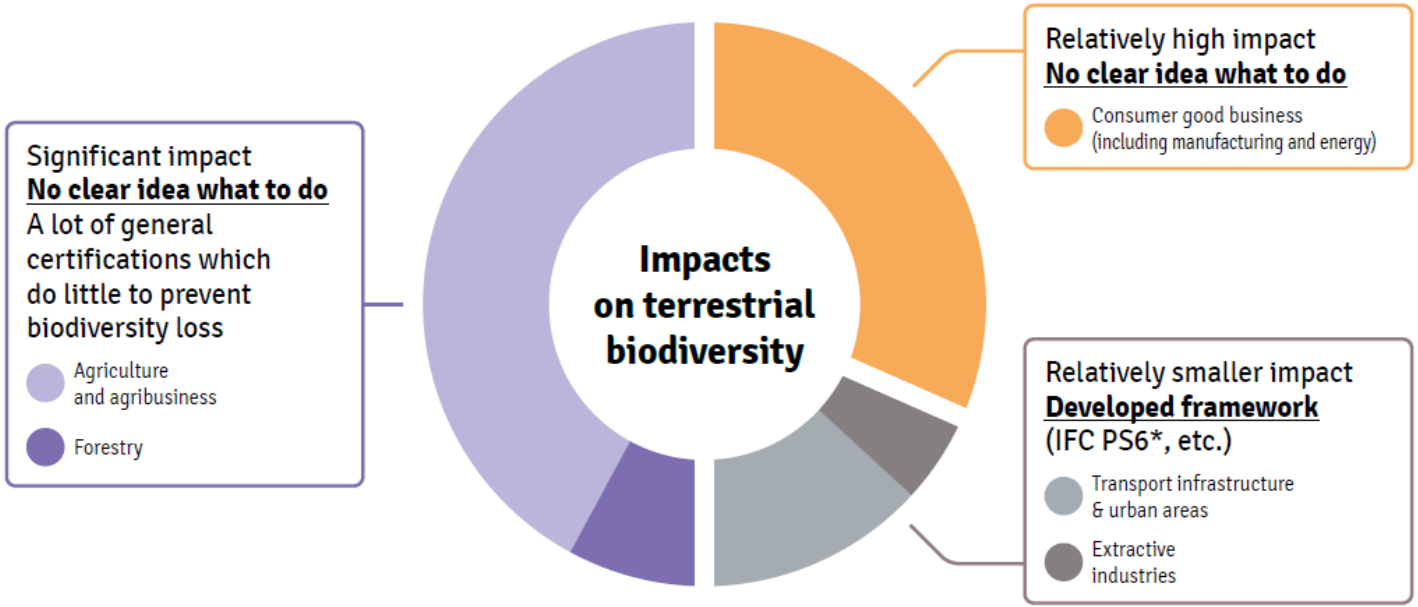
Lack of a satisfactory framework to measure impacts

> For most of the activities impacting biodiversity, there is no satisfactory framework to measure, avoid, reduce and offset their impacts



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The GBS fits into the Global Biodiversity Framework

> The GBS makes it possible to take into account business actions and align them with international targets

Kunming-Montreal Global Goals for 2050

- **GOAL A**: Ecosystems, species and genetic diversity
- **GOAL B**: Nature's contributions to people
- **GOAL C**: Access and benefit sharing
- **GOAL D**: Means of implementation

Kunming-Montreal 2030 Global Targets

REDUCING THREATS TO BIODIVERSITY

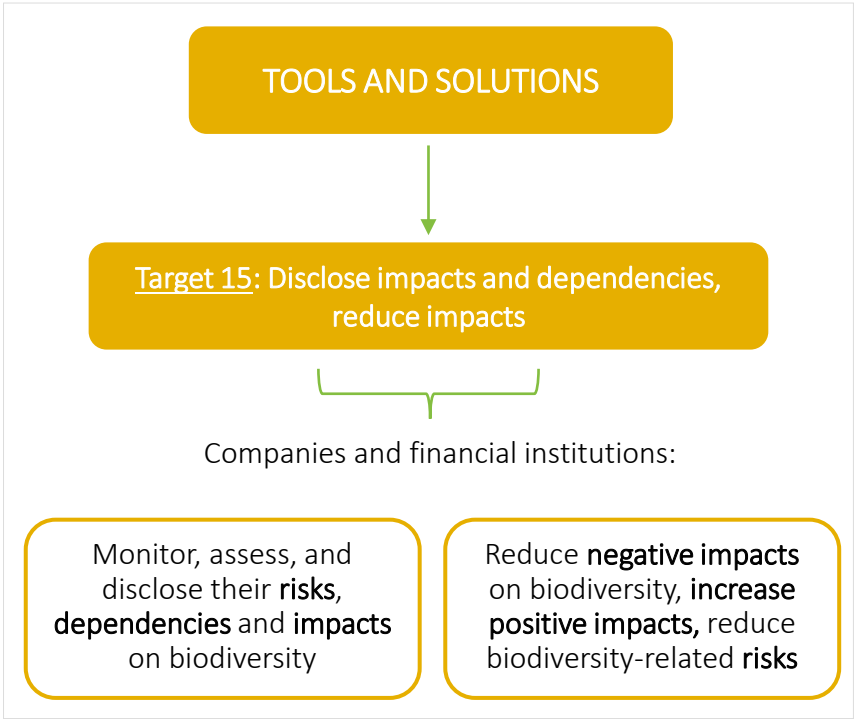
- **TARGET 1:** Land and sea-use planning
- ...
- **TARGET 7:** Reduce pollution
- **TARGET 8:** Minimize the impact of climate change
- ...

MEETING PEOPLE'S NEEDS

TOOLS AND SOLUTIONS

- ...
- **TARGET 15:** disclose impacts and dependencies, reduce impacts
- ...

The GBS fits into the Global Biodiversity Framework



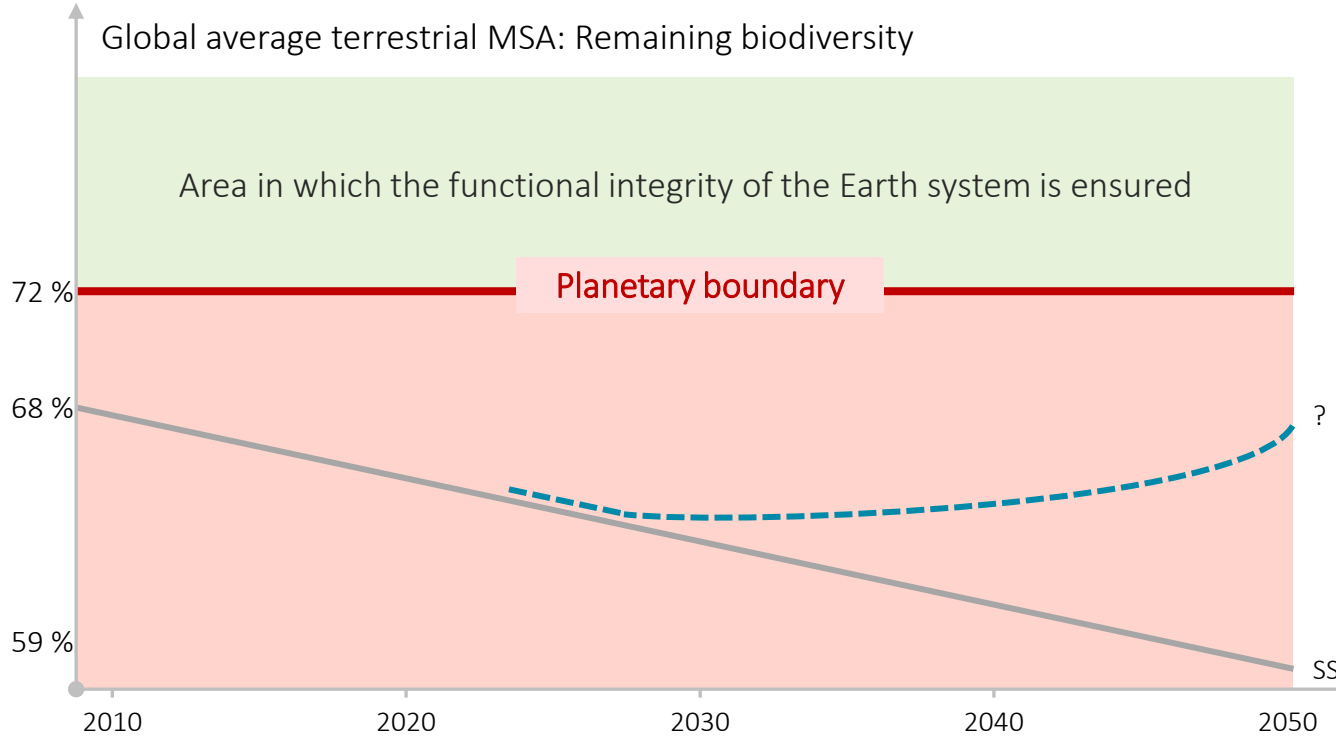
GBS supports target 15 of the GBF, allowing businesses to:

> Measure and report their impacts and dependencies on biodiversity;

> Receive recommendations on how to reduce these negative impacts and increase positive impacts;

> Monitor the impacts of actions undertaken.

Biodiversity loss: planetary boundary crossed for functional biodiversity



Goal A: the integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050.

Through the goal A, the Kunming-Montreal agreement calls for the reversing of the current trend.

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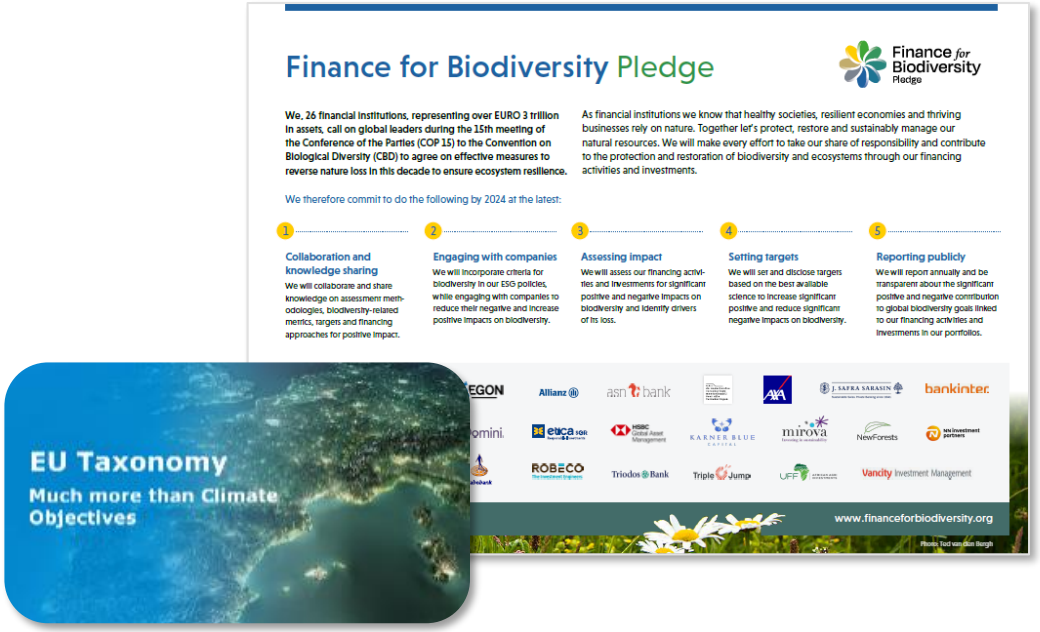
3 major trends are driving companies to measure their impacts

1. Management of operational and market risks and opportunities

2. **Demand from investors,** that will make unsolicited assessments

3. Future regulations



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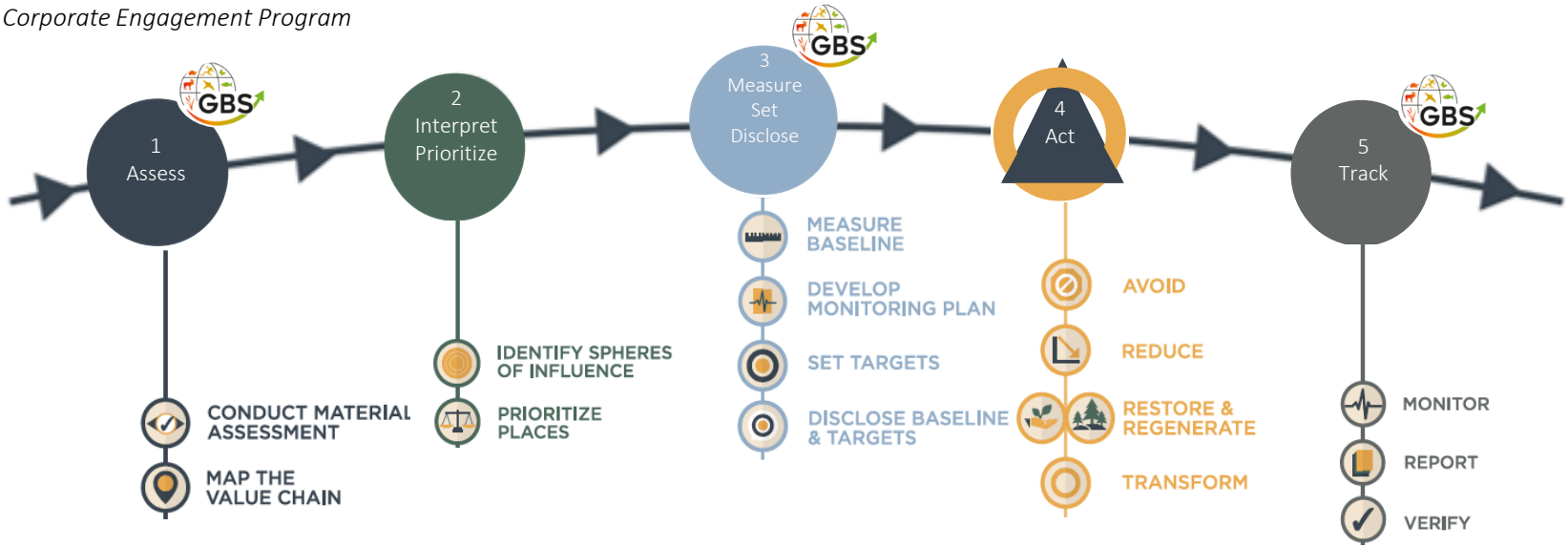
The GBS also allows businesses to follow the SBTN program

> The GBS is one of the tools that supports businesses involved in the Science Based Target Network to set relevant targets with regards to the planetary boundaries for the steps 1, 3 and 5.

