

# Navigating the landscape of biodiversity measurement tools for business

Organised by the EU Business@Biodiversity Platform as part of the We Value Nature 10-day challenge

Tuesday 16 March from 17:00-18:00h CET

**Welcome from** Lars Müller, Policy Officer at DG Environment, European Commission









#### 10-DAY CHALLENGE

11-24 March 2021

Events and activities for naturally-smarter businesses

















Supporting





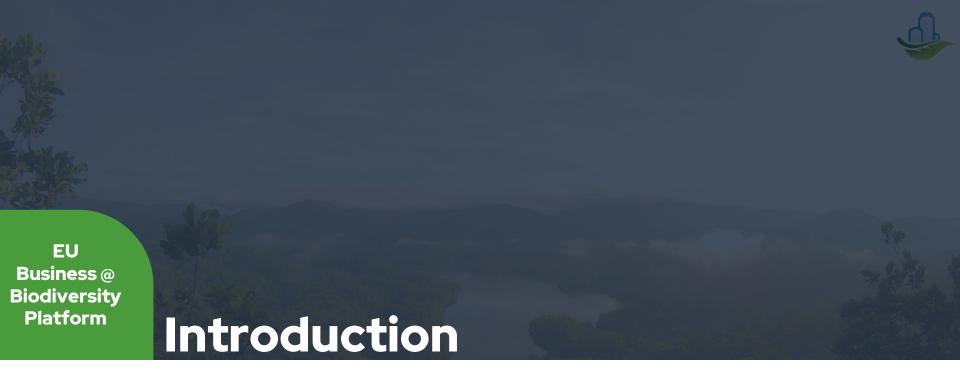
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821303 wevaluenature.eu info@wevaluenature.eu @WeValueNature





## Agenda

- 17:00 17:10 The Update Report 3 on the assessment of biodiversity measurement approaches by businesses
- **17:10 17:20** Reflections based on the quality review of case studies
- 17:20 17:30 Introducing the Biodiversity Guidance Navigation Tool
- **17:30 17:45** The Biodiversity Measurement Navigation Wheel: How does it work?
- **17:45 18:00** Q&A



Johan Lammerant, Methods workstream leader EU B@B Platform and Arcadis

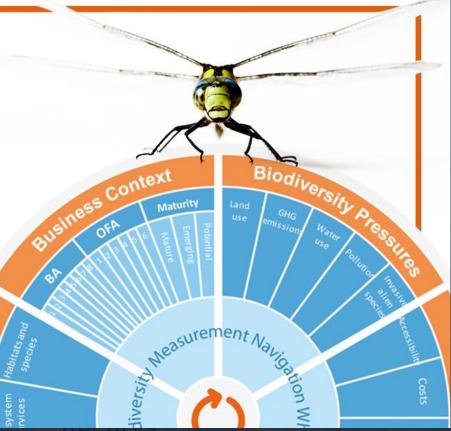






The Update Report 3 on the assessment of biodiversity measurement approaches by businesses and financial Institutions

Johan Lammerant, Methods workstream leader EU B@B Platform and Arcadis



A need for biodiversity measurement approaches, but many questions....



# Trends in the evolving landscape of biodiversity measurement approaches

- Moving towards more scientifically robust approaches
- Being aligned with global biodiversity indicators
- Recognition that the one and only biodiversity indicator doesn't exist; tendency towards dashboard approach
- Moving towards smart combination of tools
- Measurement is one thing, but data collection and stakeholder involvement are essential too
- Linking risks related to ecosystem degradation with financial risk
- increased interest in natural capital accounting approaches

## Assessment and guidance on biodiversity measurement tools and metrics for businesses and financial institutions

#### **EU Business & Biodiversity Platform Update Reports 1** and 2

- Assessment of 10 to 12 biodiversity measurement approaches for businesses and FIs which rely on quantitative indicators that provide information on the significance of impacts on biodiversity, and which are not case-specific
- Completely based on information from tool developers
- Assessment elements: type of **business applications** covered by the tool, methodology and metrics, impact drivers, input data and level of detail / real data or modeling, user friendliness, which sectors, development phase and involved stakeholders, etc.
- Many more company specific measurement and valuation approaches, but out of scope for this assessment







#### Update Report 3 → focus on case studies

16 case studies on how biodiversity is measured by businesses and FI, all being <u>quality reviewed</u> by independent panel of experts! European Currencister Business & Business &

- 1. PBF on wild salmon vs aquaculture salmon
- 2. PBF on shower gel (l'Oréal)
- 3. BFM on Dutch dairy sector
- 4. BFM on chocolate bar (Tony's Chocolonely)
- 5. CBF on a mining company
- 6. CBF on a portfolio of agrifood companies
- 7. LIFE Methodology on a printing company (Posigraf)
- 8. BFFI on portfolio of ASN Bank

- STAR on a nature positive rubber project
- 10. BISI on mining company (Anglo American)
- 11. LafargeHolcim approach on Spanish quarry
- 12. GBS on manufacturing company (Schneider Electric)
- 13. GBS Biodiversity Impact Analysis with C4F
- 14. BNGC on manufacturing company (Alvance Aluminium)
- 15. BIM on retail company (Asda)
- 16. ReCiPe on hand drying systems

