denkstatt
create sustainable value

Biodiversity and business decarbonization

How companies can contribute

18th March 2021

Ivan Paspaldzhiev & Constantin Saleta

Part of the
WE VALUE NATURE
10-DAY CHALLENGE

A member of INOGEN®

WE VALUE NATURE

10-DAY CHALLENGE

11 – 24 March 2021

Events and activities for
naturally-smarter businesses

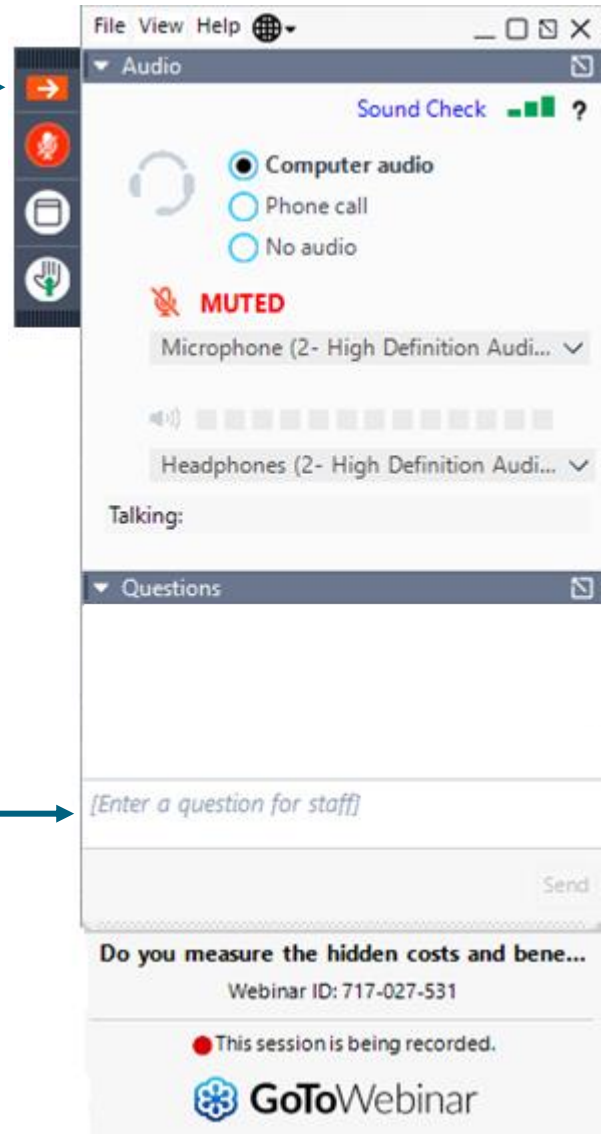
Welcome!

You can connect to audio either via computer or via phone.

Your mic is muted by default.

How to submit a question:

1. The webinar controls are at in the top-right part of your screen.
2. Click the arrow button to expand the webinar controls.
3. You can enter your question in the chat interface.



Get involved in The We Value Nature 10-Day Challenge

- Complete **daily challenges**. Each challenge can be completed in around 10 –15 minutes and will help you take the next step on your nature journey.

- Register for practical, interactive **sessions**.

wevaluenature.eu/10-day-challenge

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821303

wevaluenature.eu
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Welcome...

In this session we will discuss

WHY business should care about climate & biodiversity

WHAT is coming in terms of new reporting initiatives

HOW companies can start preparing

Today‘s speakers

Ivan Paspaldzhiev (denkstatt)

Senior Consultant

International Service Leader Natural & Social Capital

Constantin Saleta (denkstatt)

Senior Consultant

International Service Leader Decarbonization

denkstatt in one picture

Our Topics

EHS management

Decarbonisation

Ressource management

Sustainability management

Smart Urban Management

IT-Solutions

Sustainable finance

Our industry sectors

Energy & Infrastructure

Chemicals

Automotive

Mobility & Logistics

Food & Beverages

Banks & Insurances

Trade

Real Estate

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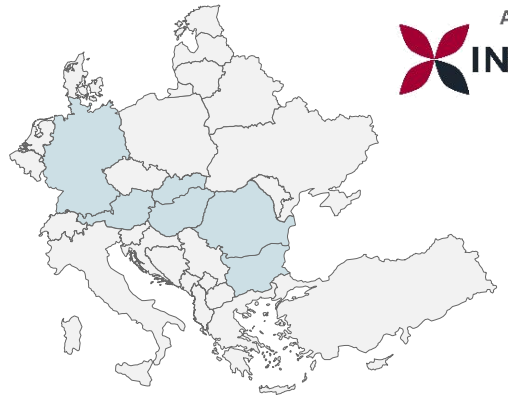

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* sustainable AG, based in Germany, is partner of denkstatt.

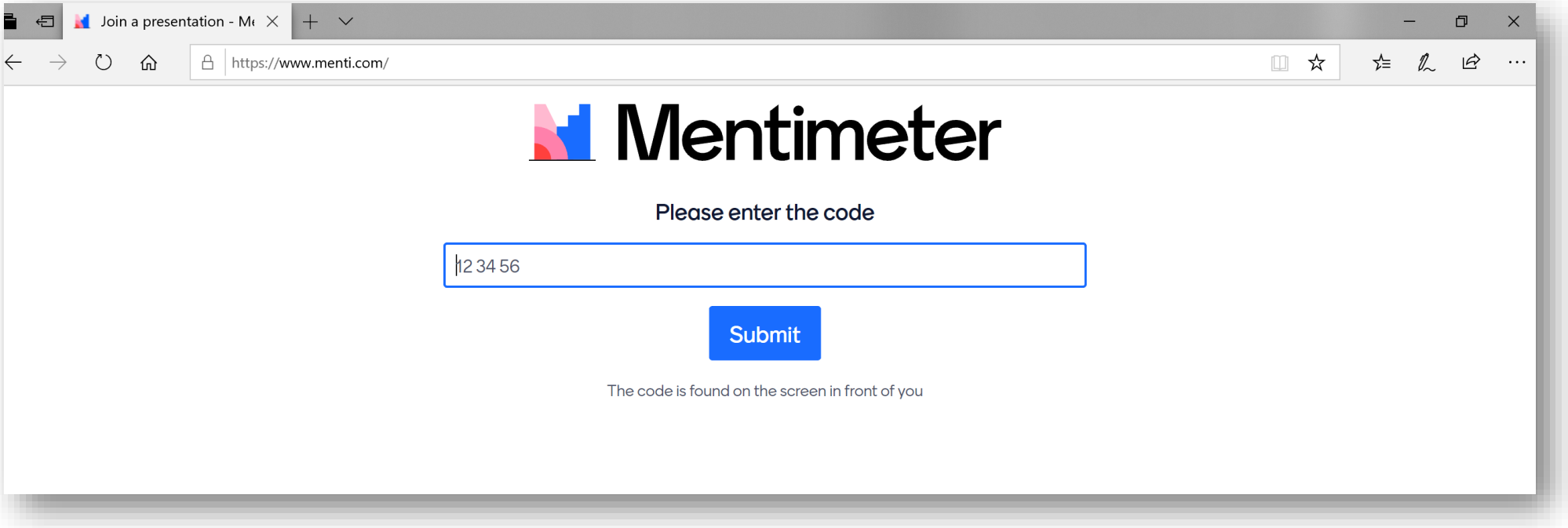
We are business advisors in environmental and sustainability affairs.

From strategy right through to implementation.

Before we start - some Mentis!

Please open your browser and type in: menti.com

Enter this code: 54 49 63 2 (will also post in the chat)



Climate – an established issue

Trends in corporate sustainability

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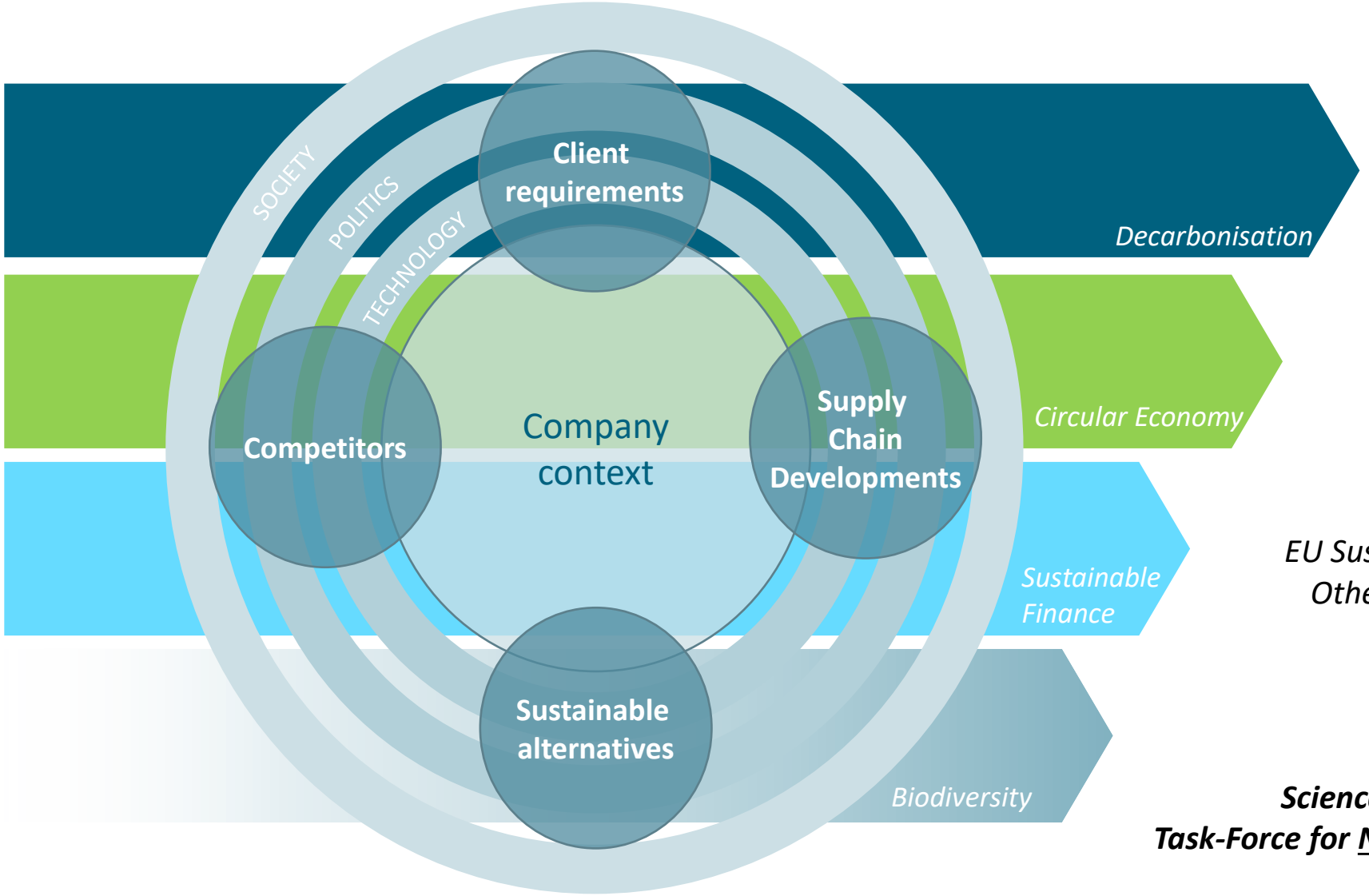


Mature
Paris Agreement
EU Green Deal
Science-based targets
Etc.