Step 1 must be conducted within 1 year of joining the Corporate Engagement Program



Source: SBTN Initial Guidance

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What biodiversity measurement tools do you know of?

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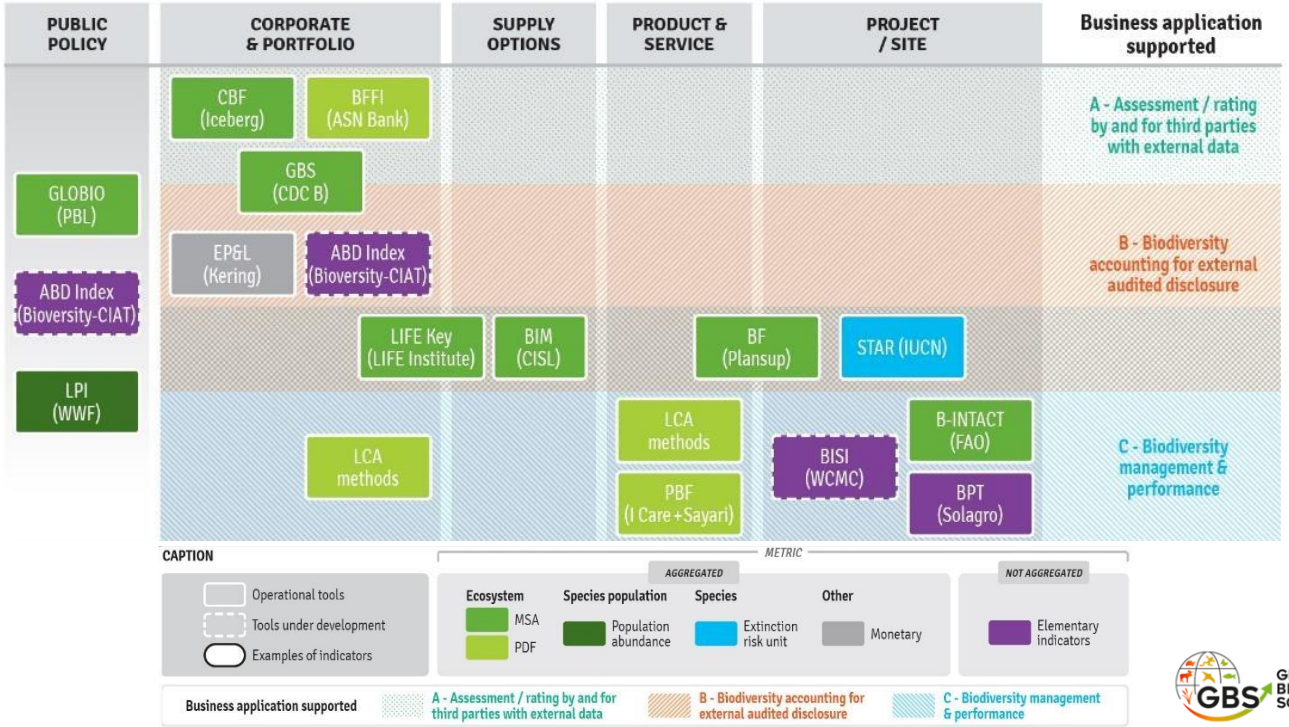
Biodiversity footprint existing tools' mapping

> The GBS focuses on companies and assets portfolios but still meet with the other dozen of existing tools at the global level.



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Do you think that your company might be interested in doing a Biodiversity Footprint Assessment?

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Global Biodiversity Score presentation

Vincent Guénon
Research officer – Finance

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GBS's metric: MSA% - describes ecosystem's integrity between 0% and 100%

FOREST ECOSYSTEM

100 % ← 0 %

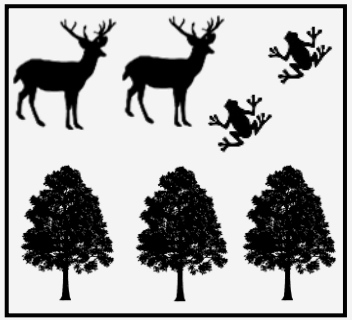
PASTURE ECOSYSTEM

Source: GLOBIO

The Mean Species Abundance (MSA): computation

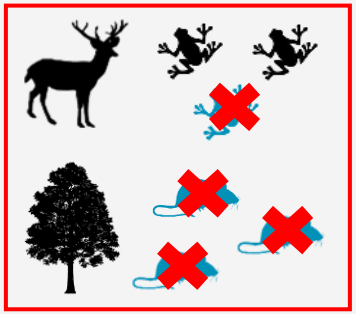
- Only account for species present in undisturbed situation
- Ratios of species abundance between observed and undisturbed states can't exceed 1

UNDISTURBED



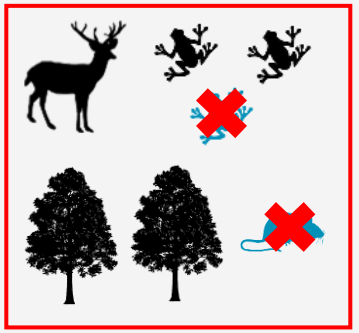
$$\text{MSA} = 100\ \%$$

DISTURBED 1



$$\text{MSA} = \frac{\frac{1}{2}+\frac{1}{3}+\frac{2}{2}}{3} = 61\%$$

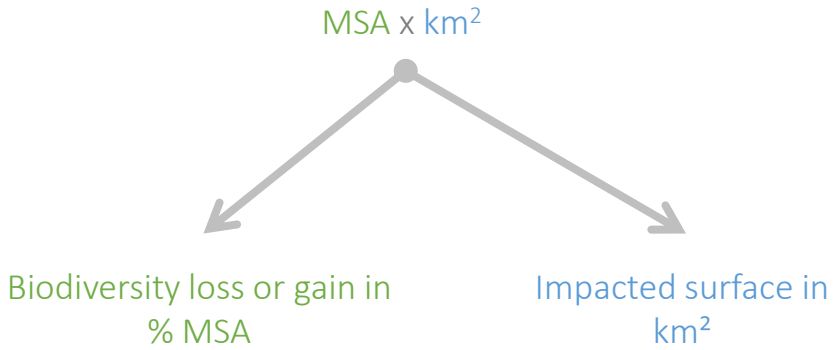
DISTURBED 2



$$\text{MSA} = \frac{\frac{1}{2}+\frac{2}{3}+\frac{2}{2}}{3} = 72\%$$

The GBS evaluates the fraction of biodiversity integrity lost or gained on a given surface, in MSA.km²

The unit used by the GBS integrates the MSA on the impacted surface



An impact of 1 MSA.km²
is equivalent to
the **destruction of 1 km² of undisturbed natural ecosystem**

Example

Conversion of pristine forest into a plantation on 100 km²

MSA = 100 %

MSA = 30 %
(i.e. 70 %MSA of biodiversity loss)

This conversion causes an **impact of 70 MSA.km²**

(100 % - 30 %) x 100 km²

Source: CDC Biodiversité (2020)

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According to you, which aspects of biodiversity are measured by the MSA ?

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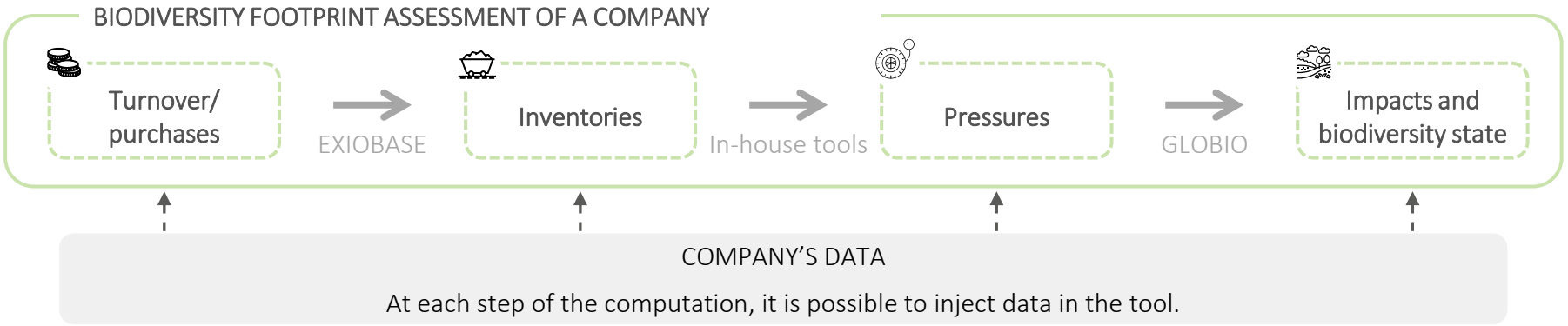
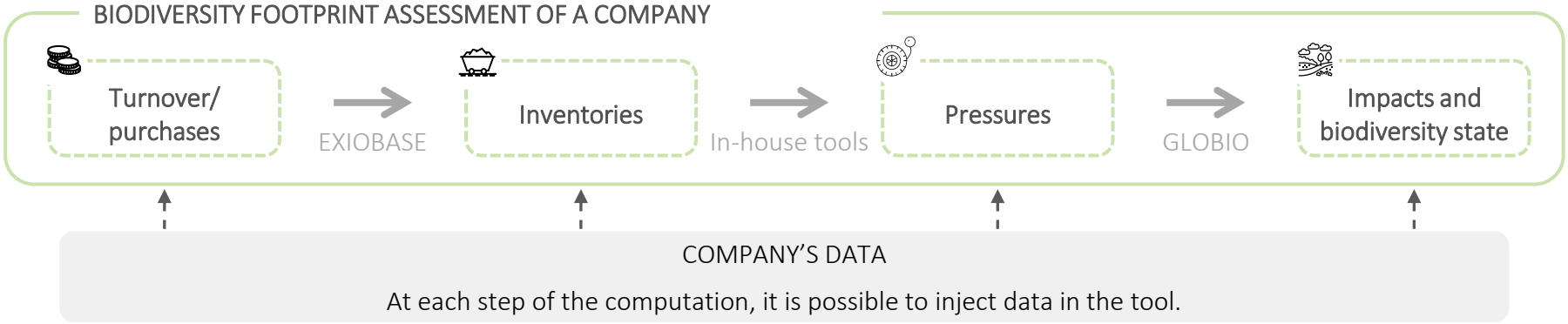
The Global Biodiversity Score tool: methodology



EXAMPLES

The Global Biodiversity Score tool: data examples

BIODIVERSITY FOOTPRINT ASSESSMENT OF A COMPANY



EXAMPLES

Case of a poultry meat business : one of the impacts will relate to poultry feed production

ChickenCorp sells poultry meat

€

ChickenCorp buys corn

t

ChickenCorp's supplier owns corn fields

km²

ChickenCorp's supplier carries out exhaustive ecological surveys on its fields.