SESSMENT OF BIODIVERSITY
ASUREMENT APPROACHES FOR
SINESSES AND FINANCIAL INSTITUTIONS
Business @ Biodiversity Platform

TE REPORT 3









#### Quality reviewed and uniform template

Access the Update Reports on the EU Business @ Biodiversity Platform's website

https://ec.europa.eu/environment/biodiversity/business/workstreams/methods/index\_en.htm

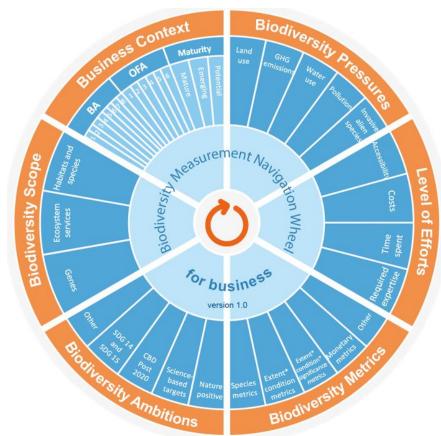
# Update Report 3 → launch of the Biodiversity Measurement Navigation Wheel for businesses v1.0

#### Decision framework based on 6 main criteria

- It offers a 'Fast Track' approach as it allows for considering multiple criteria at once;
- It relies on easy-to-use overview tables full of information on tools;
- It brings in new selection criteria such as information on accessibility, costs and efforts and the maturity level of tools;
- It explicitly highlights the possibility to combine different approaches and metrics,
- It acknowledges the different perspective of the financial sector and made a start with an adapted version for that sector;
- It covers 19 biodiversity measurement approaches;









EU
Business@
Biodiversity
Platform

# Reflections based on the quality review of case studies

Annelisa Grigg, Globalbalance

#### CASE STUDIES QUALITY ASSESSMENT

#### **DEVELOPMENTS**

- •Shift to piloting: real tangible experience and lessons learned
- **Broad range of approaches:** applied across finance, food, cement, mining, manufacturing, and fisheries sectors
- •Increased uptake and understanding of elements of alignment: such as business applications, baselines, boundaries, data inputs etc.
- Recognition and communication of strengths and limitations
- Use by some of confidence indicators
- Recognition of the need to build capacity of users and development of training materials and courses
- Emergence of approaches targeted at asset managers
- Coalescing around a few measures and data sets

#### **CASE STUDIES QUALITY ASSESSMENT**

#### **CHALLENGES**

| OTALLLINGLO                     |   |
|---------------------------------|---|
| Data                            | <ul> <li>gaps and limitations (marine environment, invasive species, reliance on potential<br/>data, quality, monetary values)</li> </ul> |
| Lack of integration             | <ul> <li>separation of issue from other sustainability issues (environmental management<br/>systems, social issues)</li> </ul>            |
| Communication                   | <ul> <li>concepts such as PDF,MSA and complex methodologies are difficult to communicate</li> </ul>                                       |
| Capacity                        | almost all approaches need technical expertise and/or training to apply   |
| Dominance of certain approaches | top-down approaches, pressure based, European   |
| Scope                           | <ul> <li>addressing cumulative impacts (define), treatment of climate change, ecosystem<br/>services /dependency</li> </ul>               |
| Reporting and disclosures       | lack of consistently reported appropriate data  |
| Links                           | combining tools and metrics remains challenging   |

#### CASE STUDIES QUALITY ASSESSMENT

#### WHAT MORE IS NEEDED?

- •More pilots and testing of multiple but linked approaches
- Linking biodiversity assessment to other forms of assessment (social etc.)
- ■Engaging the financial accounting team in house to improve data quality
- Enhance sensitivity to corporate management actions
- Capacity building e.g. of consultants
- •Alignment of key areas of difference (Scope, data etc)
- Better disclosure requirements

"Evaluating the biodiversity impact of a corporate through the lens of a single metric, regardless of its merits, is a limited approach of the reality.

It should be complemented with engagement with the company and qualitative evaluations of its actions and mitigation initiatives."

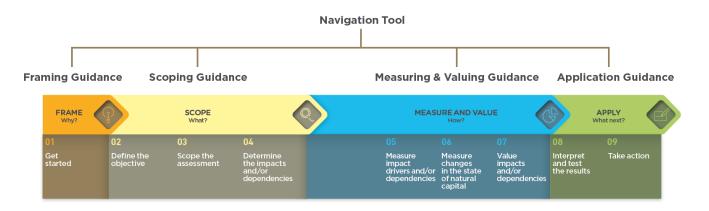


Alison Jones, Capitals Coalition

#### **Biodiversity Guidance Navigation Tool**

- Online tool that **guides** you through a biodiversity-inclusive natural capital assessment
- Follows the steps outlined in the Biodiversity Guidance and the Natural Capital Protocol and suggests tools and methodologies to successfully complete the process

Can be used to include biodiversity in a first-time natural capital assessment, or to incorporate into an existing one.







#### **Navigation Tool**

**₹ PREVIOUS QUESTION** 

FRAME: ACTION 1.2.1

CAPITALS COALITION

Have you familiarized yourself with the basic concepts of biodiversity and natural capital, and understand why assessing biodiversity within a natural capital assessment is useful?



O No / I need more information

SUBMIT



Did you know?

Your progress will be automatically saved. You can leave and finish later on.