Corporate climate strategy

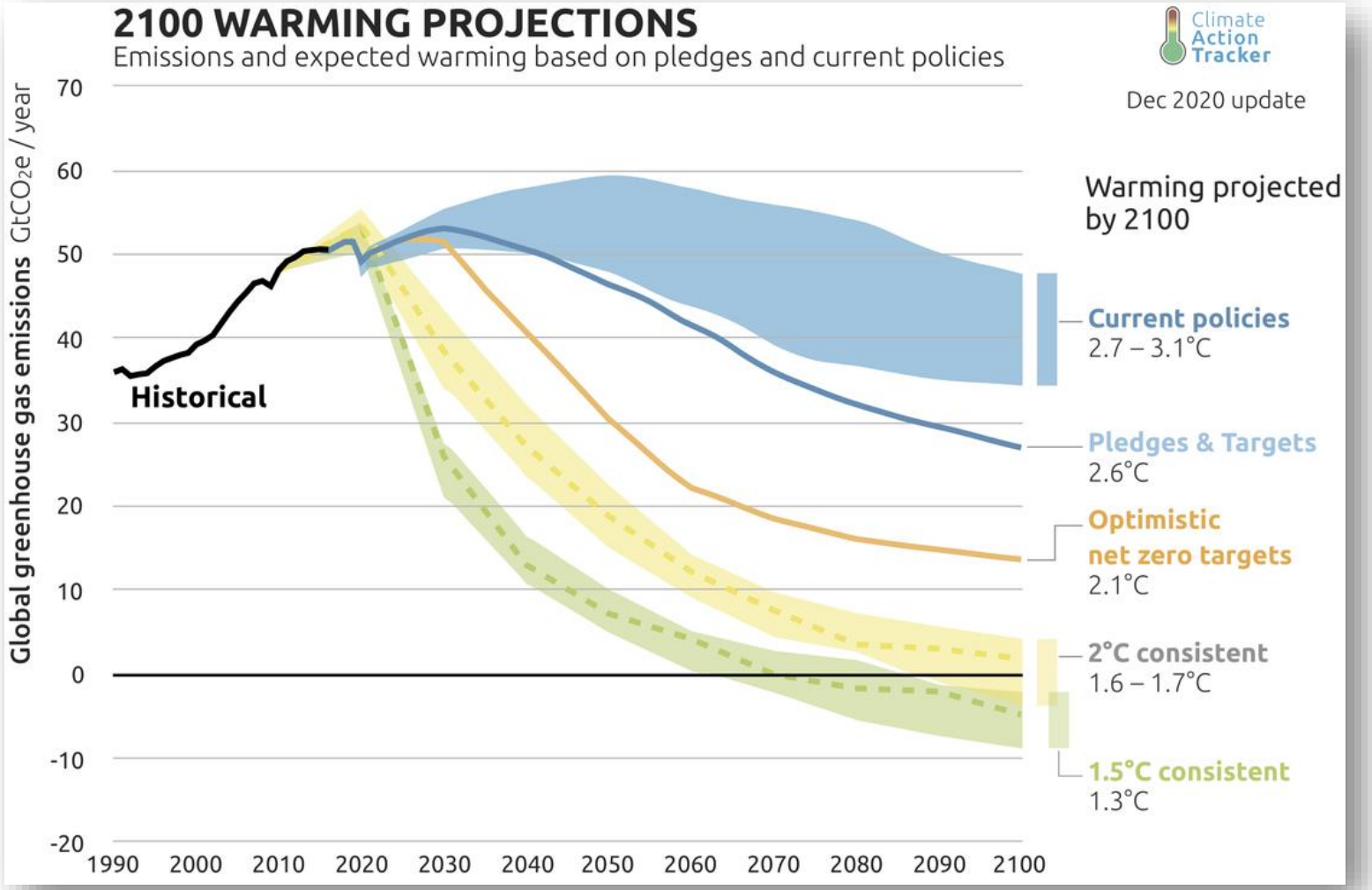
Growing
EU Sustainable Finance platform
Other institutional initiatives

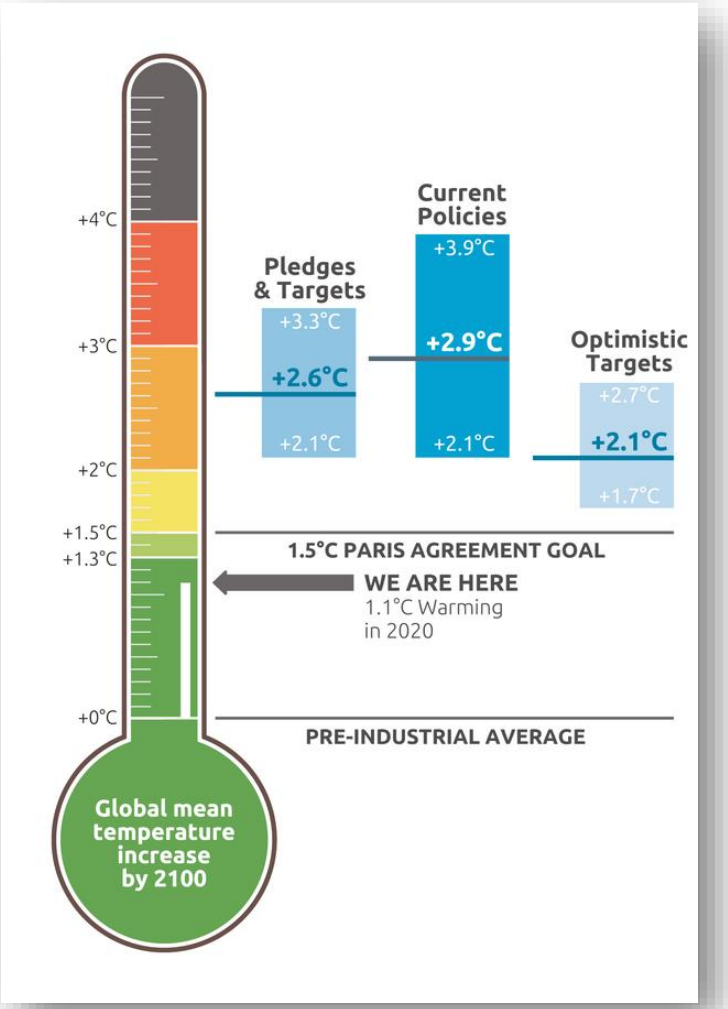
The next big thing

Science-Based Targets for Nature
Task-Force for Nature-Related Financial Disclosures

Mainstreaming biodiversity strategy

Climate – an established issue





Source: https://climateactiontracker.org/global/temperatures/

Elements of climate management

From footprinting to engagement

GREENHOUSE GAS PROTOCOL

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

CDP
DISCLOSURE INSIGHT ACTION

Foundation

Standards and market infrastructure to support quantification, verification, tracking and finance of carbon removals.

Scenarios, risks and chances

Framework for voluntary, consistent climate-related financial risk disclosure; focus on assessing, steering and mitigating climate risks and opportunities.

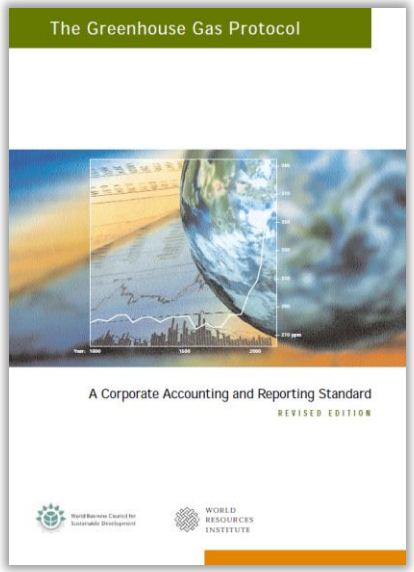
Climate strategy incl. targets

Corporate target setting and target validation framework; provides method for future-proof climate pathways.

Disclosure

Corporate accountability and tracking of progress in the transition towards net-zero business models (e.g. disclosure, scoring, ACT, etc.); disclosure towards investors.