MSA. km²

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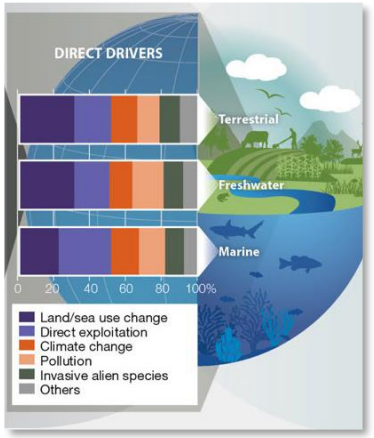
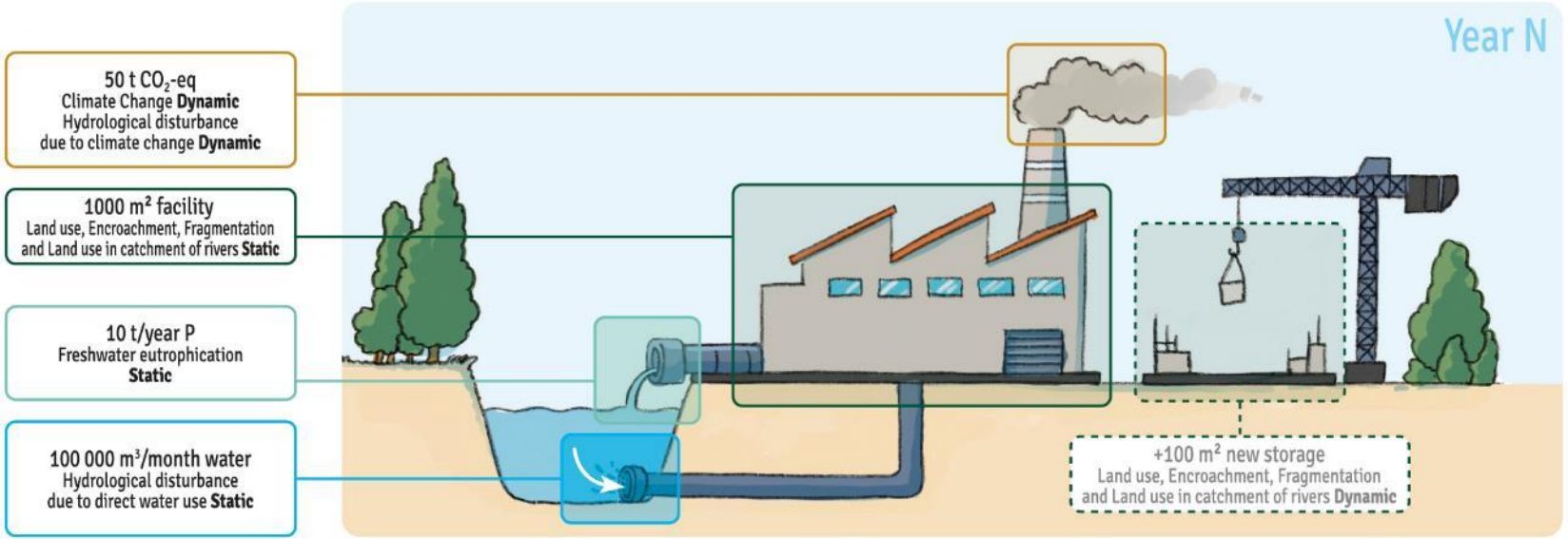
The GBS covers the key pressures for terrestrial and freshwater biodiversity



IPBES PRESSURES	*GBS / GLOBIO PRESSURES* Terrestrial	Freshwater	Marine
Land/sea use change	Land use Fragmentation of natural habitats Human encroachment	Wetland conversion	Not covered
Direct exploitation	Pressures due to resources extraction (crops, mining…)	Hydrological disturbance due to direct water use	
Climate change	Climate change	Hydrological disturbance due to climate change	
Pollution	Atmospheric nitrogen deposition Terrestrial ecotoxicity	Land use in catchment of rivers Land use in catchment of wetlands Freshwater eutrophication Freshwater ecotoxicity	
Invasive alien species	Not covered		

Source: IPBES 2019

The GBS accounts separately for static (stocks) and dynamic impacts (variation of stocks)

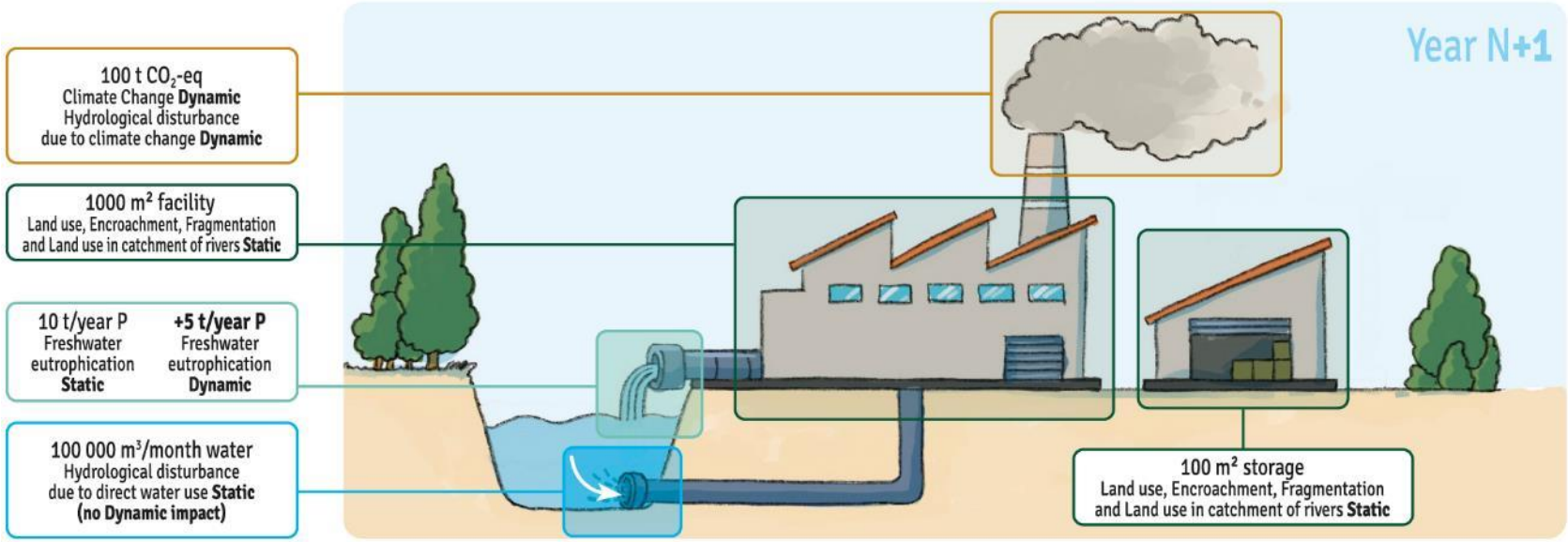


Static impacts: accumulated negative impacts

Dynamic impacts: periodic gains or losses over the period assessed – *e.g., dynamic impact associated to +100 m² of storage area during Year N*

Source: CDC Biodiversité (2021)

The GBS accounts separately for static (stocks) and dynamic impacts (variation of stocks)



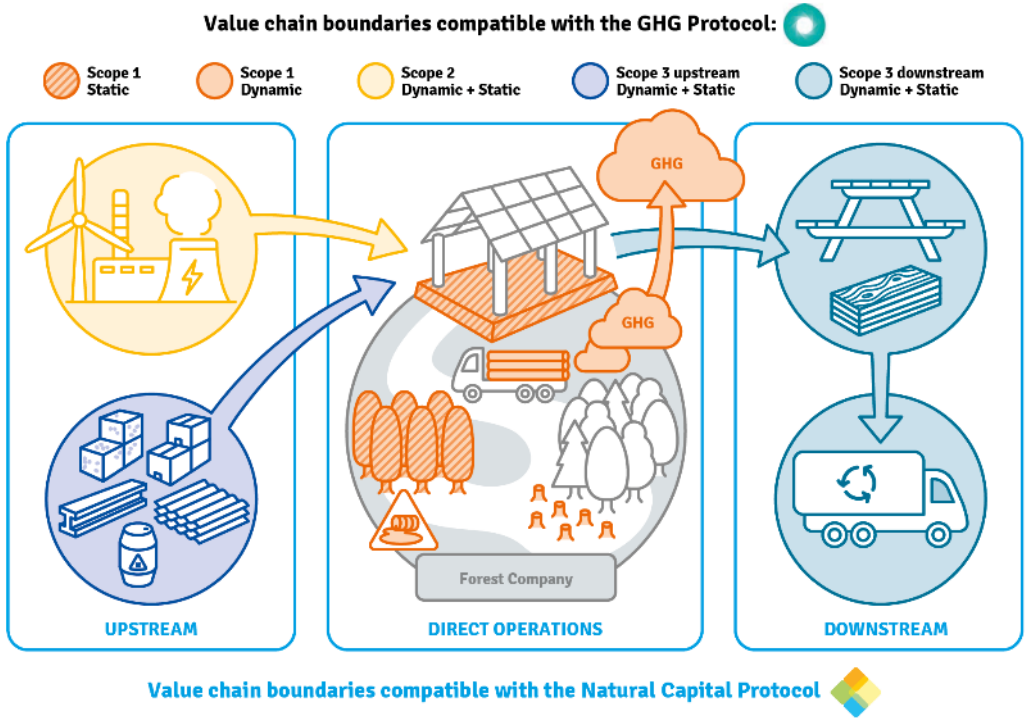
Static impacts: accumulated negative impacts – *in N+1, the 100m² of the storage area built during the previous year are now accounted in the static impacts.*

Dynamic impacts: periodic gains or losses over the period assessed

Source: CDC Biodiversité (2021)

The concept of “Scopes” allows to consider the impacts of the entire value chain

Scope 1	Direct operations
Scope 2	Impacts due to energy purchases
Scope 3 upstream	Impacts due to other purchases
Scope 3 downstream	Impacts due to the use and end of life of products and services



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Does your company use the notions of Scopes 1, 2 and 3 from the GHG Protocol ?

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Corporate biodiversity targets: quantitative targets

COMPANY	INDUSTRY	TARGETS		
		STATE OF BIODIVERSITY	PRESSURES	OTHERS
Acciona	Building	• Neutral biodiversity footprint		
Alpro	Food	• No official target yet. Seeks to be **One Planet Compatible**.		
ASN Bank	Finance	• **Net positive effect** on biodiversity by 2030		
Danone	Food		• **Zero deforestation** by the end of 2020 • Promotion of **regenerative agriculture practices** in favour of animal and plant biodiversity • **25% reduction** of the total volume of **water consumption** by 2030 & action plan for water-stressed watersheds • **Carbon neutrality** by 2050	
Grupo Red Eléctrica	Energy	• **Positive net impact** on natural capital in the vicinity of its facilities in 2030 (Scope 1)	• **Reduction of water consumption** in all work centres to 6.5 m^3/employee/year in 2030 • **100% reduction in the use of phytosanitary products** in substations in 2030	• **Zero single-use plastics** in 2030 • **0% waste to landfill** in 2030 • …

Non exhaustive list

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Corporate biodiversity targets: quantitative targets

COMPANY	INDUSTRY	TARGETS		
		STATE OF BIODIVERSITY	PRESSURES	OTHERS
GSK	Pharmaceuticals	• **Net positive impact on nature** by 2030		
Iberdrola	Energy	• **No Net Loss of biodiversity** by 2030. • Ensure that new facilities deliver a net positive impact on biodiversity, where possible (Scope 1)	• **Reducing its CO2 emissions by 50% in 2030,** with respect to 2007 and becoming carbon neutral by 2050, with its emissions in Europe projected to be almost zero by 2030.	• **Avoiding** new **infrastructures in** designated **conservation areas**
Kering	Luxury	• **Net positive impact** on biodiversity by 2025 (**regenerating** & **protecting** 6x the total land footprint of its supply chain)	• **Convert 1 million ha of farms** and rangelands in its supply chain landscapes **into regenerative agriculture** by 2025	• **Protect an additional 1 million ha** of critical, 'irreplaceable' habitat outside of its supply chain by 2025
L'Oréal	Cosmetics		• **Flat land occupancy** vital to the sourcing of ingredients compared to 2019	• **100% sustainable sourcing** of bio-based materials by 2030 (none linked to deforestation) • **100% of sites with positive impacts** on biodiversity compared to 2019, by 2030
Solvay	Chemistry		• **-30% pressure on biodiversity** by 2030 compared to 2018	

Non exhaustive list

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The GBS assesses the dependency on ecosystem services for direct operations and the supply chain

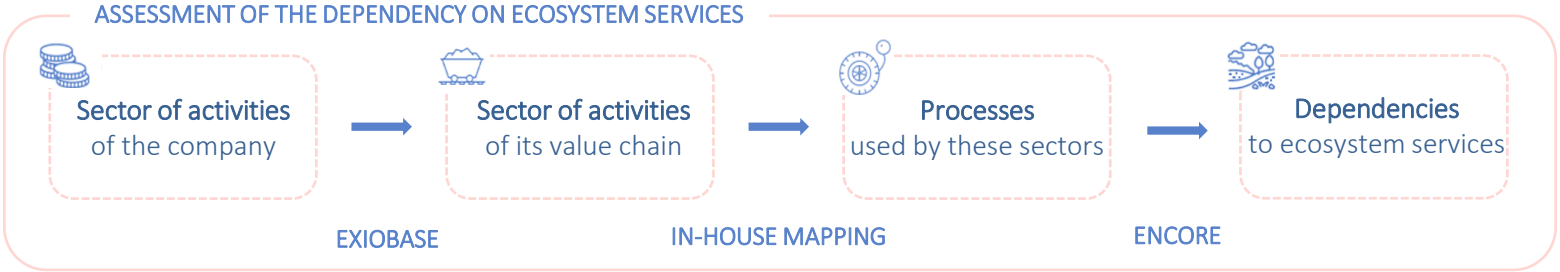
The score ranges from 0% (no known dependency) to 100% (very high dependency). The dependency score is calculated with two methodologies:

- Average dependency score: average dependency of a company or portfolio on all ecosystem services,
- Critical dependency score: share of a company or portfolio that is critically dependent, *i.e.* not substitutable, on at least one ecosystem service.