FRAME: ACTION 1.2.1

Have you familiarized yourself with the basic concepts of biodiversity and natural capital, and understand why assessing biodiversity within a natural capital assessment is useful?



O No / I need more information

**EDIT ANSWER** 



Did you know?

Your progress will be automatically saved. You can leave and finish later on.

Great! You are ready to move on to the next question.

READ MORE

**NEXT QUESTION** 



No / I need more information

**EDIT ANSWER** 



#### Did you know?

Your progress will be automatically saved. You can leave and finish later on.

#### Biodiversity guidance action 1.2.1

- 1.2.1 Familiarize yourself with the basic concepts of natural capital [and biodiversity]
- a. What is biodiversity and how does it relate to natural capital?

Natural capital is a concept used for describing our relationship with nature. The presence of, and interactions between, natural capital stocks generates a flow of goods and services. These goods and services create value through the benefits they provide to business and society (Natural Capital Coalition 2016).

The flows of benefits from ecosystems to people are often described as ecosystem services (MA 2005). Ecosystem services result from ecosystem function, which describes the flow of energy and materials through ecosystems (IPBES 2019), and is the process by which ecosystems maintain their integrity (MA 2005).

Businesses and financial institutions often already evaluate environmental risk from specific issue perspectives (e.g., energy use, waste, pollution, climate change, natural resource use, and biodiversity). Natural capital encompasses all of these environmental issues and helps to describe how they are interrelated. The application of a natural capital approach builds on the environmental, social, and governance (ESG) and risk initiatives already in use, providing additional benefits such as understanding these as a set of interrelated issues with trade-offs.

#### **PROTOCOL ACTION 1.2.1**

#### Additional resources

#### Background

Biodiversity: Finance and the Economic and Business Case for Action (OECD, 2019)

Global assessment report on **Biodiversity and Ecosystem Services** (IPBES, 2019)

in particular see Chapter 2 – Status and trends

Nature is too big to fail. Biodiversity: the next frontier in financial risk management (PwC and WWF, 2020)

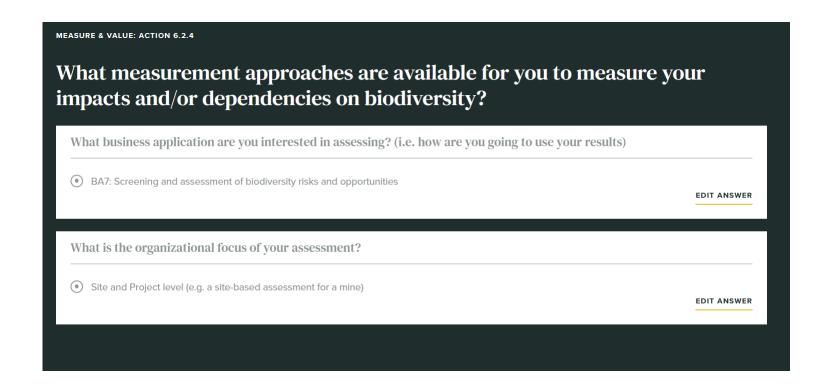
#### **Navigation Tool and Navigation Wheel**

- The Biodiversity Guidance Navigation Tool integrates the underlying principles and data of the Biodiversity Measurement Navigation Wheel (part of the EU Business @ Biodiversity Platform's Update 3 Report).
- The Navigation Tool uses the measurement approaches matrix from the EU B@B report that recommends appropriate measurement approaches based on selected **business** application and organisational focus.
- The Navigation Tool integrates the level of maturity and pressures covered by each measurement approach as outlined in the EU B@B report to further assist in selection.





#### **Navigation Tool - Measurement**



#### **Navigation Tool - Measurement**

| BIODIVERSITY MEASUREMENT APPROACH                   | DEVELOPER  | LAND USE<br>CHANGE | BIOLOGICAL<br>RESOURCE USE | WATER USE | INVASIVE ALIEN<br>SPECIES | ATMOSPHERIC<br>NITROGEN<br>DEPOSITION | NUTRIENT<br>EMISSIONS TO<br>WATER | CLIMATE<br>CHANGE | MATURITY |
|---|--|--------------------|----------------------------|-----------|---------------------------|---------------------------------------|-----------------------------------|-------------------|----------|
| Agrobiodiversity Index                              | Bioversity International                             |                    |                            |           |                           |                                       |                                   |                   | ***      |
| Biological Diversity Protocol                       | Endangered Wildlife Trust                            | <u>~</u>           | •                          | $\otimes$ | •                         | $\otimes$                             | $\otimes$                         | $\otimes$         |          |
| Biodiversity Footprint Financial Institutions       | ASN Bank, Pré Sustainability,<br>CREM                | •                  | $\otimes$                  | •         | $\otimes$                 | •                                     | •                                 | <b>✓</b>          |          |
| Biodiversity Indicators for Site-<br>based Impacts  | UNEP-WCMC, Conservation<br>Intl, Fauna & Flora Intl. | •                  | •                          | •         | <b>~</b>                  | •                                     | •                                 | $\otimes$         |          |
| Biodiversity Performance Tool for Food Sector       | Solagro  | •                  | $\otimes$                  | •         | <b>~</b>                  | $\otimes$                             | •                                 | $\otimes$         |          |
| LIFE Impact Index                                   | LIFE Institute                                       | <b>~</b>           | $\otimes$                  | •         | $\otimes$                 | $\otimes$                             | <b>v</b>                          | V                 |          |
| Species Threat Abatement and Recovery (STAR) Metric | IUCN   | •                  | •                          | •         | •                         | $\otimes$                             | •                                 | •                 |          |
| Biodiversity Net Gain Calculator                    | Arcadis  | •                  | $\otimes$                  | $\otimes$ | •                         | $\otimes$                             | $\otimes$                         | $\otimes$         |          |
|   |  |                    |                            |           |                           |                                       |                                   |                   |          |