Where to start?
Establish a baseline → Carbon inventory

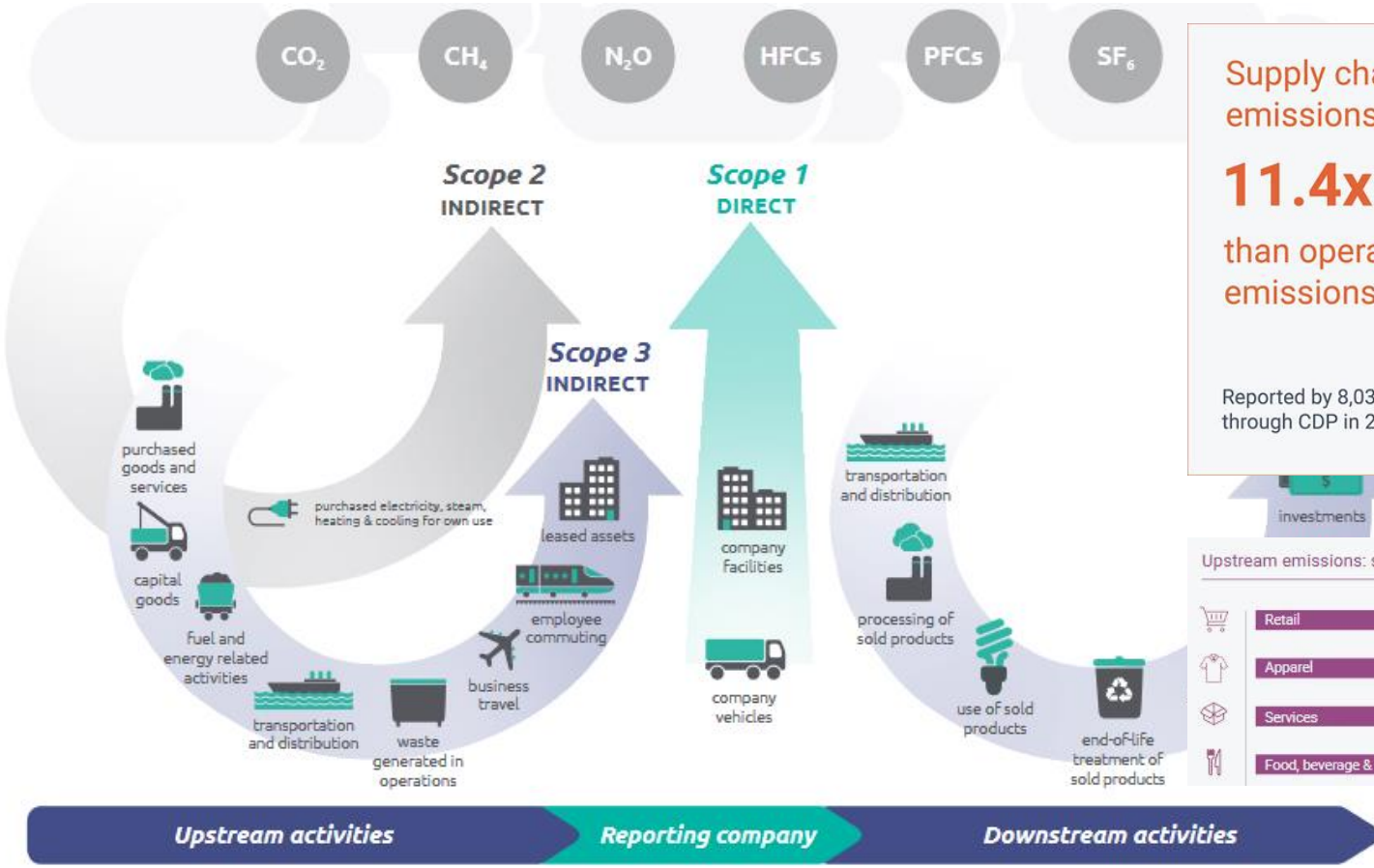


The GHG Protocol – International Standard for Greenhouse gas accounting

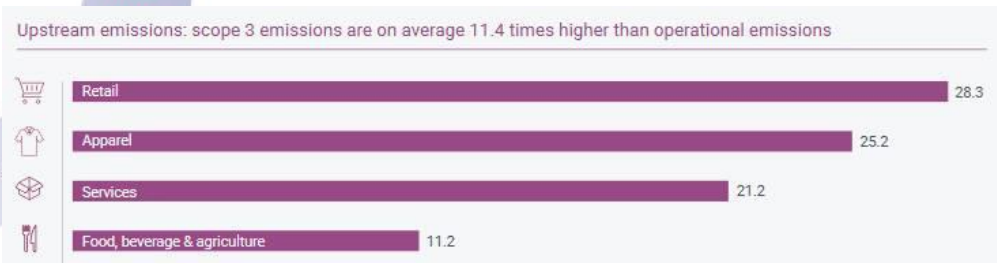
- GHG Protocol establishes **comprehensive global standardized frameworks** to measure and manage greenhouse gas (GHG) emissions
- Established **>20 years ago** by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD)
- Supplies the **world's most widely used greenhouse gas accounting standards**

Where to start?

Overview of scopes 1 – 2 – 3



Significance of value chain emissions (Scope 3)



How to implement?
Standards and approaches

Science Based Targets Initiative (SBTi)

What are science based targets?

- *Science-based GHG reduction targets for companies that are in line with decarbonization levels needed to limit global warming to well below 2°C or 1.5°C*
- *Internationally recognized framework for setting corporate climate protection targets*

SCIENCE BASED TARGETS

1259 Companies have formally committed to set SBTs

636 Companies have approved targets

An initiative by

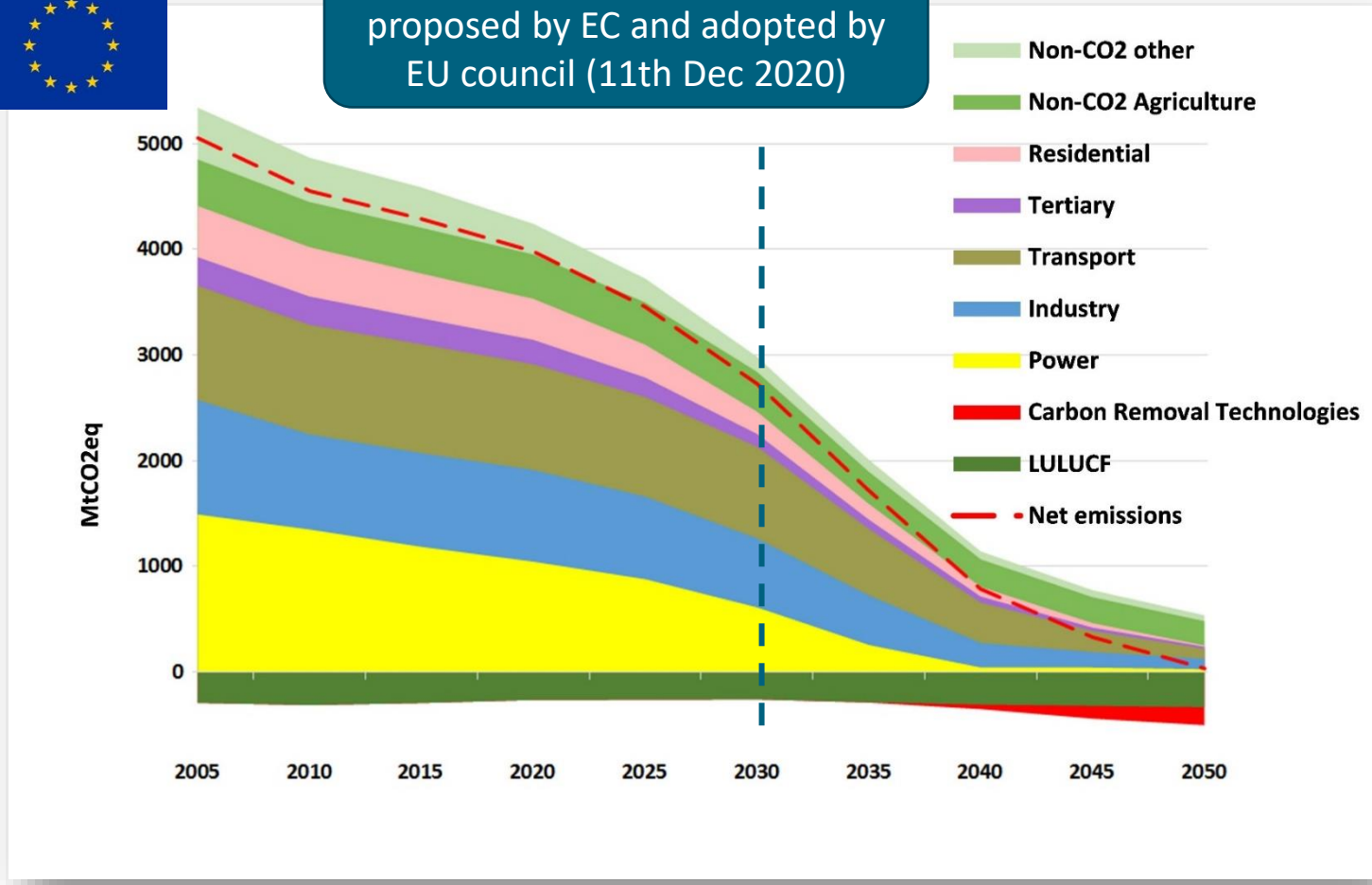
CDP DISCLOSURE INSIGHT ACTION · UN GLOBAL COMPACT · WWF · WORLD RESOURCES INSTITUTE

In collaboration with WE MEAN BUSINESS

Net-zero as new guiding star

EU Net-zero until 2050

-55% reduction by 2030 proposed by EC and adopted by EU council (11th Dec 2020)



A climate-neutral economy
What does that mean?

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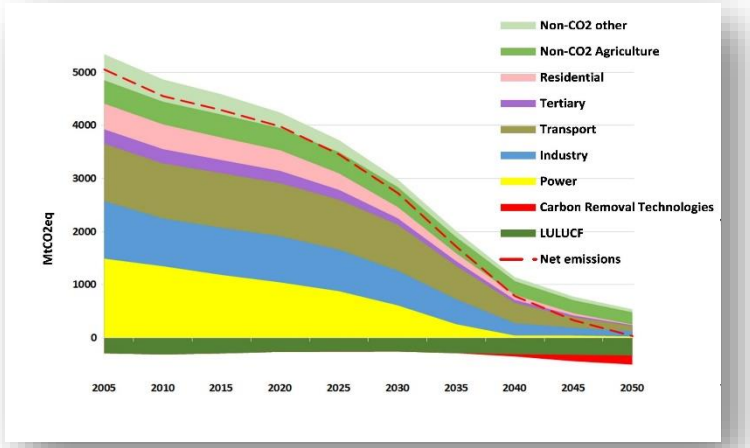
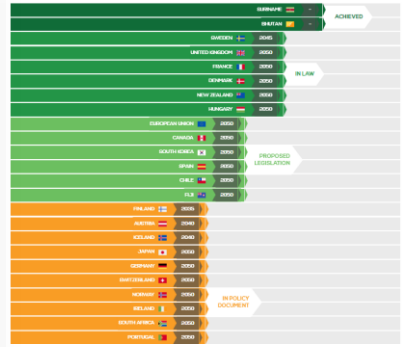