FOCUS ON ECOSYSTEM SERVICES

Ecosystem services are services provided by biodiversity that enable or facilitate human activities, particularly economic ones.

The ENCORE database lists 21 ecosystem services based on the CICES (Common International Classification of Ecosystem Services) classification. To obtain the definition of the 21 ecosystem services, click on this link.



The GBS assesses the dependency on ecosystem services for direct operations and the supply chain

The dependency scores can be detailed per sector of activity and per ecosystem services.

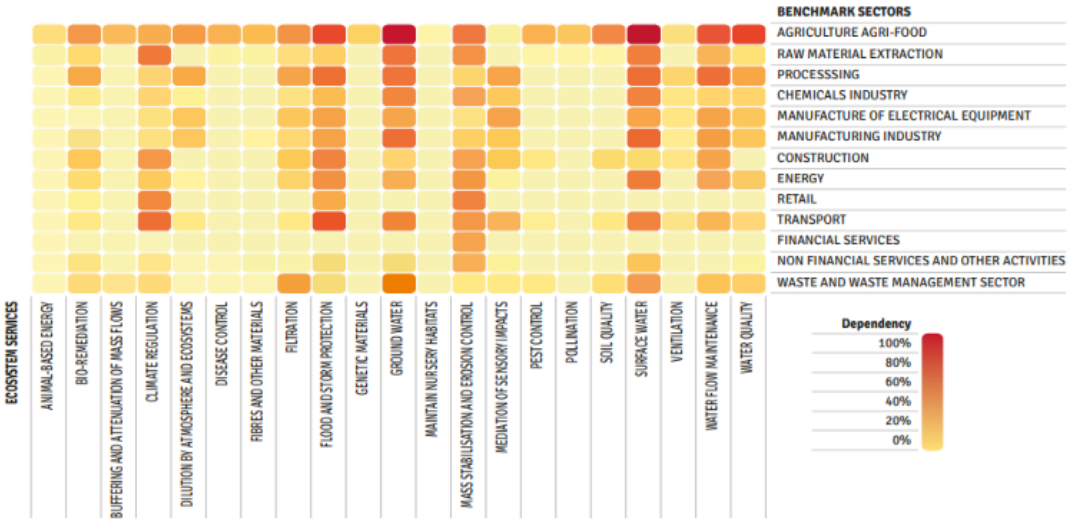


Figure 10: *Scope 1 dependencies for all 13 "benchmark industries" distinguished by CDC Biodiversité*

This methodology was used by European central banks:

DeNederlandscheBank
EUROSYSTEEM

Indebted to Nature, exploring biodiversity risks for the Dutch financial sector, 2020

BANQUE DE FRANCE
EUROSYSTÈME

A "Silent Spring" for the Financial System? Exploring Biodiversity-Related Financial Risks in France, 2021

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The B4B+ Club

Elisa Magueur
Research officer – B4B+ Club

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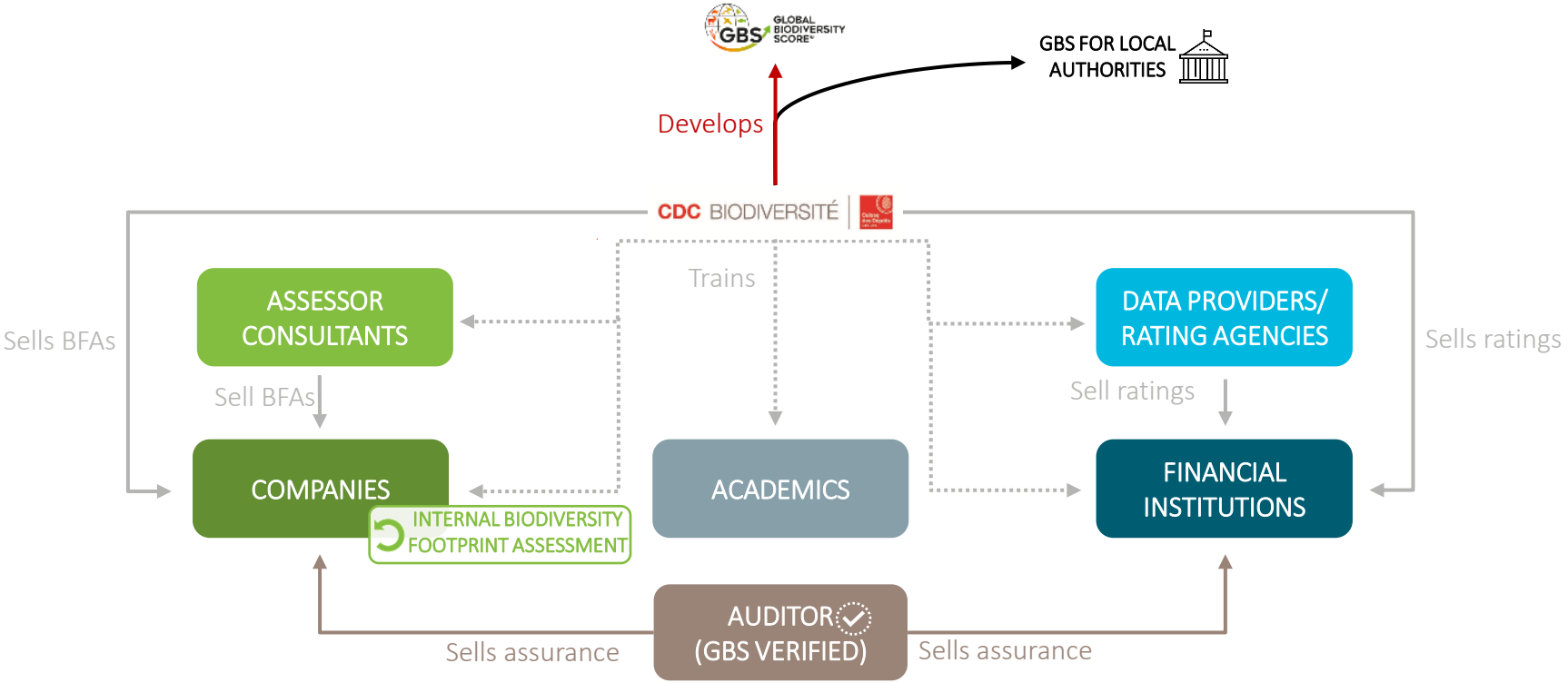
GBS ecosystem



Members and partners of the B4B+ Club

VALUE CHAIN

almo nature fondazione · CITEO · DECATHLON · EDF · egis · ENGIE · GRTgaz · HERMÈS PARIS · ICADE · INGÉROP · L'ORÉAL · LVMH · orano · Schneider Electric · Société du Grand Paris · SOLVAY · TOTAL · 3F Groupe ActionLogement

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B4B+ Club: Goals

> Goals of the B4B+ Club

- Understand how biodiversity footprint assessment tools can serve **corporate decisions**, **investment decisions** and **external reporting**.
- Anticipate **financial, regulatory and market developments** with regard to the reduction of the biodiversity footprint
- **Ensure the adaptation** of the GBS to the constraints and needs of companies and allow its implementation through **case studies**
- Keep companies informed about the assessment of the biodiversity footprint through the intervention of **external experts** and **regular bibliographic monitoring**
- Assist in carrying out biodiversity footprint assessments via **technical support**

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Detailed content of the B4B+ Club

Stakeholders ecosystem

- Annual meetings with the members (including distinct working groups for consultants, financial institutions and value chain)
- Network of businesses and experts on biodiversity footprinting
- Sharing best practice and feedback

Literature review

- Regular literature updates on biodiversity footprint assessment
- Presentation of GBS upgrades and new developments

Tool and capacity building

- Technical support via webinars and telephone (5 h of individual support included)
- Possibility of having a case study (starting at EUR 7500 excluding VAT)
- Priority access to training courses and discount for the training "Fundamentals of biodiversity footprint" (-20%)

Included trademarks licence: 1 licence for internal use or 2 nominative licences for commercial use

New working groups to be launched in 2023:

New in 2023

- Biodiversity credits working group
- Sectoral working groups (Energy utilities, Textiles)

Case studies

Do not hesitate to reach out to us if you have any innovative topic for a case study (invasive alien species, overexploitation – or « typical » case studies).

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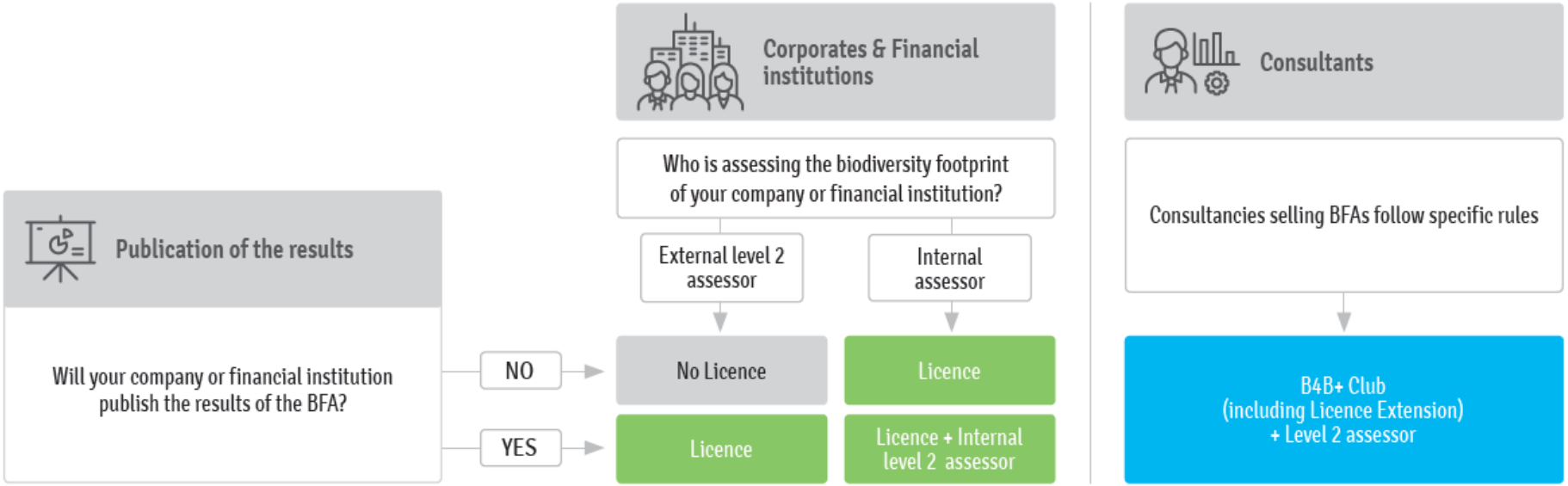
B4B+ Club fee schedule

B4B+Club fee schedule	Fee (EUR, excl. VAT)
Basic membership (including access to 1 working group (WG) + 1 plenary)	€8,500
Fee per additional WG:	€1,500
Membership: 2 WG + 1 plenary	€10,000
Membership: 3 WG + 1 plenary	€11,500
Membership: 4 WG + 1 plenary	€13,000
Discount if the subscription includes the biodiversity footprinting working group: €500	
Discount for a membership of 3 years or more: €500 (cumulative with the previous discount)	

GBS's licences



License fee for investors and companies (out of the B4B+ Club) : 1500€ excl. VAT/ year

B4B+ Club: Technical support

> The technical support via the B4B+ Club

- The GBS being in constant development, technical problems may occur. B4B+ members have access to **technical support**, via a quarterly **webinar** and by **phone**

- CDC Biodiversité will also ensure that software problems that make it impossible to calculate impacts are resolved within one working week

- Please be aware that the technical support is limited to users running Windows and using Microsoft Excel.

Tickets: a ticket system has been set up to answer questions from Club B4B+ members
→ 5h per year of support included

Technical support webinars

- Technical support webinars are held 5-6 times a year
- It is also possible to request individual times for confidential matters

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Assessing the biodiversity footprint of companies and financial assets

Ask your questions on Mentimeter

Do you think that your company might be interested in joining the Club of Business for Positive Biodiversity (B4B+ Club)?