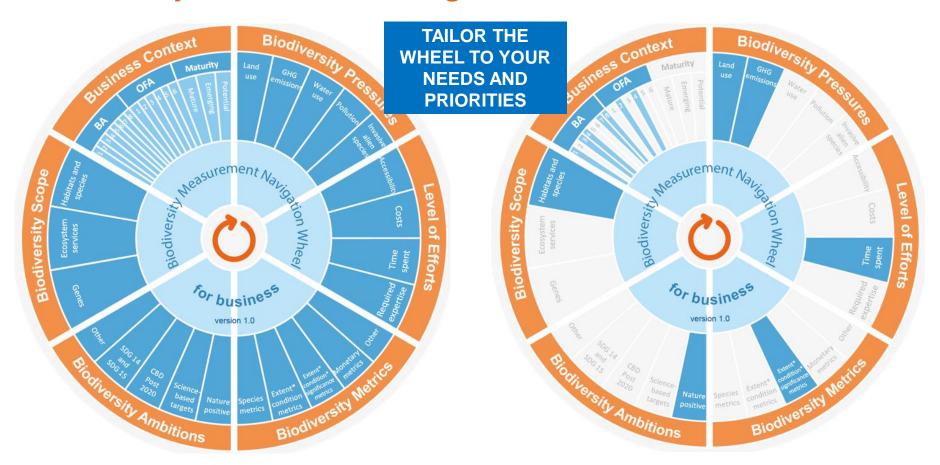


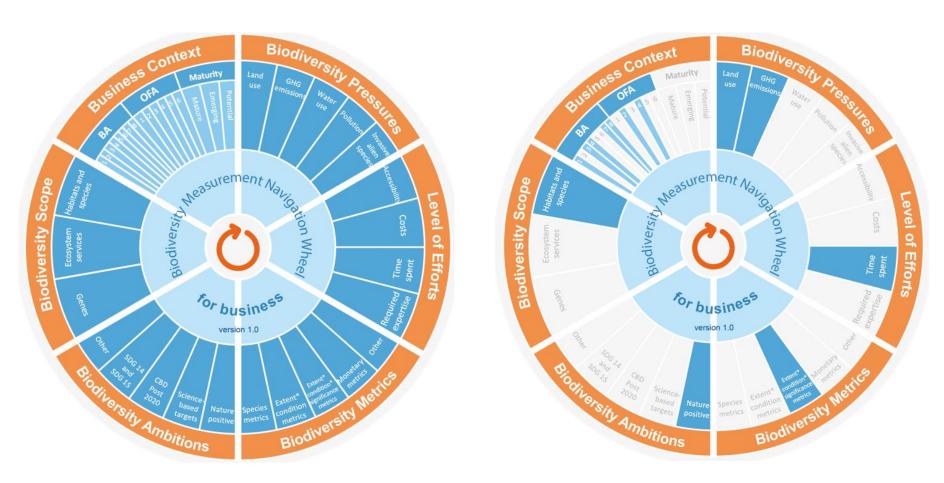
EU Business @ Biodiversity Platform

# The Biodiversity Measurement Navigation Wheel: How does it work?

Johan Lammerant, Methods workstream leader EU B@B Platform and Arcadis

#### **Biodiversity Measurement Navigation Wheel for business v1.0**





#### A worked example...

The company is gradually switching its focus from fossil-based energy sources (oil and gas) to renewable energy sources.

Renewables encompass offshore and onshore wind energy, solar energy and bioenergy.

It is a multinational company with hundreds of sites.

They have measured biodiversity on many sites, either as part of obligatory environmental impact assessments (EIA) or IFC 6 assessments but have no information on the biodiversity value or restoration potential on many other sites.

The company is considering setting a target at corporate level to reverse biodiversity loss by 2030.

As they are already investing in large scale afforestation programs as part of their climate mitigation program (carbon sequestration), they want to include these investments as part of their actions to restore biodiversity.

A remaining concern of the company is how to bring together into one corporate figure detailed biodiversity information from in-depth site level studies such as EIA and BAP (biodiversity action plans), all covering a broad range of biodiversity taxa, with less accurate outcomes for other sites (e.g. modelled data expressed in MSA) that never have been subject to such detailed studies.

| <b>BUSINESS CONTEXT</b>         |   |  |   |   |   |
|---------------------------------|---|--|---|---|---|
| Business application (BA)       | What is the objective of the measurement? |  | • | See Box 2 with overview and clarification of 8 different types of business applications | Select relevant BA – OFA combination and corresponding tools, |
|                                 |   |  |   | BOX 2 on BA   | informed by information on level of maturity                  |
| Organisational focus area (OFA) | 2.  | Does biodiversity need to be measured at corporate level?<br>Or rather at product level, project level, site level, supply | • | See Box 3 with overview and clarification of 6 different organizational focus areas     |   |
|                                 |   | chain level?   |   | BOX 3 on OFA  | Business Context  |
| Maturity level                  | 3.  | Have available tools for a given BA-OFA combination proved to be applicable?   | • | 3 different levels of maturity are distinguished (mature, emerging, potential)          | <u>Matrix</u>   |