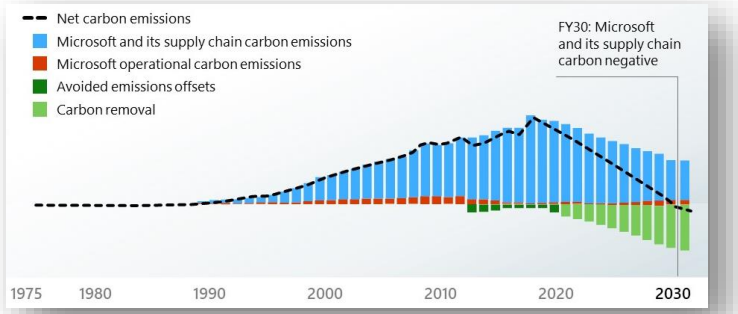
Political

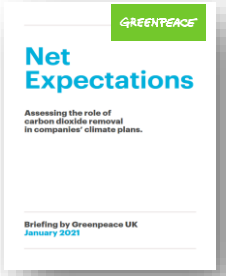
Market

Net zero

Scientific

NGOs



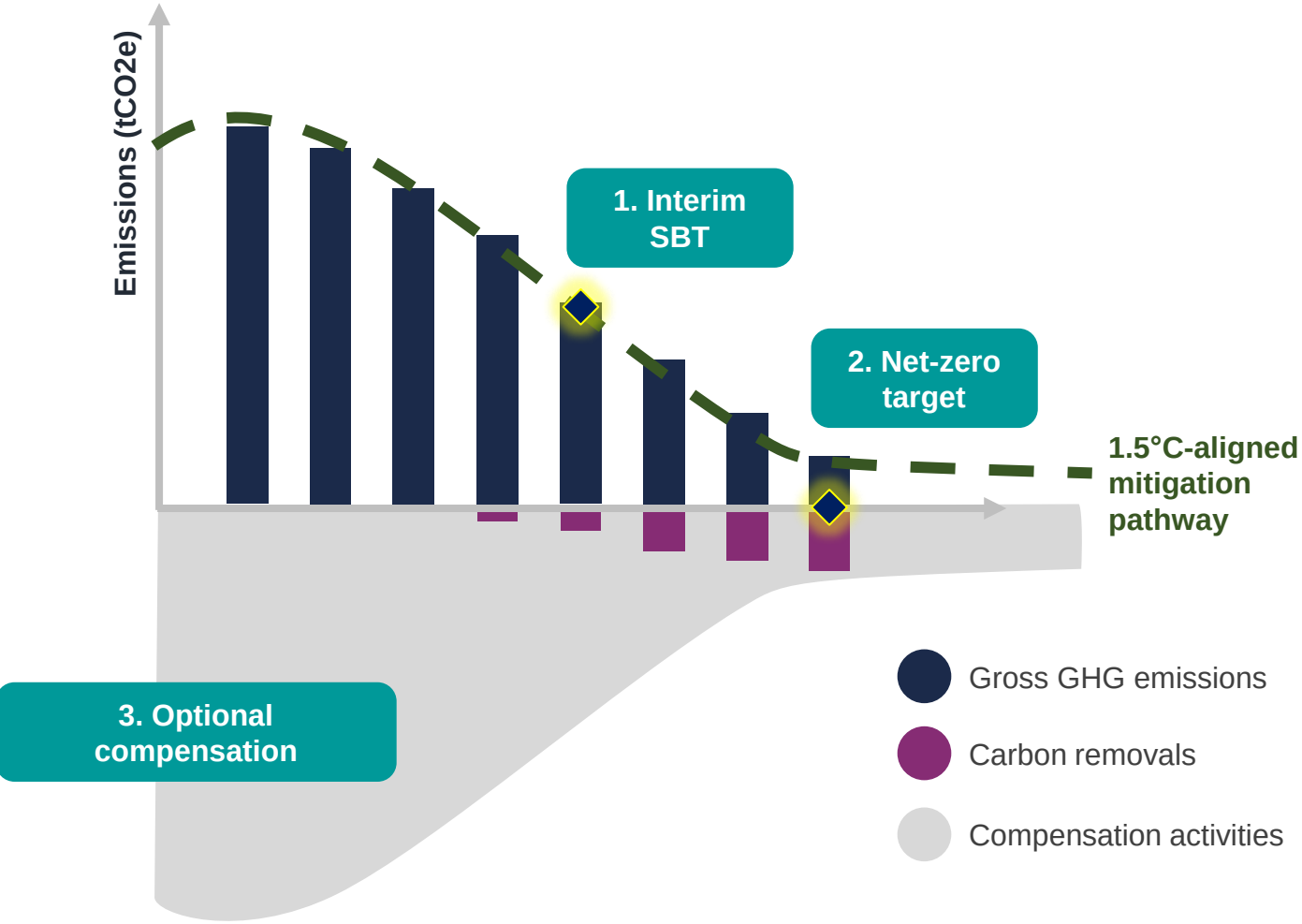


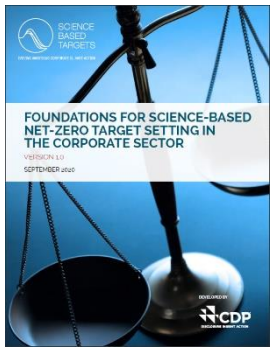
Definition net zero for business

- **Achieving climate neutrality** for a company means **net zero emissions** (all GHG!) **within a company's value chain.**
- This is achieved by **reducing the GHG emissions in the value chain in line with 1.5°C** reduction paths and **offsetting the remaining, unavoidable GHG emissions.**

Science based targets & net zero

Role of Mitigation vs. Compensation





Elements of a climate strategy (acc. to SBTi)

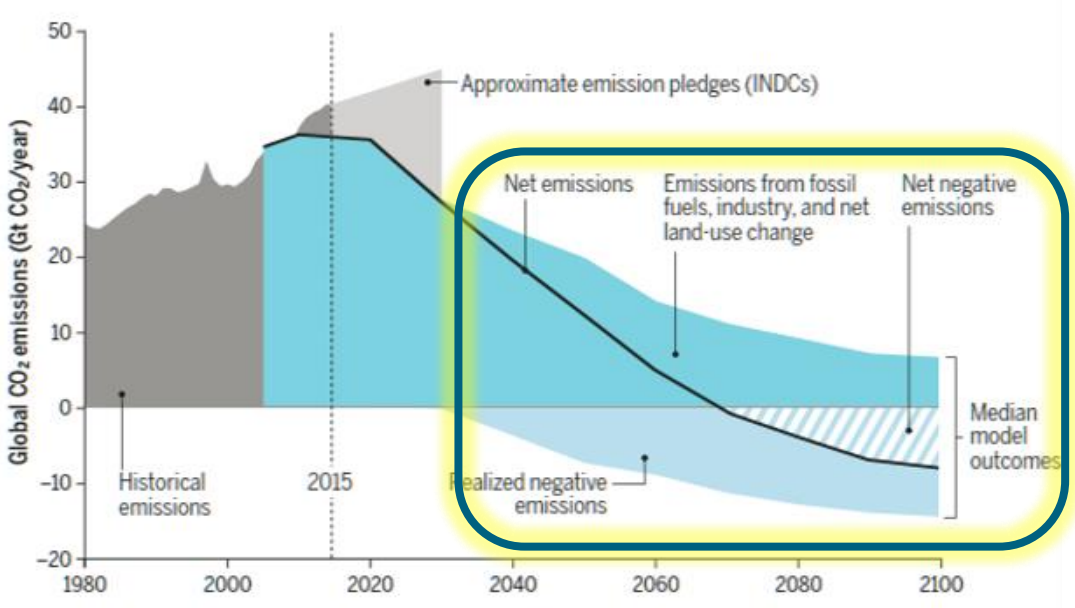
1. **Interim science-based targets:** companies shall have interim SBTs that meet specific leadership criteria (e.g., target ambition and boundary)

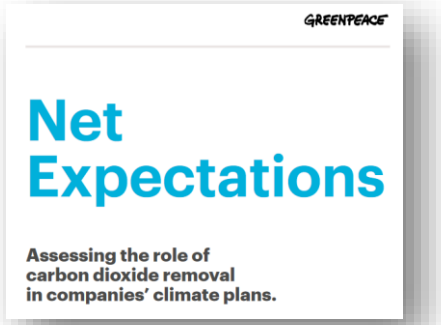
2. **Net-zero target:** targets shall include deep decarbonisation of value chain emissions paired and carbon removals that neutralise all unabated emissions

3. **Optional compensation:** companies are encouraged to compensate for unabated emissions by providing annual support to projects, programs, and solutions that provide quantifiable benefits to climate, people, and nature

Carbon Dioxide Removal (CDR)
& its role in corporate offsetting strategies

- The Paris Agreement requires **balance of greenhouse gas emissions and removals by 2050** (i.e. “net-zero emissions”).
- **Carbon dioxide removal** (“CDR”) will be needed
- All CDR approaches have **scale limitations** and **environmental impacts**





ipcc climate change

In no modelled pathway can the Paris goals be achieved without rapid emissions reductions. It should thus be stressed that CDR is not an alternative to emissions reduction, and in fact can only play a minority role in mitigation.

What can companies do?

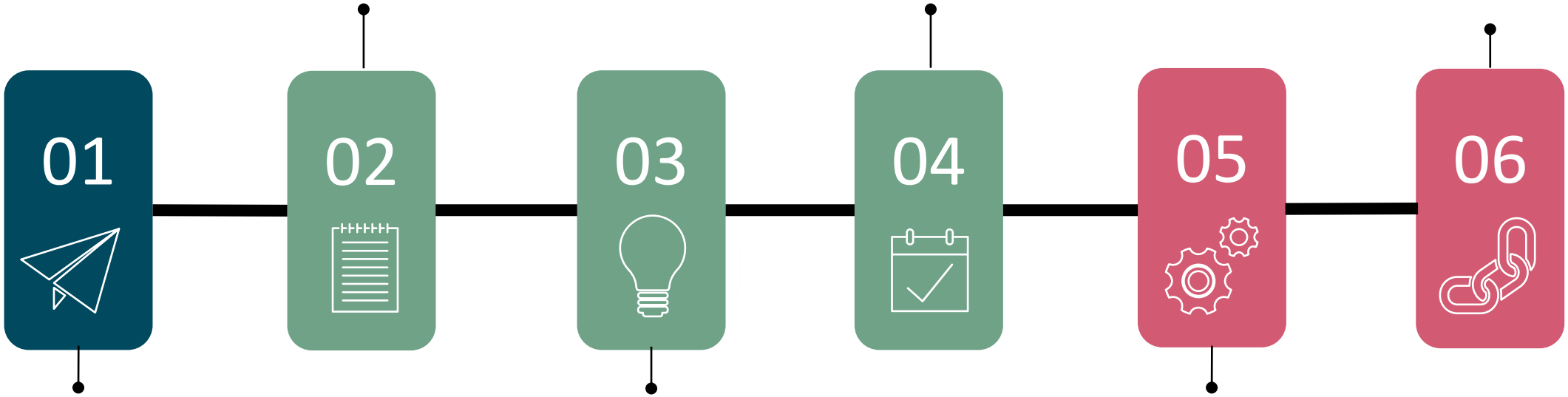
- Only unavoidable emissions should be offset by CDR – focus on mitigation!
- Disclose share of CDR anticipated to be used to fulfil climate commitments (esp. net-zero)
- Insetting – engaging & compensating in your value chain

Decarbonization process: overview

SCOPING
Definition of boundaries, objectives, scopes, years...