Go to www.menti.com and enter the code: 8146 8212

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Biodiversity footprint assessments

Amandine Kemmel
Research officer - BFA for companies

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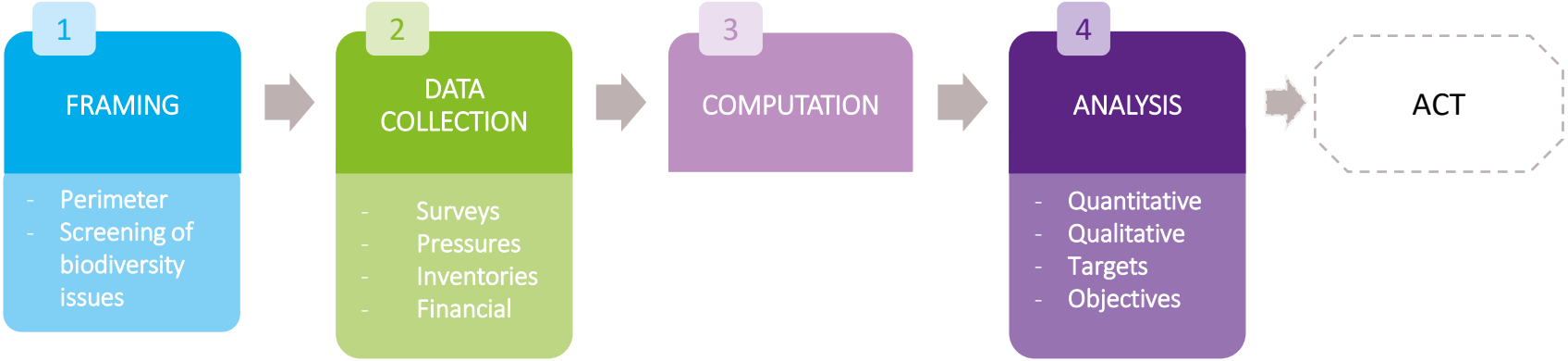
CDC BIODIVERSITÉ

Main steps of a biodiversity footprint assessment (BFA)

A GBS-based Biodiversity Footprint Assessment follows 4 steps:



After that, and in line with the Science Based Targets Network (SBTN)'s framework, companies can **Act** to avoid and reduce their impact on biodiversity. They can also regenerate and restore ecosystems or contribute to system-wide change (transform) [1].
Finally, companies can **monitor** their biodiversity footprint and observe how their actions contribute to align with a trajectory beneficial to biodiversity[2].

[1]Corresponding to Step 4 "Act" : avoid, reduce, restore & regenerate, transform (from the SBTN's framework)
[2]Corresponding to Step 5 "Track" : monitor, report, verify (from the SBTN's framework)

The GBS can use a very wide range of data inputs, with a varying quality

Generic data ⟶ More qualitative data for the GBS

General	Products	Raw materials *purchased and/or produced amounts (t)*	Physical flows	Pressures
Financial : purchases and turnover ★ ☁	**Transformed products:** purchased and/or produced amounts in LCA functional unit (kg, t, m^3…), ☁	**Crops :** each crop (wheat, maize…) and location of origin ☁	**Greenhouse gas:** emissions (t) of each gas ★ ☁	**Land use:** surfaces (ha) occupied and transformed per GLOBIO category (urban area, natural forest…) and location of the surfaces ★
	Electricity: kWh of electricity consumed (only in GBS 1.4.0 with an ecoinvent licence) ☁	**Metals and minerals:** each metal or mineral and location of origin ☁	**Hydrological disturbance:** volumes (m^3) of withdrawn water (and location of catchment) and volumes (m^3) of consummed water ★ ☁	**Eutrophication:** concentrations of emitted phosphorus and nitrogen and location of emissions
		Woodlog: each wood type (hardwood/softwood) and location of origin ☁	**Ecotoxicity:** emissions (kg) of ecotoxic substances and emission areas (air, soil…)	
		Livestock: each animal product (eggs, meat, milk…) and location of origin ☁	**Eutrophication:** amounts (kg) of emitted phosphorus and nitrogen and location of emissions	
		Grass: grazed grass and location of orign ☁		
		Oil & gas: oil and gas and location of consumption ☁		

Overview of all input data currently used in the GBS: some will not be required, depending on the project

★ Minimum data required for the assessment

☁ Data also collected for the carbon footprint (or outputs from the carbon footprint)

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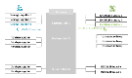
A biodiversity footprint assessment following SBTN recommendations

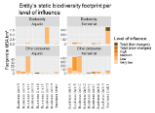
The SBTN **methods, tools and guidance are under development** and the GBS offers **partial elements to be improved, on ecological integrity** (the SBTN makes no representation that the tools presented here will be appropriate to setting an SBT for nature when SBTN's methods are complete).

1 Assess

- Sector-level materiality assessment 
- Value chain hotspot assessment 
- Company-level refinement 

→ Overview at sectoral-level
→ Locate impacts and dependencies in the value chain
→ Identify major impacts of the company

2 Interpret Prioritize

- Interpret 
- Prioritize 

→ Interpret and understand impacts
→ Identify the location of the impacts
→ Identify levels of influence, across the value chain
→ Prioritize actions

3 Measure Set Disclose

- Measure baseline
- Set targets
- Disclose

Experimental explorations, which will be improved when SBTN's recommendations are available

All figures and results in illustrations are fictitious

The results can also be put into perspective

Comparison to global orders of magnitude and translation into area equivalents

Scope 1 – Terrestrial impact intensities

Terrestrial Dynamic: 2 MSA.m²/k€

Loss equivalent to the area of Monaco city for each billion € of turnover

Terrestrial Static: 400 MSA.m²/k€

Loss equivalent to the area of 4 times Paris for each billion € of turnover

Global impacts

Terrestrial Dynamic: 300 000 MSA.km²

Loss equivalent to the area of Germany every year

Terrestrial Static: 46 000 000 MSA.km²

Loss equivalent to the area of Europe, North America and Oceania combined

Aquatic Static: 2 600 000 MSA.km²

Loss equivalent to the area of North American Great Lakes

CDC Biodiversité is developing industry benchmarks to help the assessment of companies' biodiversity performance

First version of sectoral **benchmark sheets** for the industries of **AGRICULTURE & AGRIFOOD** and **CHEMICALS** published early november 2021.
The benchmark sheet for the **RAW MATERIAL EXTRACTION** sector is under consultation

Benchmark sheets:
- Agriculture & Agrifood [link]
- Chemicals [link]
- Construction [link]
- Technical annex [link]

For **more information**: [link]

Sectors	Status	High-priority sectors targeted by the National Biodiversity Action Plan
Agriculture Agri-food	Published	X
Raw material extraction	Under consultation	
Construction sector	Under development	X
Chemicals industry	Published	X
Energy (production and supply of electricity)	Under development	X
Manufacture of electrical equipment	Under development	
Manufacturing industry		
Distribution sector		
Waste and waste management sector		
Transport		
Financial services		
Non-financial services and other activities		
Processing		

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Industry sectors are addressed gradually in the GBS

According to the development of the GBS and the publication of benchmark factsheets, industry sectors can be prioritized and some of them may be more complex to address with the GBS.

Mature sectors, with high impacts	Intermediate sectors	Complex sectors, with lower impacts
• Raw materials extraction • Agriculture & Agri-Food • Energy • Electrical and electronic equipment	• Chemicals & Cosmetics • Textile industry • Processing • Transport • Manufacturing industry	• Distribution • Building sector • Waste and waste management • Non financial services • Financial services • Consulting • Audit • Media

Terms and conditions of a biodiversity footprint assessment with the GBS

Duration and budget of each biodiversity footprint assessment vary according to different criteria:

- ❑ Type of assessment conducted:
  - Screening of impacts with financial data (+ possibly GHG emissions and/or land use in Scope 1)
  - Biodiversity footprint assessment (robust assumptions and more complete data)
- ❑ Assessed perimeter
- ❑ Addressed sectors
- ❑ Quality of the data available:
  - Format adapted or not to the GBS nomenclature
  - Quantity of missing data and complexity of the assumptions to be applied
- ❑ Reporting levels for the results and analysis (in general, 1 to 5)
- ❑ Analysis of reduction actions with trajectory to 2050 (generally 3 to 4 actions)

Additional options:

- ❑ Elements according to SBTN's recommendations, on ecological integrity
- ❑ Specific developments of GBS modules or impact factors

Duration : **3 to 6 months**

Screening of impacts:
28 to 56 k€ (excl. VAT)

Relatively simple cases:
37 to 68 k€ (excl. VAT)

Intermediate cases:
53 to 105 k€ (excl. VAT)

Relatively complex cases:
84 to 158 k€ (excl. VAT)

For more information: gbs@cdc-biodiversite.fr

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More than 40 assessments realised or undergoing, by January 2023

COMPANY	SECTOR	ASSESSMENT	ASSESSORS	PUBLIC RESULTS	YEAR OF ASSESSMENT
2020 – 2 companies					
Schneider Electric	Electrical and electronic equipment	Schneider Electric's end to end Biodiversity Footprint Assessment #1	CDC Biodiversité, PRé sustainability	White paper - Sept. 2020	2020
Decathlon	Distribution sector	Biodiversity Footprint Assessment #1	Decathlon	No	2020
2021 – 23 companies					
Vattenfall	Energy (production and supply of electricity)	Assessment of Vattenfall biodiversity footprint in line with the SBTN's guidance #1	CDC Biodiversité, Deloitte	No	2021
Nestlé Waters France	Agriculture and Agri-Food	Nestlé Waters 4 brands Biodiversity Footprint Assessment #1	CDC Biodiversité, TBC BioPerf.biz	No	2021
Hermès International	Manufacturing industry	Biodiversity Footprint Assessment #1	CDC Biodiversité, WWF	Document d'Enregistrement Universel 2021 (p155)	2021
Almo Nature Benefit SpA	Agriculture and Agri-Food	Benchmark report for the cat & dog pet food industry	CDC Biodiversité,	No	2021
Adeo	Distribution sector	Biodiversity Footprint Assessment #1	B&L	No	2021
Agrifood company	Agriculture and Agri-Food	Sector level materiality assessment #1	Utopies	No	2021
…					
2022 – 17 companies					
Uniper	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	CDC Biodiversité, TBC,	No	2022
Fortum	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	CDC Biodiversité, TBC,	No	2022
Chloé	Manufacturing industry	Biodiversity Footprint Assessment #1	CDC Biodiversité, ,	No	2022
…					
2023 – 1 company					
Schneider Electric	Electrical and electronic equipment		CDC Biodiversité,	No	2023

More than 40 assessments realised or undergoing, by January 2023

COMPANY	SECTOR	ASSESSMENT	ASSESSORS	PUBLIC RESULTS	YEAR OF ASSESSMENT
2021 – 23 companies					
Food service company	Agriculture and Agri-Food	Sector level materiality assessment #1	Utopies,	No	2021
Engie	Energy (production and supply of electricity)	Sector level materiality assessment #1	Utopies,	No	2021
UTMB (Ultra Trail du Mont Blanc)	Non financial services and other activities	Sector level materiality assessment #1	Utopies,	No	2021
ADEME	Non financial services and other activities	Biodiversity Footprint Assessment on pilot sites	CDC Biodiversité, Camille Accolas	No	2021-2022
La Française des Jeux	Non financial services and other activities	Case study on gaming materials	CDC Biodiversité, with partnership of FSC,	No	2021-2022
Multinational Leisure company	Non financial services and other activities	Biodiversity Footprint Assessment #1	Biodiv'Corp	No	2021-2022
Picard	Agriculture and Agri-Food	Biodiversity Footprint Assessment #1	Biodiv'Corp	No	2021-2022
TSE (Third Step Energy)	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	Biodiv'Corp	No	2021-2022
Charcoal company	Processing	Biodiversity Footprint Assessment #1	Blooming	No	2021-2022
Energy company #1	Raw materials extraction	Preliminary study	Blooming	No	2021-2022
Multinational professional services company	Non financial services and other activities	Sector level materiality assessment	TBC	No	2021-2022
Nestlé Waters UK	Agriculture and Agri-Food	Biodiversity Footprint Assessment #1	TBC	No	2021-2022
Telecommunication company	Non financial services and other activities	Biodiversity Footprint Assessment #1	TBC	No	2021-2022
Retailer company	Agriculture and Agri-Food	Sector level materiality assessment #1	TBC	No	2021-2022
Technology company #1	Non financial services and other activities	Sector level materiality assessment #1	TBC	No	2021-2022
Technology company #2	Non financial services and other activities	Sector level materiality assessment #1	TBC	No	2021-2022
Energy company #2	Energy (production and supply of electricity)	Case study on pilot sites	TBC	No	2021-2022

More than 40 assessments realised or undergoing, by January 2023

COMPANY	SECTOR	ASSESSMENT	ASSESSORS	PUBLIC RESULTS	YEAR OF ASSESSMENT
2022 – 17 companies					
Uniper	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	CDC Biodiversité, TBC,	No	2022
Fortum	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	CDC Biodiversité, TBC,	No	2022
Chloé	Manufacturing industry	Biodiversity Footprint Assessment #1	CDC Biodiversité, ,	No	2022
Société du Grand Paris	Building sector	Biodiversity Footprint Assessment #1	CDC Biodiversité, ,	No	2022
Groupement Les Mousquetaires	Distribution sector	Biodiversity Footprint Assessment #1	Biodiv'Corp	No	2022
Energy company #3	Energy (production and supply of electricity)	Biodiversity Footprint Assessement #1	BioPerf.biz,B&L	No	2022
GGL Group	Building sector	Biodiversity Footprint Assessment #1	Blooming,	No	2022
Decathlon	Distribution sector	Biodiversity Footprint Assessment #2	Decathlon,	DPEF 2021	2022
Food company	Agriculture and Agri-Food	Biodiversity Footprint Assessment #1	TBC,	No	2022
Real estate company	Non financial services and other activities	Biodiversity Footprint Assessment #1	TBC,	No	2022
Renewable energy company	Energy (production and supply of electricity)	Biodiversity Footprint Assessment #1	TBC,	No	2022
Cosmetics company #2	Chemicals industry	Biodiversity Footprint Assessment #1	Utopies,	No	2022
Building company	Building sector	Biodiversity Footprint Assessment #1	Utopies,	No	2022
Transportation company	Transport	Biodiversity Footprint Assessment #1	Utopies,	No	2022
Legrand	Electrical and electronic equipment	Biodiversity Footprint Assessment #1	CDC Biodiversité, I Care,	No	2022
Fnac Darty	Distribution sector	Sector level materiality assessment #1	CDC Biodiversité, ,	No	2022
Orano	Raw materials extraction	Biodiversity Footprint Assessment #1			
2023 – 1 company					
Schneider Electric	Electrical and electronic equipment	Biodiversity Footprint Assessment #2	CDC Biodiversité,	No	2023

Who can assess the biodiversity footprint of companies ?