## Always start with defining your business applications (BA) and organizational focus areas (OFA)

**Maturity is an interesting add-on** 

| Business                       | Organisational       | Focus Area      | s (OFA)        |            |
|--------------------------------|----------------------|-----------------|----------------|------------|
| applications<br>(BA) supported | Product /<br>service | Site / p        | project        | Su         |
|                                | ABOI<br>BFM 3 4      | ABD<br>BD       | BPT CBF 5      | ABDi<br>BD |
|                                | BPT 10 2             | BFFI 8          | GBS<br>LIFE () | BIM        |
| Current                        | ReCiPe               | BISI 100<br>BMS | PBF<br>STAR 9  | BMS<br>CBF |
| performance                    | BFM 34               | BNGC (1)        | UFE            | BFM        |
| Oim                            | BPT DOE 102          | BPT CO          | PBF            | BIM        |

|                                   | -                             |  |  |   |  |                      |
|-----------------------------------|-------------------------------|--|--|---|--|----------------------|
| applications<br>(BA) supported    | Product /<br>service          | Site / project   | Supply chain   | Corporate   | Portfolio / sector                         | Country / region     |
| Current performance               | BFM 3 4 BPT PBF 1 2 ReCIPe    | ABD BPT BD CBF 5 BFFI 6 GBS BIRS 11 LIFE 1 BISI 10 PBF BMS STAR 9 BINGC 15 | ABDI EPÄL GBS BFM 3 4 UFF BIM 5 RECIPE CBF 3 5 STAR          | BEAS BEFFE B FP&L BFM B GBS 12 BIM 15 BISI STAR   | ABDI CBF BFFI GBS (1) BFM 3 LIFE BIRS STAR | ABDI<br>LIFE<br>STAR |
| Future performance                | BFM 3 4 BPT PBF 1 2 ReCiPe    | BD LIFE BPT PBF BNGC (14) STAR 9   | BFM 3 4 PBF 1) 2<br>BIM LIFE<br>EP&L STAR                    | BD GBS BIM LIFE CBF STAR EP&L                     | BFFI GBS BFM 1) STAR CBF                   | STAR                 |
| Tracking target progress          | BPT PBF 1 2 ReCIPe            | ABDI BPT BD CBF BFFI 8 UFE 1 BISI 10 PBF BNGC 4 STAR 9                     | ABDI LIFE BD PBF 1 2 BIM STAR BMS EP&L                       | ABDI CBF BD EP&L BFFI 6 GBS 12 BIM LIFE BISI STAR | BFFI GBS<br>CBF STAR                       | ABOI<br>STAR         |
| Comparing options                 | BFM 3 4 BPT PBF 1 2 ReCIPe 16 | ABDI CBF BFFI GBS BIRS (1) LIFE 7 BISI 10 PBF BPT STAR                     | ABDI GBS BFM 3 4 LIFE BIM 15 PBF 1 2 BMS ReCIPe 16 EP&L STAR | ABDI CBF BFFI EP&L BFM GBS BIM LIFE               | BFFI CBF BFM 3 GBS TAR                     | ABDI<br>STAR         |
| Third party assessments / ratings |                               | CBF § STAR   | STAR   | CBF 6 STAR  | BFFI GBS (                                 |                      |
| Third party certification         |                               | BD LIFE 7<br>BMS STAR<br>CBF   | BD STAR<br>BMS   | BMS STAR  | CBF STAR                                   |                      |
| Risk & opportunity assessment     | ВРТ                           | BD CBF BFFI 8 STAR 9 BISI 10 LIFE BNGC 14                                  | BIM (B) STAR   | BD CBF EP&L BFFI 8 BIM 15 BISI                    | BFFI LIFE CBF STAR GBS (3)                 | ABDi                 |
| Biodiversity<br>accounting        |                               | BD CBF 6 BFFI 0 UFE 7 BIRS 11 STAR BNGC                                    | BD STAR<br>CBF 66  | BD GBS 12<br>BFFI 0 STAR<br>CBF 3 6               | BFFI GBS TAR BIRS STAR CBF                 | )                    |

#### BIODIVERSITY MEASUREMENT APPROACHES

Product Biodiversity Footprint PBF: BFM: Biodiversity Footprint Methodology Corporate Biodiversity Footprint CBF:

LIFE Key LIFE:

**Biodiversity Footprint Financial Institutions** BFFI: STAR: Species Threat Abatement and Restoration metric BISI: Biodiversity Indicators for Site-based Impacts

GBS: Global Biodiversity Score

GBS BIA: GBS - Biodiversity Impacts Analytics Biodiversity Net Gain Calculator BIM: Biodiversity Impact Metric EP&L: Environmental Profit and Loss