STRATEGY & ROADMAP
Fields of action and reduction paths; target system and scenarios

DISCLOSURE
Internal / external communication (SBT, CDP), Monitoring verification, ESG Ratings

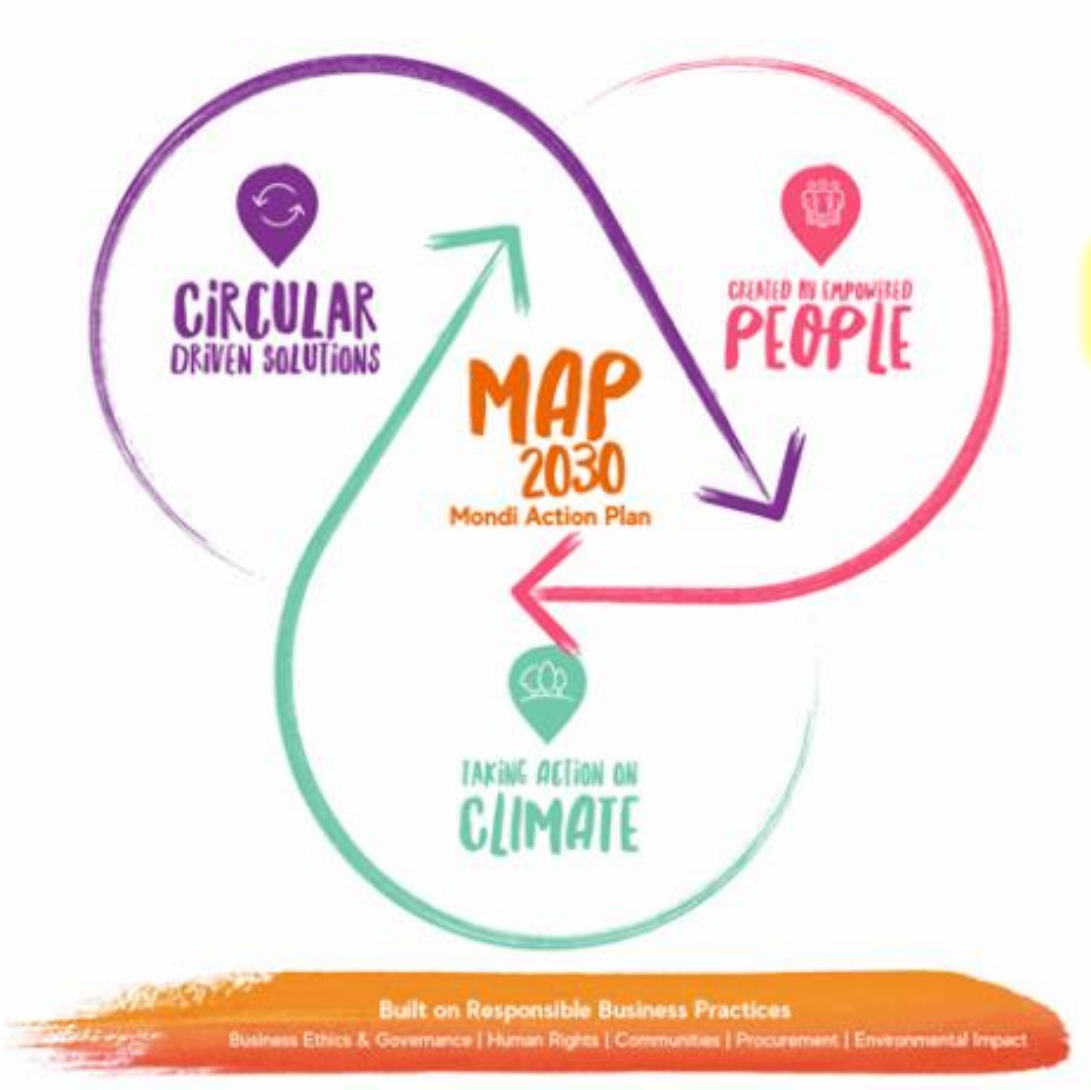


KICKING OFF
Plan project, set up structure & assign responsibilities; assess data basis & potential measures

ANALYSIS
Evaluation measures, Potential increase in efficiency, Estimation costs

IMPLEMENTATION
Implementation of short and medium-term measures, planning for the long term, Monitoring plan, Offsetting

Current practice: Mondi Group



Commitments	Targets
Reduce our greenhouse gas emissions in line with science-based targets	○ Reduce our Scope 1 and 2 emissions by 34% per tonne of saleable production by 2025 and 72% by 2050 from a 2014 base year ○ Reduce Scope 2 GHG emissions by 39% per MWh by 2025 and by 86% by 2050 from a 2014 base year ○ A science-based Scope 3 reduction target set by 2025
Maintain zero deforestation in our wood supply, sourcing from healthy and resilient forests	○ Maintain 100% FSC certification in our own forest landholdings ○ 100% responsibly sourced fibre with 75% certified FSC / PEFC fibre procured by 2025 and the remainder being controlled wood ○ Implement leading forestry measures to ensure productive, healthy and resilient forests
Safeguard biodiversity and water resources in our operations and beyond	○ Conduct water stewardship assessments at our mills and forest operations by 2025, and implement required actions to address the findings by 2030 ○ Conduct biodiversity assessments at our mills and forest operations, introducing biodiversity action plans where necessary by 2025

CDP DISCLOSURE INSIGHT ACTION A LIST 2020
CLIMATE FORESTS WATER

WWF CLIMATE SAVERS 碳减排先锋 DEFENSORES DO CLIMA クライメート・セイバーズ
A WWF GLOBAL INITIATIVE WITH BUSINESS

Current practice: Nestlé

Nestlé
Good Food, Good Life

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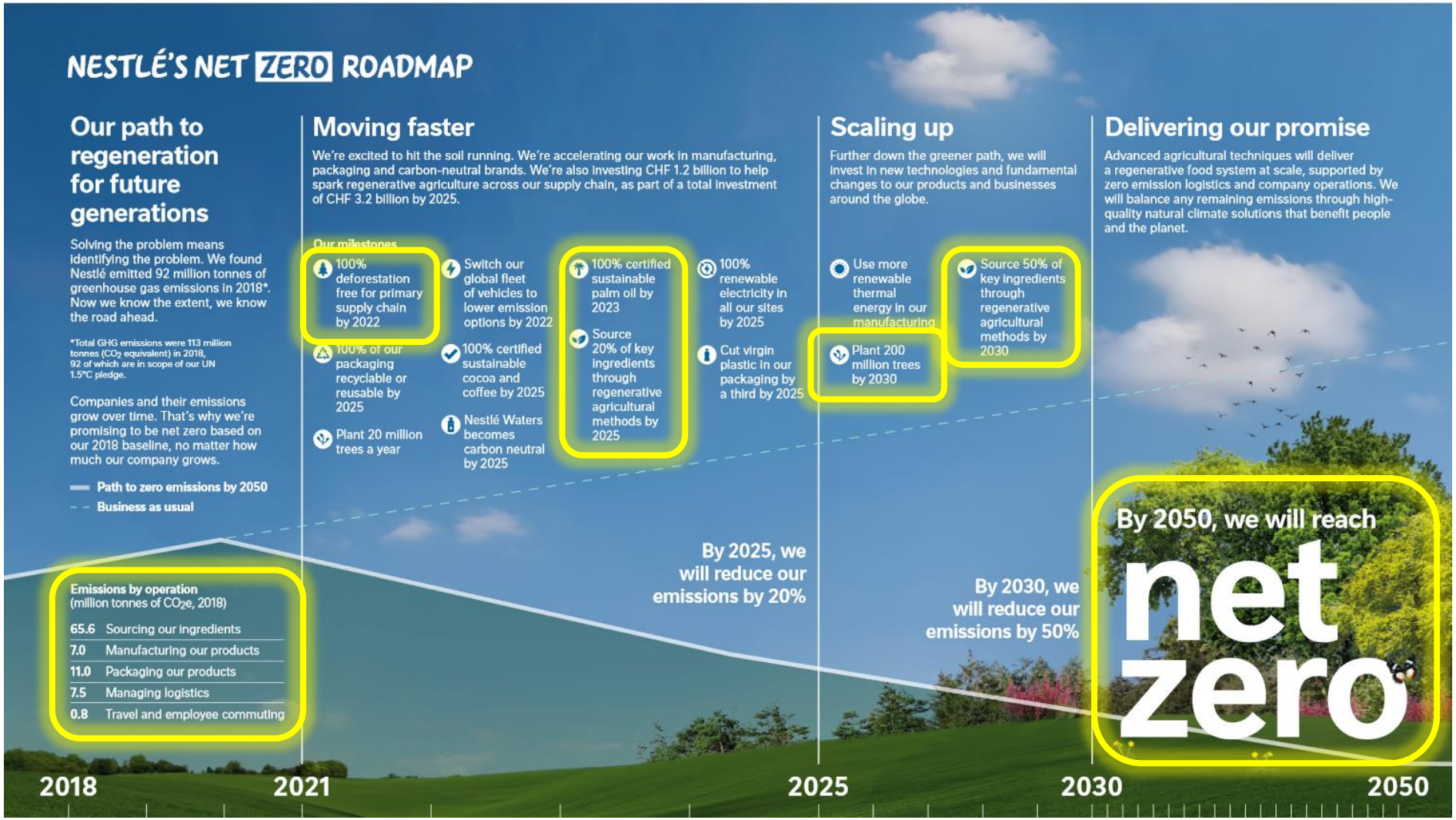
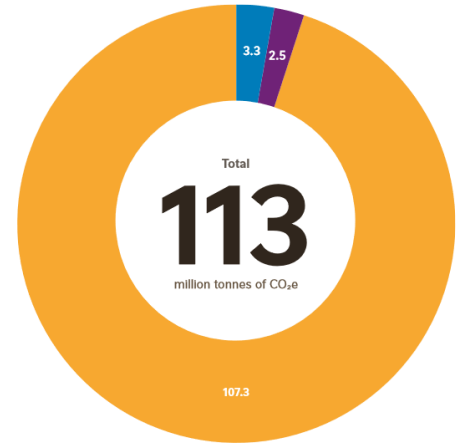