The GBS team from CDC Biodiversité and **GBS-trained assessors** can help to conduct your biodiversity footprint assessment.

See the list or GBS-trained assessors on CDC Biodiversité's website

Jeanne Barreyre	**Atos**
Théophile Bellouard	**Axa Climate**
Sylvain Boucherand	**B&L évolution SCOP EC**
Véronique Dham	**BiodivCorp**
Olivier Schär	**BioPerf.biz**
Kevin Mozas	**Blooming**
Alexis Costes	**Carbone 4**
Arthur Pivin	**Carbone 4**
Eliette Verdier	**I Care & Consult**

TNFD & proposals for financial institutions

Vincent Guénon
Research officer – GBS Finance

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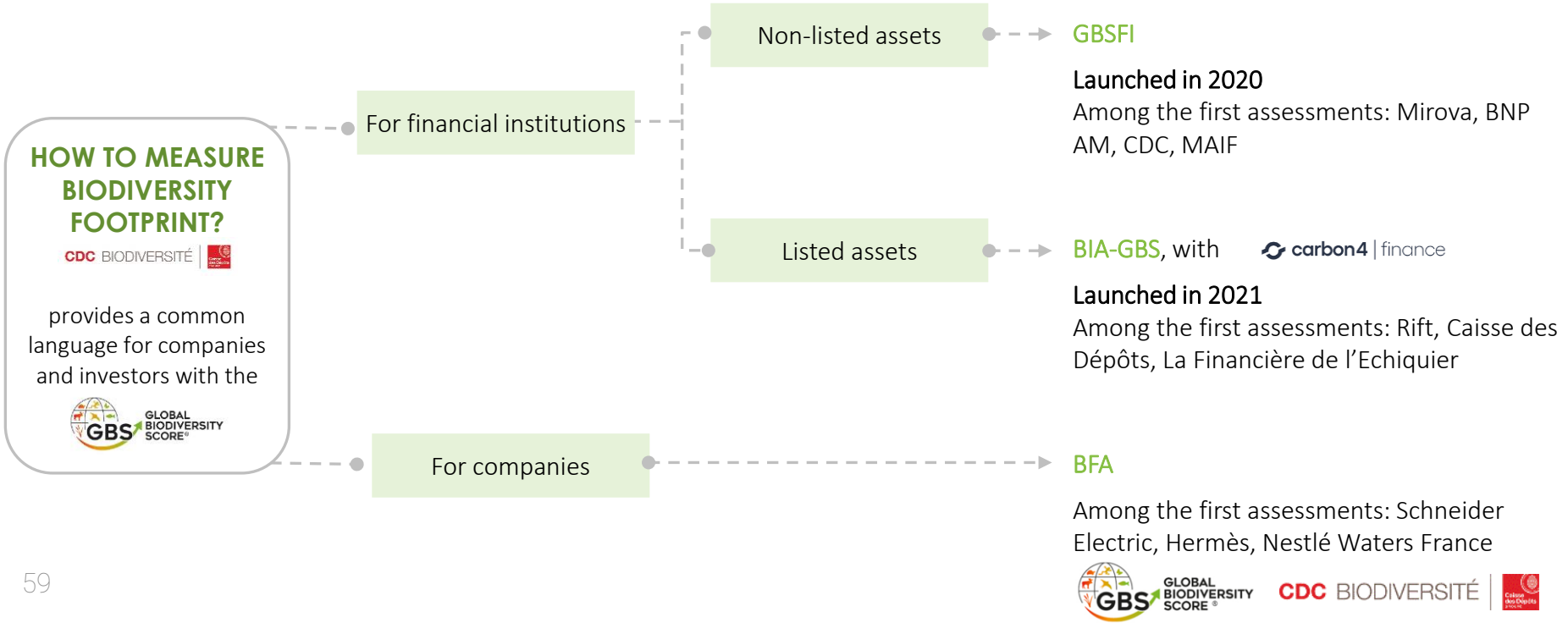
GBS proposals for biodiversity footprint assessment

> The GBS allows companies and investors to assess their biodiversity footprint



Regulatory context

	FOR COMPANIES		FOR FINANCIAL INSTITUTIONS	
In Europe	*Until 2021* NFRD Corporate reporting obligations	*Since 2021* CSRD Increased requirements and alignment of reporting with the taxonomy, larger number of companies concerned	*2021 (2023 for biodiversity)* European Taxonomy Ranking of sustainable sectors according to six categories, including biodiversity	*Since 2021* SFDR Transparency obligations on financial products and reporting
To be reported		Impacts and dependencies on biodiversity	Publication of the share of sustainable investment	% of investments in companies whose sites/operations are located in/near biodiversity sensitive areas
In France	DPEF	To be defined	Article 173 (2015) then Article 29 of the Loi TEC (2021)	
To be reported			Physical & transition risk, alignment of investment portfolios with biodiversity targets	

Assets covered by the GBS

Asset	How to study it?
Listed shares and bonds	Turnkey with BIA-GBS
Private equity, infrastructure, real estate	CDC Biodiversité's customised consultancy services
Other assets	Not covered to date, contact us if needed

GBS for listed assets– BIA-GBS

The BIA-GBS database was created by CDC Biodiversité and Carbon4 Finance, an environmental data expert.

Launched in **July 2021**

Goals:

- Measure the **impacts** of investment portfolios on biodiversity
- Feed the **reporting** of financial institutions on biodiversity

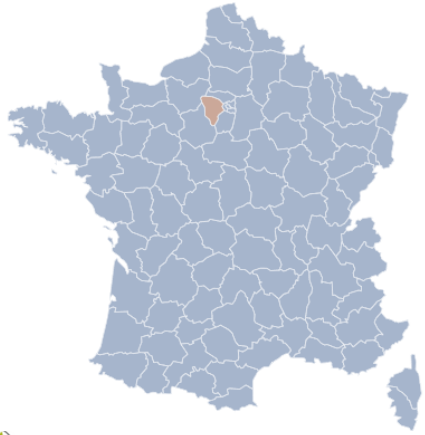
Coverage:

- **Listed shares and bonds**
- **Sovereign bonds**

Among the **first users**:

- La Banque Postale Asset Management
- MAIF (see example)
- Caisse des Dépôts GDA
- La Financière de l'échiquier
- Vontobel Asset Management (USA)…

The activities of the organisations financed by MAIF have a static terrestrial impact of 2,008 MSA.km², which is almost equivalent to the artificialization of the surface of the Yvelines department. In addition, these activities contributed to a new (dynamic) terrestrial impact over the year of 58 MSA.km², which represents half of Paris intra-muros.

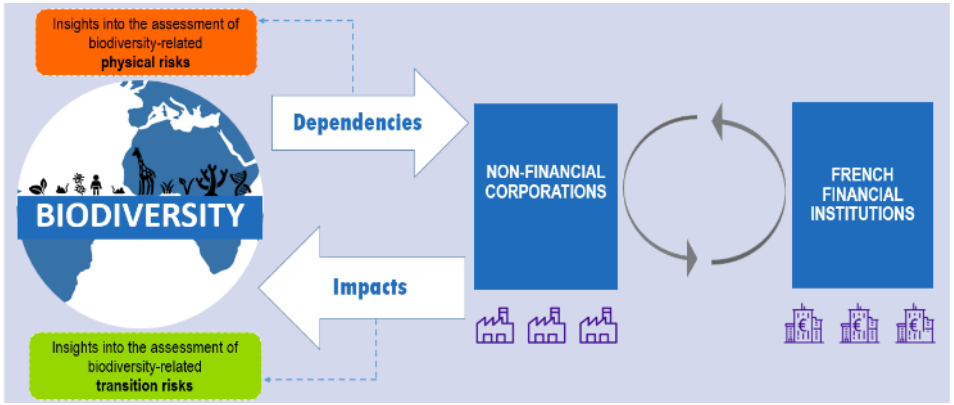


Source: MAIF

The GBS follows the double-materiality approach, in line with the French article 29 & TNFD

The principle of double-materiality consists in the study of physical and transition risks. It has been adopted in France by Article 29 of the LEC law.

	Methodology	Deliverable
Transition risk	Measuring the impact of the portfolio on biodiversity For listed assets: BIA-GBS For unlisted assets: GBS FI consulting service	Impact in MSA.km²
Physical risk	Measuring the portfolio's dependence on ecosystem services For listed assets: BIA-GBS x ENCORE For unlisted assets: GBS FI consulting service	Dependency score in %



Svartzman et al, 2021

The LEAP process of the TNFD and BIA-GBS

Locate
the interface with nature

L1: Business footprint

L2: Interface with nature

L3: Priority location identification

L4: Priority sector identification

To date, BIA-GBS provides the impacts and the dependencies for the whole portfolio and therefore skip the "L". The use of asset-based data would allow BIA-GBS to deepdive into the "L".

Evaluate
dependencies & impacts

E1: ID of relevant environmental assets and ecosystem services

E2: ID of dependencies & impacts

E3: Dependency analysis

E4: Impact analysis

Already feasible with BIA-GBS

Assess
material risks & opportunities

A1: Risk and opportunity identification

A2: Existing risks mitigation & opportunity management

A3: Additional risks mitigation & risk and opportunity management

A4: Risk and opportunity materiality assessment

Partially feasible – under development

Prepare
to respond & report

P1: Strategy & resource allocations

P2: Performance management

P3: Reporting

P4: Presentation

Partially feasible – under development

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Assessing the biodiversity footprint of companies and financial assets

Ask your questions on Mentimeter

Would you be interested in the GBS's proposals for financial institutions ?

Go to www.menti.com and enter the code: 8146 8212

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GBS Trainings

Elisa Magueur
Research officer – B4B+ Club

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CDC Biodiversité offers 4 trainings

Fundamentals of biodiversity footprint

Understanding **biodiversity erosion challenges** and the **key concepts of footprint assessment**

Biodiversity footprint & reporting for financial institutions

Getting to know the **regulatory framework**, related **risks** and **tools and initiatives for the financial sector**

GBS training Level 1

Introduction to the GBS tool and to Biodiversity Footprint Assessments

GBS training Level 2

Mastering the tool and conducting Biodiversity Footprint Assessments

Pre-register here

Possibility of intra-company trainings

2 trainings dedicated to the GBS tool

GBS training Level 1

Introduction to the GBS tool and to Biodiversity Footprint Assessments

- **1 day** (7h)
- 15 trainees
- **Next sessions :** Feb. 6&7 (Eng); April 6 (Fr) ; June 6&7 June (Eng)
- **€ 1 600 / trainee (VAT excl.)**

GBS training Level 2

Mastering the tool and conducting Biodiversity Footprint Assessments

- **Level 1 training + license required**
- **2 days** (14 h + ~ 1 day for personal work)
- 8 trainees
- **Next sessions :** Feb. 13, 14, 15, 16 (Eng); April 18&19 (Fr); June 19, 20, 21, 22 (Eng)
- **€ 3 500 € / trainee (VAT excl.)**

TRAINED TO DATE

Level 1: 139 trainees

Level 2: 78 trainees

Pre-register here

New 2022 training

Fundamentals of biodiversity footprint

OBJECTIVE

Understand the stakes and key concepts of biodiversity footprint assessment

CONTENT

- Understand the causes and stakes around biodiversity loss
- Get familiar with the international and regulatory frameworks
- Present the main concepts involved in biodiversity footprinting (metrics, accounting, existing tools)
- Introduce how companies can set quantified biodiversity targets and reverse the trend of biodiversity loss

FOR WHOM

Anyone willing to gain fundamental knowledge on biodiversity footprint assessment and the current international and regulatory frameworks

PRACTICAL INFORMATION

Blended learning:
- Online autonomous course
- Live class: Case study (1.5 hrs)

Date: March 30th | June 1st

Price: € 500 per person (VAT excl.)
(€400 for B4B+ Club members)

PREREQUISITES

- Knowledge related to biodiversity & ecosystem services
- English spoken

Pre-register here

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GLOBAL BIODIVERSITY SCORE

Assessing the biodiversity footprint of companies and financial assets

Ask your questions on Mentimeter

Would you be interested in a training to better understand the fundamentals of the biodiversity footprint and use the GBS ? (Level 1/Level 2)

Go to www.menti.com and enter the code: 8146 8212

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New 2022 training

Biodiversity footprint & reporting for financial institutions

OBJECTIVE

Get familiar with biodiversity footprint framework and regulations, related risks, and tools and initiatives of the financial sector regarding biodiversity

CONTENT

- Get familiar with the biodiversity footprint framework and key players for financial institutions
- Understand biodiversity footprint regulations for financial institutions (European Taxonomy, TNFD, SFDR, French Article 29,…)
- Learn more about the double materiality approach
- Discover the tools and initiatives of the financial sector regarding biodiversity footprint

FOR WHOM

Anyone willing to understand the stakeholders, regulation, and initiatives regarding biodiversity footprint for financial institutions

PRACTICAL INFORMATION

Format:
- 2 half-days (2*3h30)
- Online class with biodiversity and GBS experts working with financial institution

Date: April 12 & 13 (PM) | June 13 & 14 (PM)

Group: 8 participants for effective learning

Price: €1600 per person (VAT excl.)