LafargeHolcim ReCiPe

- PBF Salmon
- PBF Shower gel
- 8 BFM Dutch dairy sector
- BFM Tony's Chocolonely
- 6 CBF Mining company
- CBF Portfolio agri-food companies
- 6 LIFE Posigraf printing company
- BFFI ASN Bank
- STAR Bukit Tigapuluh rubber project
- BISI Anglo American mine
- LafargeHolcim mine Spain
- GBS Schneider Electric company
- 6 GBS BIA application with C4F
- (B) BNGC Alvance Aluminium site
- BIM Asda retail company
- ReCiPe Hand drying systems
- Potential
- Emerging
- Mature

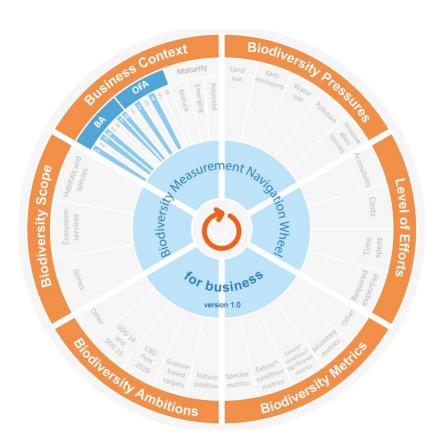
#### **Example company**

- BA1: measuring current biodiversity performance
- BA3: monitoring progress to target
- BA4: comparing options
- BA7: screening risks and opportunities
- BA8: accounting

BUSINESS CONTEXT MATRIX → PBF and ReCiPe (product level approaches) can be excluded.

Exclusion of 5 other tools based on sector focus: BPT and BMS (farm level), ABDi (agrifood), BFFI ad CBF (finance sector).

None of the remaining approaches covers all business applications, neither at site level nor at corporate level; this means that measurement approaches will need to be combined.



#### **BIODIVERSITY SCOPE**

#### Biodiversity scope

- 1. Does the measurement approach need to measure impacts on species and habitats?
- 2. Does the measurement approach need to measure ecosystem services benefits?
- 3. Does the measurement approach need to measure genetic diversity?

## Select tools that are suitable for your particular biodiversity scope

**Biodiversity Scope Table** 

| BIODIVERSITY SCOPE TABLE (X: covered, (X): only covered qualitatively, O: not covered) |                    |                    |       |  |  |  |  |  |  |
|--|--------------------|--------------------|-------|--|--|--|--|--|--|
| Biodiversity<br>measurement approach   | Habitats / Species | Ecosystem Services | Genes |  |  |  |  |  |  |
| Biodiversity Footprint<br>Financial Institutions (BFFI)                                | ×                  | 0                  | 0     |  |  |  |  |  |  |
| Biodiversity Indicators for<br>Site-based Impacts (BISI) <sup>41</sup>                 | ×                  | 0                  | 0     |  |  |  |  |  |  |
| Biodiversity Impact Metric (BIM)   | ×                  | 0                  | 0     |  |  |  |  |  |  |
| Global Biodiversity Score® (GBS)   | ×                  | 0                  | 0     |  |  |  |  |  |  |
| LIFE Methodology (LIFE)  | ×                  | (X)                | 0     |  |  |  |  |  |  |
| Product Biodiversity Footprint (PBF)   | x                  | 0                  | 0     |  |  |  |  |  |  |

#### **BIODIVERSITY AMBITIONS**

#### Ambitions

- Has the company defined/committed to a specific biodiversity ambition (e.g. nature positive)?
- 2. Which measurement approaches do allow me to track progress towards company targets on biodiversity?
- 3. Which metrics are suitable for tracking progress towards company targets on biodiversity?
- 4. Am I clear on how to define the baseline?

Select tools and metrics which are suitable for tracking progress to target by applying BA3 'tracking progress to targets' in the business context matrix and by using the Ambitions Table and the Biodiversity Metrics Table

Business Context Matrix

**Ambitions Table** 

Biodiversity
Metrics Table

Biodiversity commitments by businesses increasingly ambitious ('nature positive by 2030') but complete lack of common understanding what it really means ....

Does it mean that positive impacts on biodiversity in 2030 (e.g. by investing in nature restoration) exceed negative impacts on biodiversity? // Over what historical period do these negative impacts apply? // Does it mean that the biodiversity impact in 2030 has improved compared to 2020? // Is it similar to Net Gain? // What is 'nature': only biodiversity, or does it include water, land and climate (in line with the thinking of the Science Based Targets Network for Nature)? // Does biodiversity include ecosystem services?

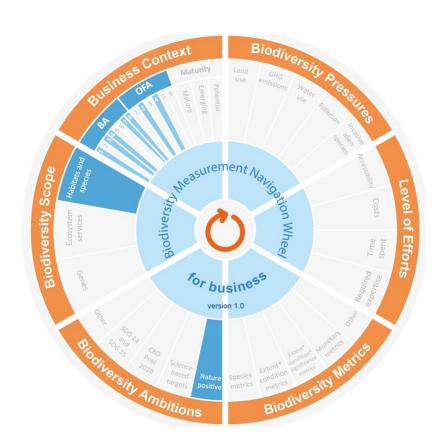
Consequences for tool selection!

#### **Example company**

The biodiversity ambition 'reversing biodiversity loss by 2030' does not lead to the exclusion of one of the tools

Limitation of the biodiversity scope (no ecosystem services) leads to exclusion of 2 additional approaches: the E P&L approach and the ecosystem services valuation part of the LafargeHolcim approach.

Furthermore, the emphasis on having a solid biodiversity accounting system might favor specific approaches such as the Biological Diversity Protocol (BD).