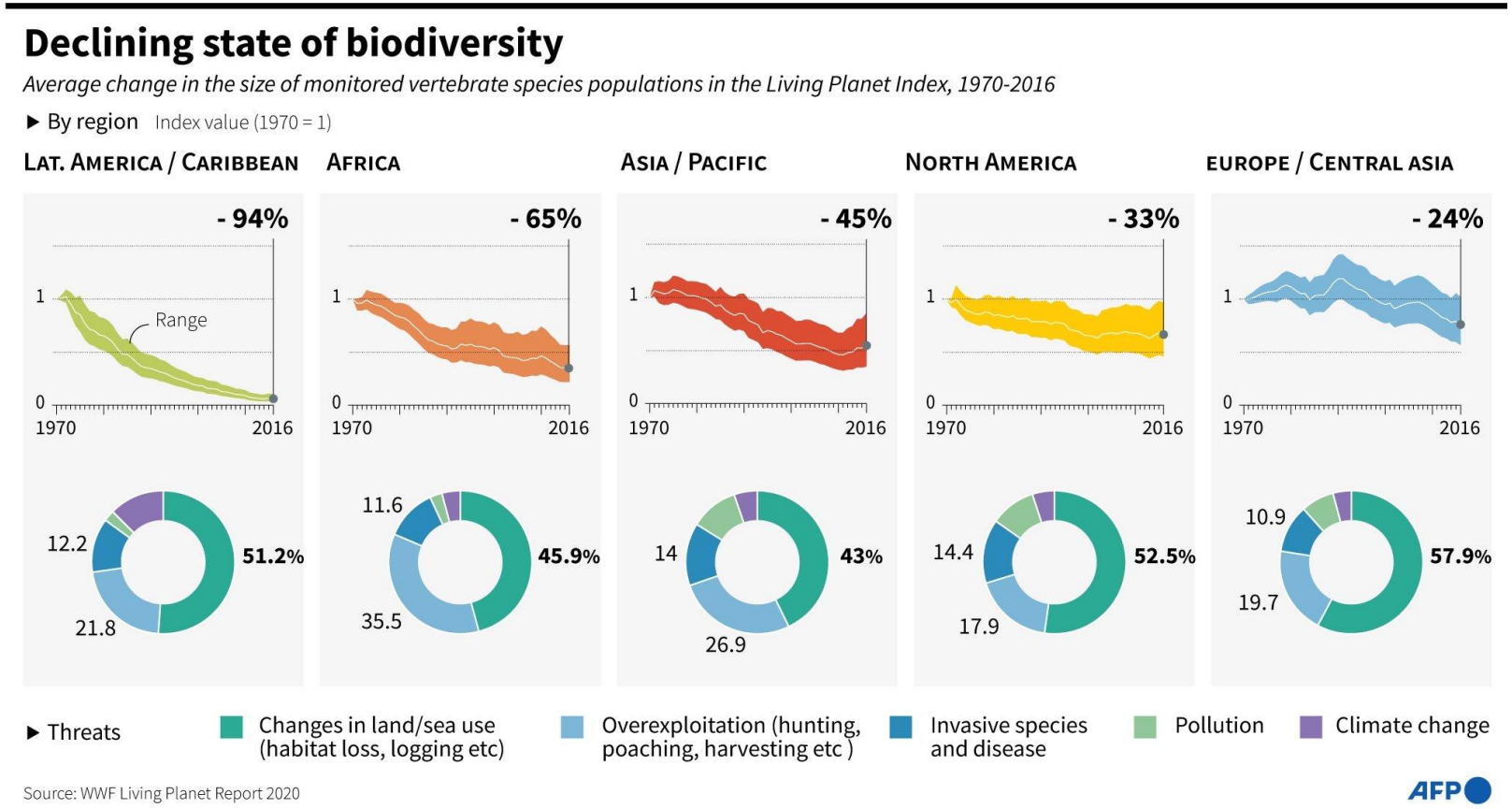
Scope 1
Emitted directly 3.3 3.0%
from sources we own or control such as on-site combustion (coal, natural gas, fuel for company's vehicle fleet).

Scope 2
Emitted indirectly 2.5 2.2%
from the generation of purchased energy like electricity and heating/ cooling network.

Scope 3
All other indirect emissions 107.3 94.8%
in our value chain, both upstream and downstream, such as sourcing and use of sold products.

Biodiversity – the next big thing

As if we didn't have enough things to worry about...



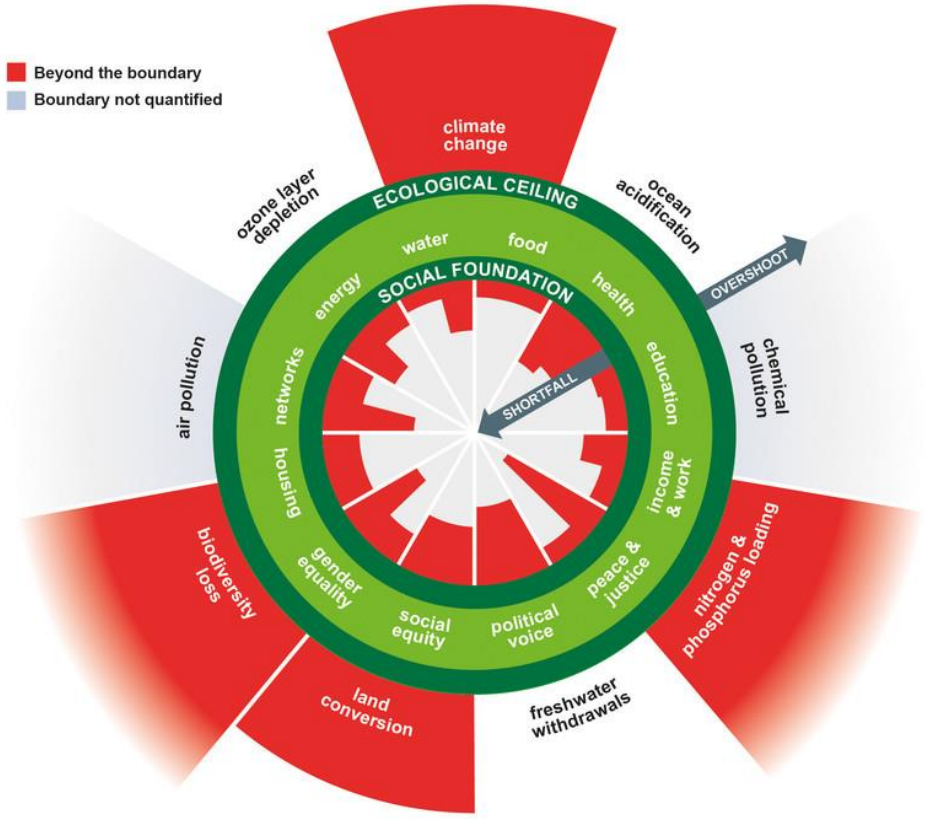
Climate change-driven pressures on biodiversity

Source: WWF Living Planet Report 2020

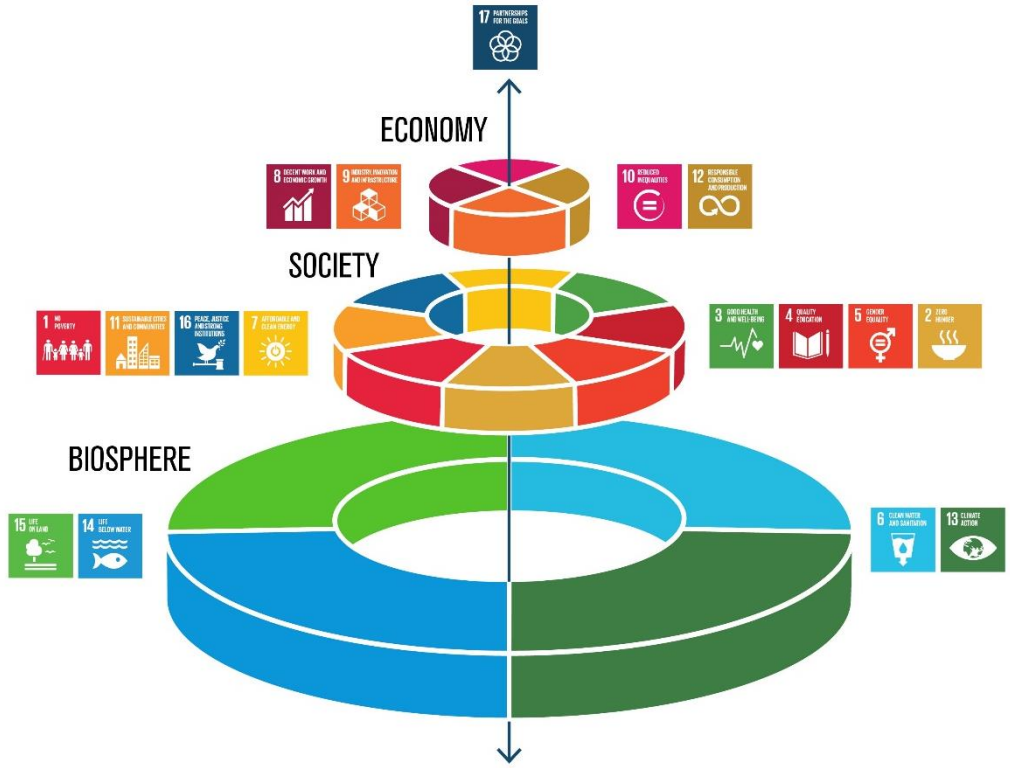
Putting things in context

Sustainability really likes food metaphors :)

“Doughnut economics”



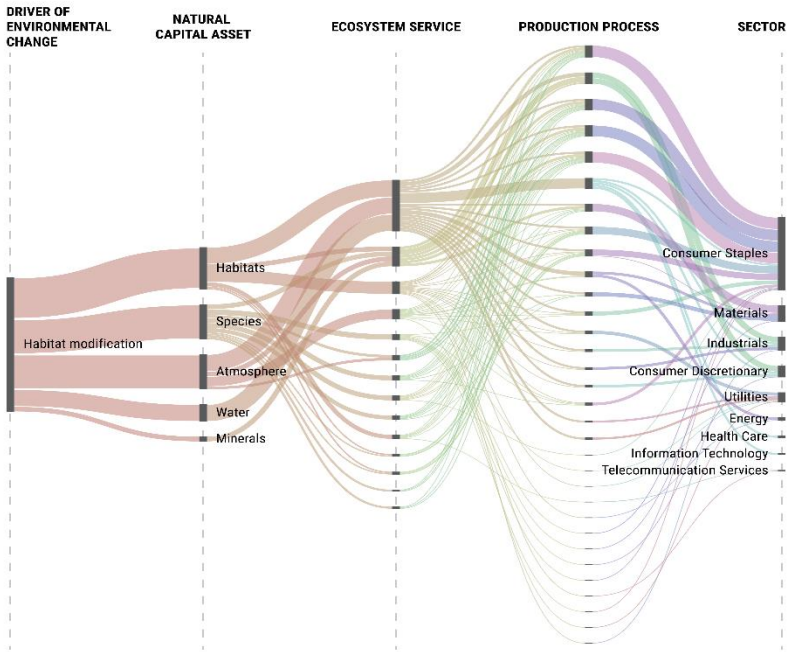
“SDG wedding cake”



Why should you care?