PREREQUISITES

- Validation of Fundamentals of biodiversity footprint training
- English spoken

Pre-register here

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GLOBAL BIODIVERSITY SCORE

Assessing the biodiversity footprint of companies and financial assets

Ask your questions on Mentimeter

Would you be interested in the training "Biodiversity footprint & reporting for financial institutions"?

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Towards a common standard for biodiversity footprint

Elisa Magueur
Research officer – B4B+ Club

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Main convergence and reporting frameworks

> CDC Biodiversité and the GBS are aligned and involved in the major reporting and convergence frameworks

REPORTING

Taskforce on Nature-related Financial Disclosures (**TNFD**)

Corporate Sustainability Reporting Directive **(CSRD)**, **EU Green taxonomy** & Sustainable Finance Disclosure Regulation (**SFDR)**

Article 29 of the French Energy and Climate law

METHODOLOGY

European Commission Ecosystem **:**

- Business @ Biodiversity (**B@B**)
- **ALIGN**

Science Based Target Network **(SBTN)**

Align project

Objective: to converge from a technical point of view on these topics, in order to allow companies to have a common vocabulary and to have compatible and coherent tools for different uses

Aligning accounting approaches for nature

2021

2023

Measurement standard

Deliverables:

- Assessment of biodiversity measurement approaches for businesses and financial institutions (Lammerant 2019)
- Biodiversity Measures for Business: Corporate biodiversity measurement and disclosure within the current and future global policy context (UNEP-WCMC 2020)

Biological Diversity Protocol (BD Protocol)

- A protocol providing a common conceptual framework on accounting for biodiversity impacts
- Very promising initiative, the first report was published in March 2021 (consultation report)

Table: Statement of Biodiversity Position for the Cossure project

Assets (A)

Ecosystem accounts	Hectares (ha)	Percentage (%)
Regular grasslands MSA 30%	270	76%
Improved grasslands MSA 60%	87	24%
Total	**357**	100%

Accumulated negative impacts (C)

Ecosystem accounts	Hectares equivalents (MSA.ha)	Percentage (%)
Regular grasslands MSA 30%	189	53%
Improved grasslands MSA 60%	34.8	10%

Accumulated positive impacts (B)

Ecosystem accounts	Hectares equivalents (MSA.ha)	Percentage (%)
Regular grasslands MSA 30%	81	23%
Improved grasslands MSA 60%	52.2	15%
Total	**357**	100%

Example of application of the BD Protocol to a GBS-based assessment (CDC Biodiversité, 2020)

Case study – GRTgaz

Blooming
Businesses and Biodiversity

Pre-study for the assessment of GRTgaz's biodiversity footprint with the Global Biodiversity Score

Speaker :
Kevin MOZAS – Blooming

GRTgaz

CLUB B4B+

26th of January 2023

Blooming in brief

Biodiversity:

- a cross-cutting approach to environmental issues
- an inseparable ally of the economy

Supporting companies in integrating and promoting biodiversity-related issues.

ENTREPRISES ENGAGÉES POUR LA NATURE

Blooming

Our mission

- ✓ That any company can contribute on its own scale to the preservation of biodiversity.
- ✓ Demonstrate to companies their interest in acting
- ✓ Biodiversity knows no borders !

What we do

Instilling

- ✓ Webinars
- ✓ Sector conferences
- ✓ Awareness workshops
- ✓ Business & Biodiversity training

Structuring

- ✓ Risks & Opportunities audits
- ✓ Definition of indicators
- ✓ Biodiversity footprint evaluation
- ✓ Action plans and strategies
- ✓ Extra-financial reporting
- ✓ Commitments, recognitions & labels

Deploying

- ✓ Sites adaptation & renaturation
- ✓ Reduction and compensation of impacts
- ✓ Investment in natural capital

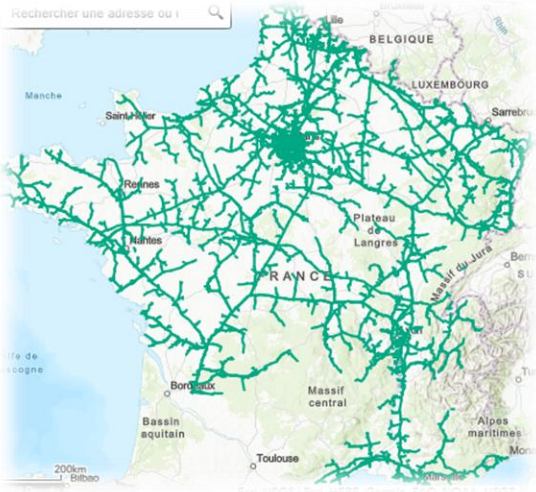
Blooming

GRTgaz in brief

Discreet but important infrastructures

32,500 km of buried pipelines

Nearly 10,000 surface installations

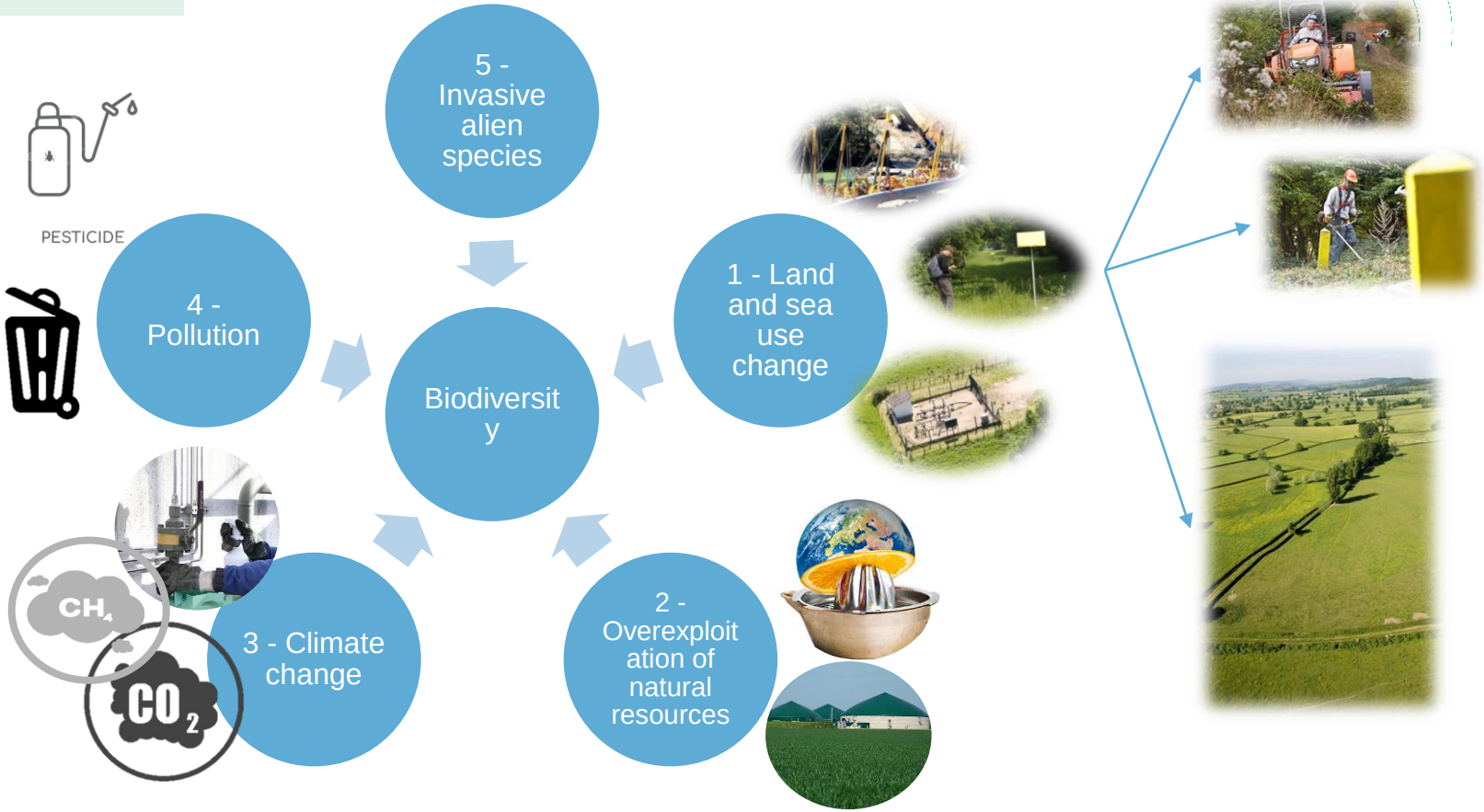


90%

of our pipelines are located in natural or semi-natural environments

GRTgaz in brief

Impacts that we cannot ignore



GRTgaz and the GBS

The challenges of this pre-study

Before embarking on this evaluation, the questions we wanted to address:

- Is the tool adapted to our model (infra linear operator)?
- What data is needed for a footprint measurement, do we have it or what effort is needed to get it?

Context and objectives of the study

GRTgaz is committed to fully integrating the issue of biodiversity into its CSR strategy
Intention to measure the footprint of its activities on biodiversity
Need to evaluate to what extent the GBS® is adapted to the activities carried out by GRTgaz
Need to qualify the framework in which the assessment can be performed

Methodology

1- INTERVIEWS	• Organizational analysis & scope definition • Identification of the main sources of impacts • Establishing data availability
2- DATA EVALUATION	• Classification of data by typology • Evaluation of their exploitability in the GBS • Quantification of their exploitability rates, required treatment levels and accuracy
3- RECOMMENDATIONS	• Modeling • Characterization • Collection

Analysis of available data

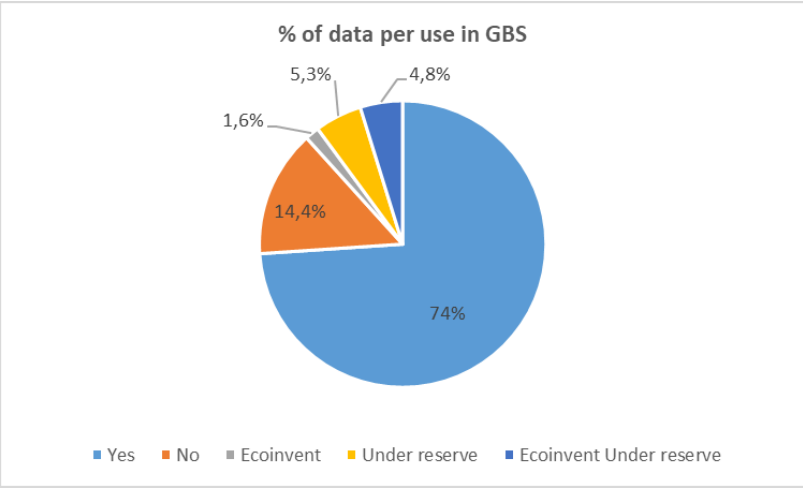
- Segmented according to their associated source of impact, the data were classified :
  - by degree of exploitability
  - by GBS files concerned
  - by corresponding GBS impact factors

- Comprehensive analysis file (188 lines of data)