#### **BIODIVERSITY PRESSURES**

#### Pressures

- 1. Which are the pressures on biodiversity that need to be covered by the measurement approach?
- Which approach or combination of approaches covers these pressures?

Select tools or combination of tools that cover the pressures which are relevant for your company

**Biodiversity Pressures Table** 

|   |                          | Direct exp                                       | loitation <sup>30</sup> | Invasive         | Pollution                       |                                   |                   |                             |  |
|---|--------------------------|--|-------------------------|------------------|---------------------------------|-----------------------------------|-------------------|-----------------------------|--|
| Approaches  | Land / sea<br>use change | Biological<br>Resource Use<br>(e.g. overfishing) | Water Use               | alien<br>species | Atmospheric nitrogen deposition | Nutrient<br>emissions to<br>water | Climate<br>change | Other                       |  |
| Restoration metric (STAR)   |                          |  |                         |                  |                                 |                                   |                   |                             |  |
| Biodiversity Footprint<br>Methodology (BFM)<br>Biodiversity Footprint<br>Calculator (BFC) | X<br>X                   | 0  | X <sup>31</sup><br>O    | 0                | 0                               | X<br>O                            | ×                 | 0                           |  |
| Corporate Biodiversity Footprint (CBF)  | Х                        | 0  | Х                       | 0                | Х                               | Х                                 | Х                 | 0                           |  |
| Biodiversity Net Gain<br>Calculator (BNGC)  | Х                        | 0  | Х                       | Х                | 0                               | Х                                 | 0                 | Noise and light disturbance |  |
| BIRS and ES<br>assessment<br>LafargeHolcim  | Х                        | 0  | 0                       | ×                | 0                               | 0                                 | 0                 | 0                           |  |

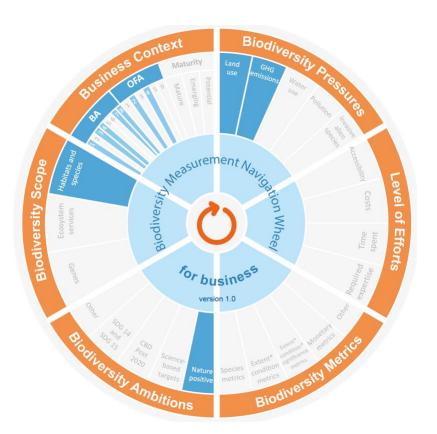
#### **Example company**

In a first stage, the company decides to only focus on land use and GHG emissions.

Based on the PRESSURES TABLE all tools can measure land use impacts.

Amongst the remaining tools (i.e. not eliminated yet), biodiversity loss caused by GHG emissions is only covered by GBS, LIFE, STAR and BFM/BFC.

However, tools specifically addressing biodiversity measurement related to land use, should remain in the scope too as they might be more accurate and can probably be combined with the abovementioned tools that also cover GHG emissions. These tools are BIRS, BNGC, BISI and BD.

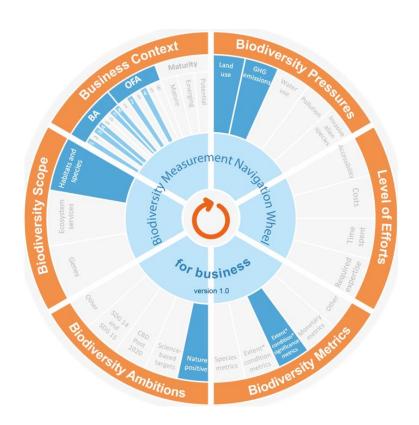


| BIODIVERSITY                     | METRICS  |  |  |  |   |  |
|----------------------------------|--|--|--|--|---|--|
|                                  | qua<br>havi<br>2. Doe<br>'biod<br>havi<br>3. Can     | ntified biodiversity im<br>e monetized outcome<br>is the measurement of<br>diversity features' for<br>e defined? | approach cover the relevant<br>the BA and ambition/target that I<br>netrics to obtain a more   |  | ropriate metrics or con<br>n respective tools  Biodiversity Metrics Table | nbination of metrics in  |
| Type of                          | TY METRICS TAE                                       | Unit of  | Key points   | Used for   | Scale of  | Approaches relying   |
| metric                           | used<br>metrics                                      | biodiversity   |  |  | analysis  | on these metrics   |
| Species<br>metrics               | Number of individuals                                | Number of individuals of any one species   | Enables impacts to any one species to be offset by improving populations elsewhere; requires precise monitoring of species population numbers                | Simple easily<br>communicated<br>compensation for<br>impacts to key<br>species   | Project or site scale   | Requires specific species related inventory approaches.  BISI might include suc approaches if needed |
|                                  | STAR Species Threat Abatement and Restoration metric | Globally<br>threatened<br>species  | Measures risk of species<br>extinctions; based on threats to<br>each species weighted by its threat<br>status; excludes species listed as<br>'Least Concern' | Compare potential threat abatement and/or restoration actions  | Any scale   | STAR   |
| Extent *<br>Condition<br>metrics | Habitat<br>hectares;<br>quality hectares             | Ecosystems   | Compares the condition (or quality) of an ecosystem to a standard reference level  | Measuring losses and gains within the same ecosystem type; used by many biodiversity offset schemes (for offsets within the same ecosystem type) | Project or site<br>scale  | None of the assessed approaches  |