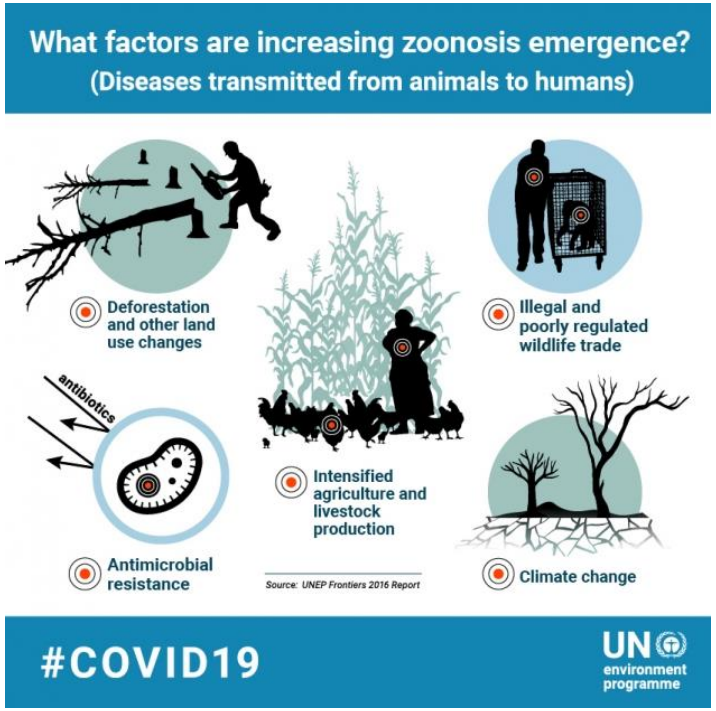
Biodiversity underpins the economy

Source: Dasgupta Review



The links between the economy and biodiversity loss are complex

Source: We Value Nature



Look no further than COVID-19

Source: UN Environment Programme

Why should you care?

Biodiversity is gaining ground on the policy agenda

UN environment programme

CBD

Convention on Biological Diversity

Distr.
GENERAL

CBD/POST2020/PREP/2/1
17 August 2020

ORIGINAL: ENGLISH

PREPARATIONS FOR THE POST-2020 BIODIVERSITY FRAMEWORK

UPDATE OF THE ZERO DRAFT OF THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

Global governments to adopt…

2050 biodiversity vision

2050 biodiversity goals

2030 biodiversity milestones & actions

End-May 2021!

Science-Based Targets for Nature

Similarities and differences to SBTs for GHGs

So far

Contents:
Concepts & definitions, proposed process, next steps you can take

By end-2022

Full guidance

Key differences

SBTs for GHGs	SBTs for Nature
Single driver of impacts (GHGs)	Multiple drivers (land use , water use , pollution, etc.)
1 kg of CO2-eq emissions has the same impact regardless of where it is emitted	Impacts on biodiversity depend on local species richness, diversity, and ecosystem resilience (e.g. water stress)
Land sector sequestration is not included (so far)	Land sector is included *by definition*

Materiality as a guiding principle
(you cannot/need not do everything!)

You will need to understand the local context

Parallel update of GHG Protocol & SBTi (GHGs) guidance to account for land sector expected end-2021

Science-Based Targets for Nature

Where to start? Illustrative targets & supporting initiatives

IFC International Finance Corporation WORLD BANK GROUP
Creating Markets, Creating Opportunities

Performance Standard 6

CAPITALS COALITION CambridgeConservationInitiative

Avoid sourcing from areas of high species extinction risk

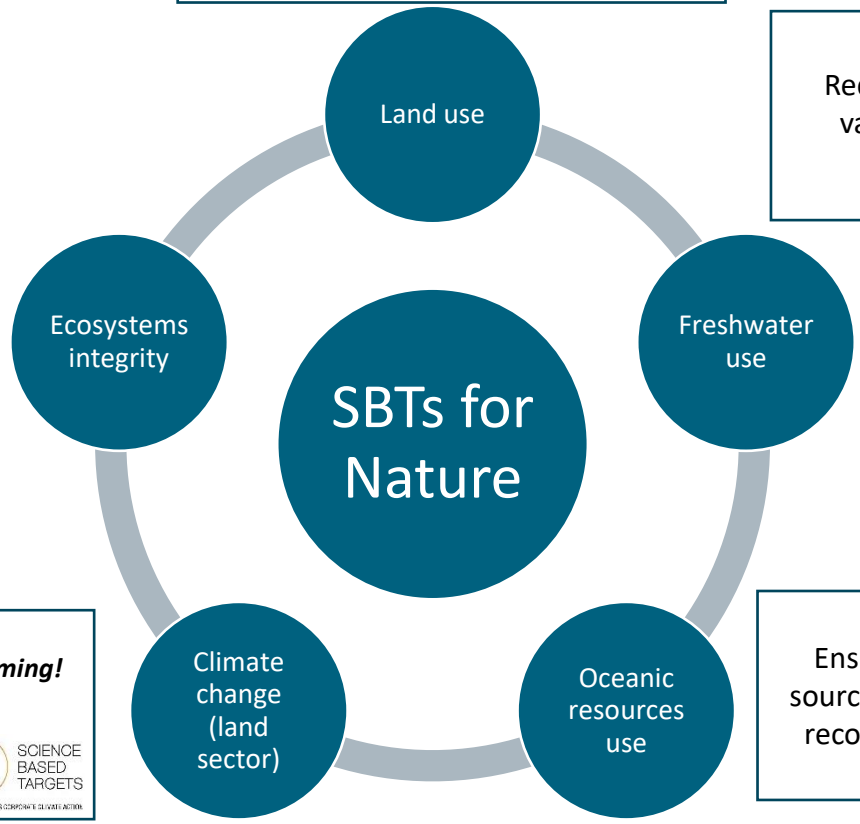
Source X% of key ingredients through regenerative agriculture

Regeneration via X% ecological focus areas in critical sourcing locations

Reduce deforestation in upstream supply chain by X%

CDP

Accountability Framework



Reduce water use in value chain by X%

CDP

UN GLOBAL COMPACT CEO WATER MANDATE

Sequester X tons of CO2 through landscape restoration *for residual emissions*

GREENHOUSE GAS PROTOCOL

Upcoming!

SCIENCE BASED TARGETS

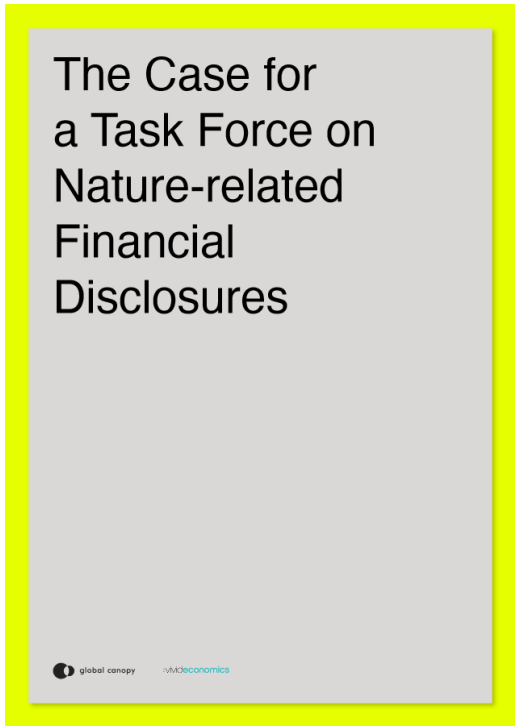
Ensure 100% of fish sourcing is according to recognized standards

GSSI GLOBAL SUSTAINABLE SEAFOOD INITIATIVE

GLOBAL DIALOGUE on Seafood Traceability

Task-Force for Nature-related financial disclosures Similarities and differences from TCFD

So far



Contents:
Concepts & definitions, proposed risk framework

By Q2 2023

Full guidance

Key differences

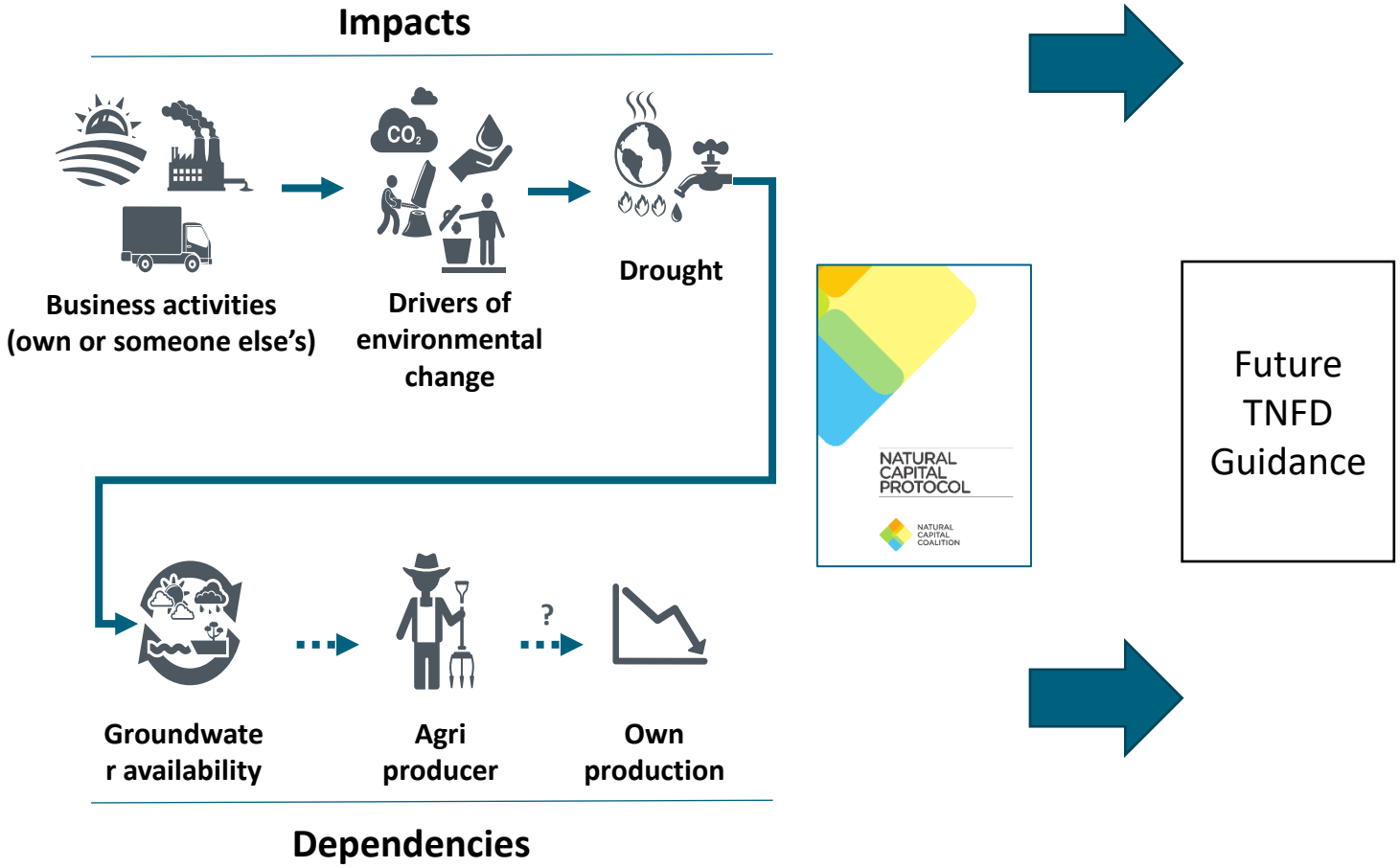
TCFD (Climate)	TNFD (nature)
Risks & opportunities stemming from climate change (single lens)	Risks & opportunities stemming from biodiversity issues (multi-issue lens)
Risks & opportunities	Risks, opportunities & *dependencies*
Tools for scenario analysis are (mostly) available	Tools for scenario analysis are (mostly) in development

You will need to broaden the scope of issues you address

You will need to adopt Natural Capital thinking

Some of the tools needed aren't available yet, but you can already start preparing

Task-Force for Nature-related financial disclosures Where to start? Natural Capital thinking



Transition risks	Example
Policy & regulations	New policy, biodiversity targets Stranded assets (e.g. palm oil)
Markets	Preference for sustainable goods (e.g. plastics free)
Reputation	Community opposition Shareholder activism
Legal	Environmental litigation Loss of license to operate

Physical risks	Example
Operations/commodities	Direct dependence on some ecosystem services (e.g. water)
Supply chain	Increased prices of key raw materials (e.g. due to decreasing yields)
Disaster resilience	Increased flooding, droughts, pest outbreaks

Where to start?