			POSSIBLITE D'UTILISATION ET NIVEAU DE TRAITEMENT NECESSAIRE DES DONNEES + FICHIERS ET FACTEURS D'IMPACTS GBS CORRESPONDANTS					POSSIBLITE D'UTILISATION VIA ECOINVENT		
Sources d'impacts	Données		Utilisable GBS	Condition d'utilisatio	Traitement / Modélisation	Fichiers GBS	Facteurs d'impacts	Utilisable	Classe/produc t	Facteurs Ecoinvent
Consommations de carburants	Quantité d'essence consommée	*Litres*	Oui	3- Après modélisation	- Assimilation au pétrole - Conversion litres en tonnes	5- GBS_Commo_Oil&Gas_data-collection	Crude oil, at consumer	n.a.		
		teqCO 2	Oui	1- En l'état	-	8- GBS_Pressure_Climate-Change_data-collection	Émissions en teqCO2	n.a.		
	Quantité de diesel consommé	*Litres*	Oui	3- Après modélisation	- Assimilation au pétrole - Conversion litres en tonnes	5- GBS_Commo_Oil&Gas_data-collection	Crude oil, at consumer	n.a.		
		teqCO 2	Oui	1- En l'état	-	8- GBS_Pressure_Climate-Change_data-collection	Émissions en teqCO2	n.a.		
	Quantité de GNV consommée (hors bioGNV)	*kg*	Oui	3- Après modélisation	- Assimilation au gaz naturel - Conversion litres en tonnes	5- GBS_Commo_Oil&Gas_data-collection	Natural gas, at consumer	n.a.		
		teqCO 2	Oui	1- En l'état	-	8- GBS_Pressure_Climate-Change_data-collection	Émissions en teqCO2	n.a.		
	Quantité de bioGNV consommée	*kg*	Non	4- n.a.	-	n.a.		non		
		teqCO 2	Oui	1- En l'état	-	8- GBS_Pressure_Climate-Change_data-collection	Émissions en teqCO2	n.a.		
Consommation de produits chimiques	Electrode	contenants	Sous réserve	2- Après traitement	Obtention du montant d'achats	1- GBS_Financial_Information_data-collection	Manufacture of electrical machinery and apparatus n.e.c. (31)	Oui	Classe	42950: Wire, rods, tubes, plates, electrodes and similar products, of bas metal or of metal carbides, coated or
	TEG/MEG	contenants	Oui	2- Après traitement	Conversion en tonnes	3- GBS_Pressure_Ecotoxicity_data-collection	Triethylene glycol + Diethylene glycol monomethyl ether	Oui	Product	triethylene glycol + ethylene glycol monoethyl ether
	Isopropanol	contenants	Oui	2- Après traitement	Conversion en tonnes	3- GBS_Pressure_Ecotoxicity_data-collection	Isopropanol (L371)	n.a.		
	Produit_atelier	contenants	Ecoinvent Sous réserve	3- Après modélisation	Sous réserve de détermination des facteurs Ecoinvent pertinents au sein de la classe identifiée	n.a.	-	TBC	Classe	Soap, cleaning preparations, perfumes and toilet preparations
	Huile	contenants	Oui	2- Après traitement	Conversion en tonnes	7- GBS_Products_data-collection	lubricating oil production, production mix, at plant, technology mix, 100% active substance [Europe]	Oui	Product	lubricating oil
	Graisse	contenants	Sous réserve	2- Après traitement	- Sous-réserve de validtion du proxy "lubricating oil" - Obtention du poids (tonnes)	7- GBS_Products_data-collection	lubricating oil production, production mix, at plant, technology mix, 100% active substance [Europe]	Oui	Product	lubricating oil

Blooming

Results: data exploitablity



Distribution of data by possibility of use in GBS

Datasets	Total data	% of data by use in GBS					
		Yes	Under reserve	Ecoinvent	Ecoinvent under reserve	No	Total
General/Total	188	74%	5%	2%	5%	14%	100%
Land use	5	100%	0%	0%	0%	0%	100%
Water consumption	4	100%	0%	0%	0%	0%	100%
Gas releases	26	100%	0%	0%	0%	0%	100%
Energy consumption	16	100%	0%	0%	0%	0%	100%
Fuel consumption	8	88%	0%	0%	0%	13%	100%
Consumption of chemical products	18	22%	22%	11%	39%	6%	100%
Consumption of refrigerants	11	91%	0%	9%	0%	0%	100%
Aerial surveillance activities	4	100%	0%	0%	0%	0%	100%
Employee commuting	8	100%	0%	0%	0%	0%	100%
Use of the computer fleet	8	63%	0%	0%	0%	38%	100%
Purchases	20	100%	0%	0%	0%	0%	100%
Waste Inventory	60	50%	10%	0%	3%	37%	100%

Possibilities of use in GBS : details per dataset

- There is a **high level of exploitability** of the data, including those related to the most significant issues.

Example of data not exploitable due to lack of impact factors:

- Cooling liquid consumption (chemical products)
- Non-climate change impacts due to :
  - consumption of Bio-NGV
  - use of email, videoconferencing and cloud

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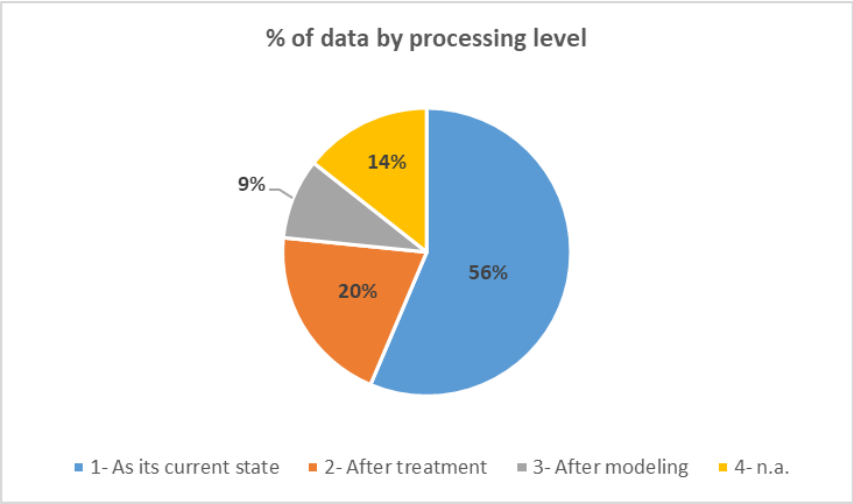
Results: data processing requirement



Distribution of data by condition of use in GBS

Datasets	Total data	% of data by condition of use in GBS				
		As its current state	After treatment	After modeling	n.a.	Total
General/Total	188	57%	20%	9%	14%	100%
Land use	5	20%	20%	60%	0%	100%
Water consumption	4	100%	0%	0%	0%	100%
Gas releases	26	50%	50%	0%	0%	100%
Energy consumption	16	50%	44%	6%	0%	100%
Fuel consumption	8	50%	0%	38%	13%	100%
Consumption of chemical products	18	11%	61%	22%	6%	100%
Consumption of refrigerants	11	64%	36%	0%	0%	100%
Aerial surveillance activities	4	50%	0%	50%	0%	100%
Employee commuting	8	50%	0%	50%	0%	100%
Use of the computer fleet	8	50%	13%	0%	38%	100%
Purchases	20	100%	0%	0%	0%	100%
Waste Inventory	60	63%	0%	0%	37%	100%

Detail by dataset of conditions of use in GBS

- The majority of the data can be used **directly** in the GBS, while a small amount of data, but concerning important issues, requires **modeling**.

Example of data requiring processing or modeling:

- Land use :
  - Surface area of work sites
  - MSA of facilities / easement strips
- Consumption of phytosanitary products by service providers
- Aerial surveillance: conversion of km to fuel

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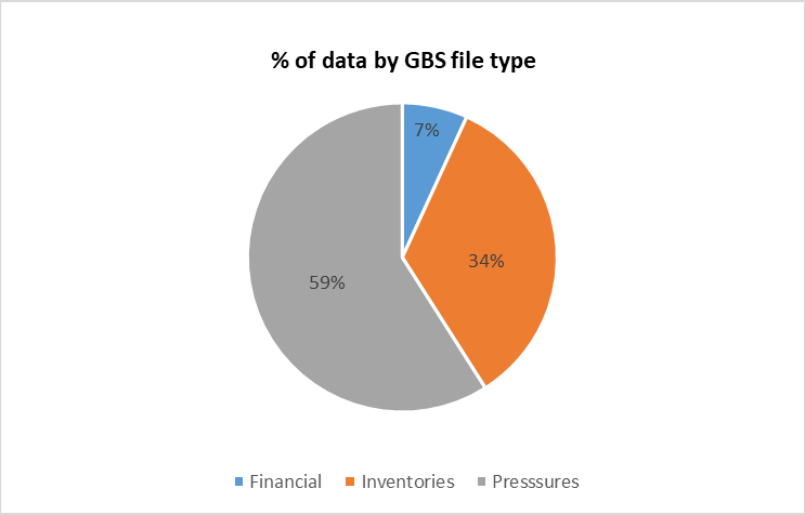
Results: data accuracy



Distribution of data by GBS file type

Datasets	Total data	% de données par type de fichier GBS			
		Financial	Inventories	Pressures	Total
General/Total	161	7%	34%	59%	100%
Land use	5	0%	0%	100%	100%
Water consumption	4	0%	0%	100%	100%
Gas releases	26	0%	50%	50%	100%
Energy consumption	16	0%	50%	50%	100%
Fuel consumption	7	0%	43%	57%	100%
Consumption of chemical products	17	6%	71%	24%	100%
Consumption of refrigerants	11	0%	18%	82%	100%
Aerial surveillance activities	4	0%	50%	50%	100%
Employee commuting	8	0%	50%	50%	100%
Use of the computer fleet	5	0%	20%	80%	100%
Purchases	20	50%	0%	50%	100%
Waste Inventory	38	0%	26%	74%	100%

Distribution of GBS files used per dataset

- The level of accuracy of the input data is globally **very satisfactory**.

Example of data whose accuracy can be improved :

- Metal raw materials (from € to tons)
- « Machinery and equipment » and « Computer and electronic products »

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Recommendations and areas for improvement

Recommendations and areas for improvement regarding the data, issued in terms of :

COLLECTION	Ex.1 : quantity of metallic materials (today in €) Ex.2 : quantities of chemical products (today by type of container)
CHARACTERIZATION	Ex.1 : CAS number of the chemical products Ex.2 : method of waste recycling
MODELING	Ex.1 : MSA level of land under control & GIS use Ex.2 : area of regional work sites (pending actual data collection)

Synthesis

High degree of exploitability of the available data through the GBS

Capacity of the GBS to take into account the specificities of GRTgaz

Accuracy can be improved by adapting the collection process for certain data

Identification of data to be completed or modeled

Dissemination of the subject internally, particularly to data holders

Positive conclusion on the relevance of assessing GRTgaz's biodiversity footprint using the GBS®

Your questions are welcome!

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To finish...

Learn more: our publications (PDF format)

- Global Biodiversity Score: Establishing an ecosystem of stakeholders to measure the biodiversity performance of human activities- 2021 update (2021)

- Global Biodiversity Score: a tool to establish and measure corporate and financial commitments for biodiversity – 2018 technical update (2019)

- Measuring the contributions of business and finance towards the post-2020 global biodiversity framework – 2019 technical update (2020)

- Common ground in biodiversity footprint methodologies for the financial sector – CDC Biodiversité, ASN bank, ACTIAM, Finance in Motion (2018)

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Questions and answers

- **What is the baseline used by the GBS to characterize the status of biodiversity?**

In a GBS assessment, a baseline is chosen to allow an analysis of impacts' evolution (beginning of the assessment period, fixed date in the past)

NB: the MSA does not include a baseline year. MSA = 100% refers to an "undisturbed" ecosystem, not to the state at an earlier date

- **Can both a desert and a rainforest achieve a 100% MSA?**

Yes, but in the future, we plan to introduce weights to take into account the species richness of each biome.

- **Does the GBS consider that turning a pristine forest into an agricultural parcel will have the same impact on a forest in Cambridge as it does on the Atlantic forest in Brazil ?**

Yes, for the same reasons as the previous question. But in the future, we plan to introduce weights to consider the species richness of each biome.

- **Does the GBS consider upstream and downstream impacts ?**

So far, only upstream impact are considered. We plan to add downstream impacts.

- **Was the MSA measured with ecological inventories ?**

Pressure-impact relationships were deducted from a meta-analysis of scientific literature, of which the main articles are ecological inventories. MSA values were then deducted from these inventories.

Questions and answers

- **Are the data and models updated regularly ?**

Yes, GLOBIO data are updated every 4 to 5 years.

- **Does the GBS consider marine biodiversity and invasive species ?**

No, no usable database was found.

- **Are regulatory offsets considered in the GBS ?**

The GBS does not replace existing tools and approaches for the implementation of the regulatory ERC sequence.
The co-benefits of these measures for ordinary biodiversity can be assessed with the GBS, outside the ERC framework.

- **Does the GBS also offer a qualitative assessment of the biodiversity performance of companies?**

Yes, the Biodiversity Footprint Assessments that the GBS will enable foresee a screening phase, going beyond the impacts assessed with the GBS and a qualitative analysis phase.