#### **Example company**

The energy company decides to explore several approaches on a small number of sites in order to better understand the type of outcomes of different approaches. Interesting paths to explore for them are:

- integrating EIA and BAP outcomes of many sites in a BISI dashboard approach (progress of pressures, state, response) and experiment with aggregation over multiple sites, and/or
- an MSA based approach that also allows measuring biodiversity footprints caused by GHG emissions, and measuring positive biodiversity impacts by large scale afforestation, and/or
- application of a NNL based approach (either BD, BNGC or BIRS), and/or
- parallel road-testing of STAR.



| LEVEL OF EFFORTS                          |         |   |  |              |                              |   |                              |
|---|---------|---|--|--------------|------------------------------|---|------------------------------|
| Required expertise                        |         | you have the required expertise to a surement approach?                         | o apply the  | Sele<br>time |                              | ich are compatible w                                      | ith the available budget and |
| Accessibility                             | 2. Is t | he measurement approach open s  | source or commercial?  |              |                              |   |                              |
| Costs                                     |         | nich budget am I prepared to pay f<br>nsultancy?                                | or purchasing software,  |              |                              | Effort Table  |                              |
| Time investment                           |         | nat time efforts am I prepared to in<br>easurement approach (including tra<br>? |  |              |                              |   |                              |
|   |         |   | EFFORT TAB   | LE           |                              |   |                              |
| Biodiversity measurement approach         |         | Accessibility (Full Open Source // Open Source with Support // Commercial)      | Required expertise  (INT = most probably availab within the company; EXT = external expertise most probably required; EXT – T: training is possible) |              | (COS                         | Costs<br>T EXT H, M, L)<br>T Other H, M, L)<br>(no costs) | Efforts<br>(H, M, L)         |
| Biodiversity Footprint<br>Methodology     |         | Open Source with Support  | EXT-T  |              | COST EXT: M/L                |   | L                            |
| Biodiversity Footprint Calculator         |         | Open Source   | INT  |              | No costs                     |   | L                            |
| Corporate Biodiversity Footprint          |         | Commercial  | EXT-T  |              | COST EXT: L<br>Cost Other: H |   | L                            |
| Biodiversity Net Gain Calculator          |         | Commercial  | EXT  |              | COST EXT: M/L                |   | L                            |
| BIRS and ES assessment<br>(LafargeHolcim) |         | BIRS: Open Source<br>ES assessment: company<br>tool                             | EXT  | EXT          |                              | OST EXT: H  | М                            |
| ReCiPe2016                                |         | Open Source   | EXT  |              | CC                           | ST EXT: H/M   |                              |

#### **Example company**

The company decides to start prioritizing sites according to biodiversity value or potential.

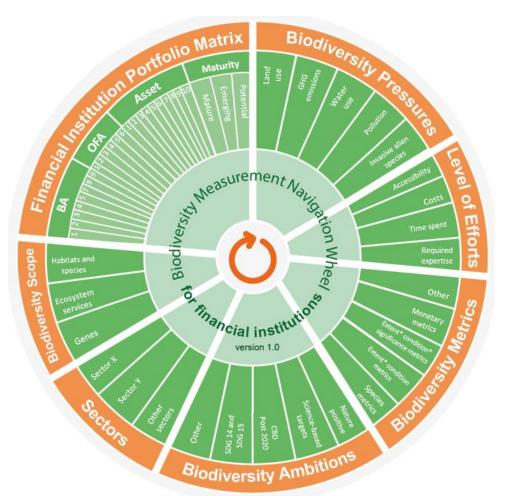
Efforts for biodiversity measurement will vary accordingly. Both STAR and BISI are useful tools to support this prioritization process as both are making use of IBAT, an IUCN managed data source of protected areas, key biodiversity areas and Red List species globally.

The company discovers that BFC is a handy online tool that produces good insights in land use biodiversity footprint and GHG emissions related biodiversity footprint (based on MSA), at almost no cost. Therefore, they decide to start with applying BFC.



#### Biodiversity Measurement Navigation Wheel for financial institutions v1.0

- Very initial version
- > Specific:
  - Asset categories in addition to BA and OFA
  - Sector as key criterion
  - Specific ambition levels?
  - Specific metrics (e.g. exclusion criteria)?

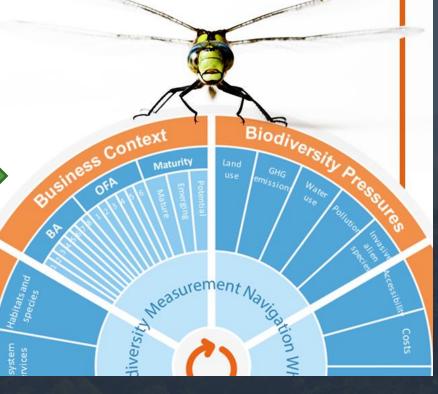




# Q&A

Submit your questions in the chatbox on the right

**Q&A moderator:** Annelisa Grigg





Scope



The Capitals Community is the networking space for the We Value Nature 10-Day Challenge.

Sign up and join the We Value Nature group to take part in the conversations:

https://community.capitalscoalition.org



We want your feedback!

Please share your thoughts on this session and the overall 10-Day Challenge event at:

https://wevaluenature.eu/Feedback