SCOPING

Materiality. Screening of potentially important impacts & dependencies on nature (which impacts, which locations)

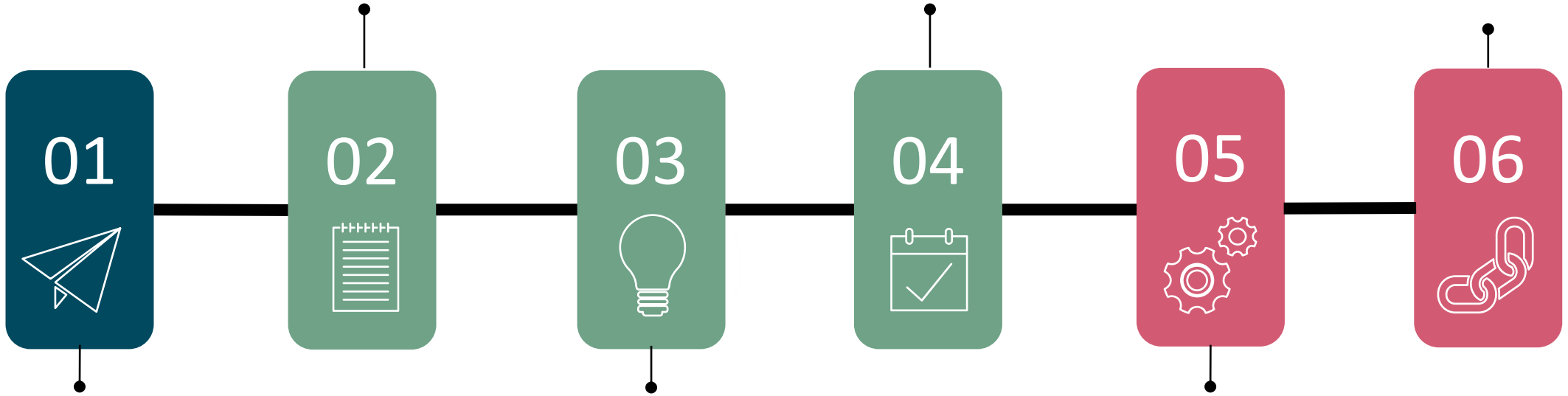
STRATEGY & ROADMAP

Identify steps for integrating or strengthening nature issues in sustainability strategy and activities.

Define levels of ambition (water, deforestation, etc.)

DISCLOSURE

Internal / external communication (SBT, CDP), Monitoring verification



Getting started

Understanding the context & its importance

ANALYSIS

Sustainability strategy gap analysis
On-the-ground analysis – the real company context

IMPLEMENTATION

Implementation of short and medium-term measures, planning for the long term, Monitoring plan

Example from Metro AG

Scoping: natural capital impacts in the value chain

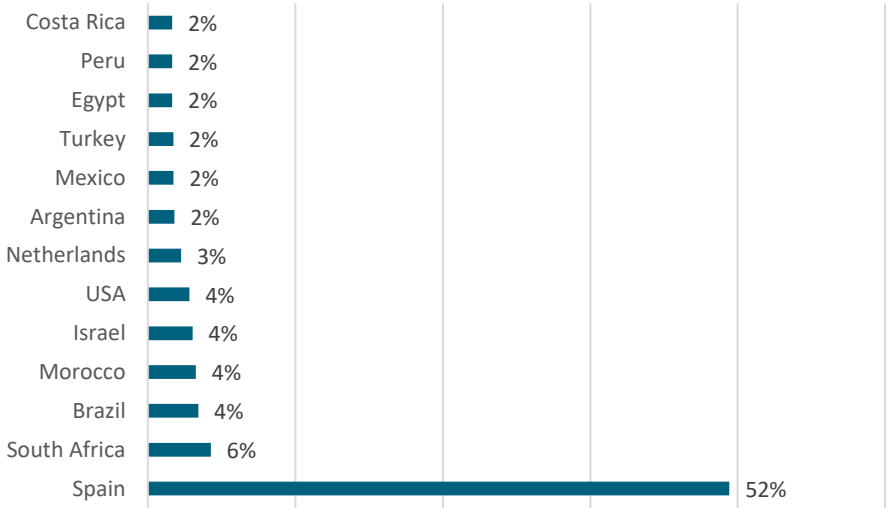
Goal: Understanding natural capital impacts of fruits & vegetables sourcing.

Scope: Hundreds of suppliers from 50+ countries.

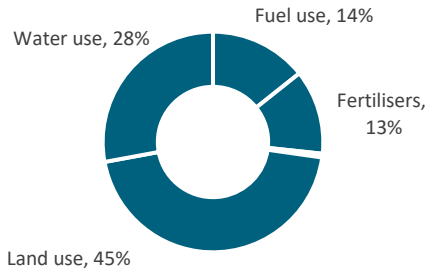
Approach: Input-output modelling based on purchasing data. Monetization of impacts for comparability.

Outcomes: “Big picture” view of entire F&V supply chain, allowing for further prioritization of activities.

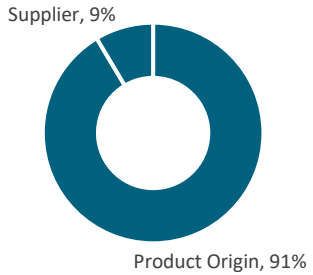
Shares of impacts by country



Shares by driver of impacts



Shares by supply chain step



Example for on-the-ground assessment

ANALYSIS: Understanding the company context (time and place)

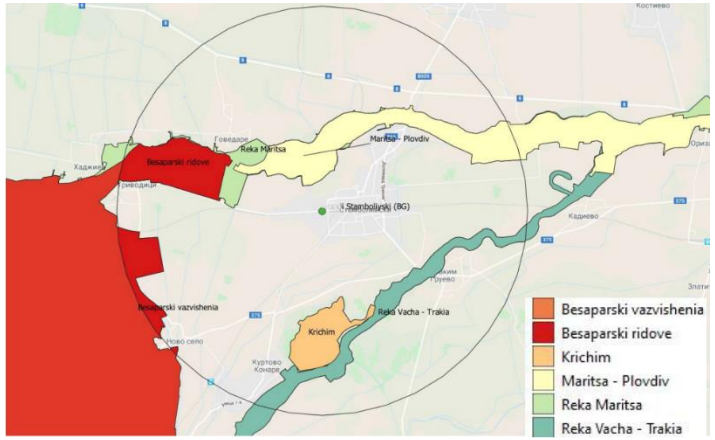
Goal: Understand *local* biodiversity issues.

Scope: Site/operations-level.

Approach: Mapping, local data sources & research.

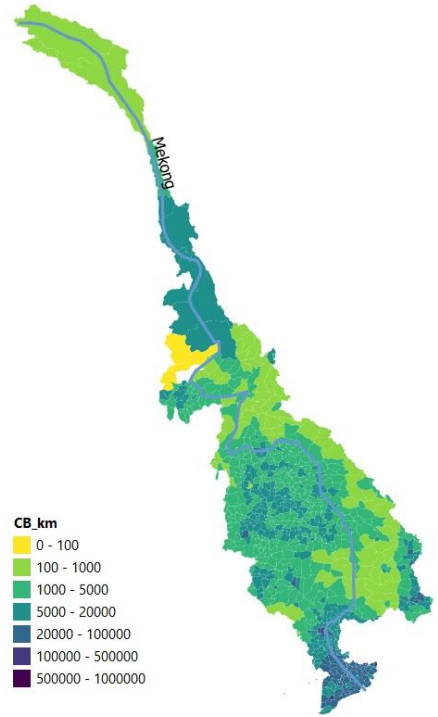
Outcomes: Prioritization of issues between sites based on their local characteristics.

Mapping areas of high biodiversity value in vicinity of site



Pressure	*Driver*	*Potential impact*	*Remedial measures*
Waste water discharge	Chemical water status	Deteriorating water quality downstream	Increased periodic monitoring
Soil contamination	Pipe leakage	Chlorates to soil	Stepwise pipe replacement
Air emissions	Fuel use	NOX, SOx pollution	Fuel switch to biofuel boiler
…	…	…	…

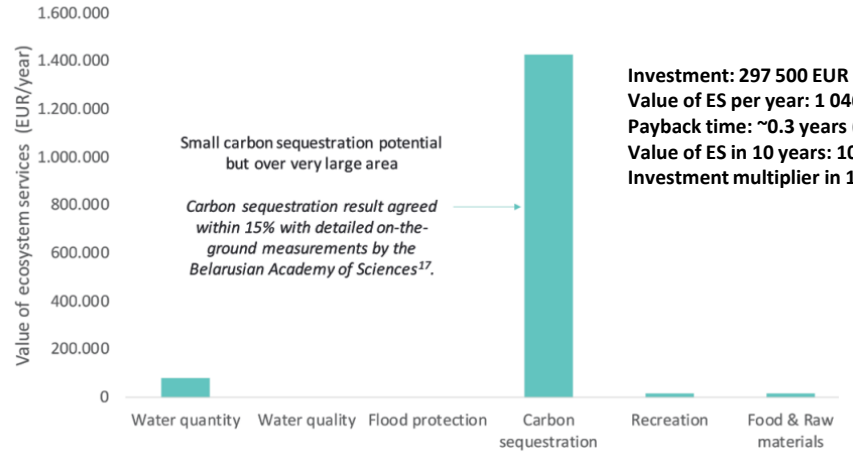
Mapping plastics pollution from products use



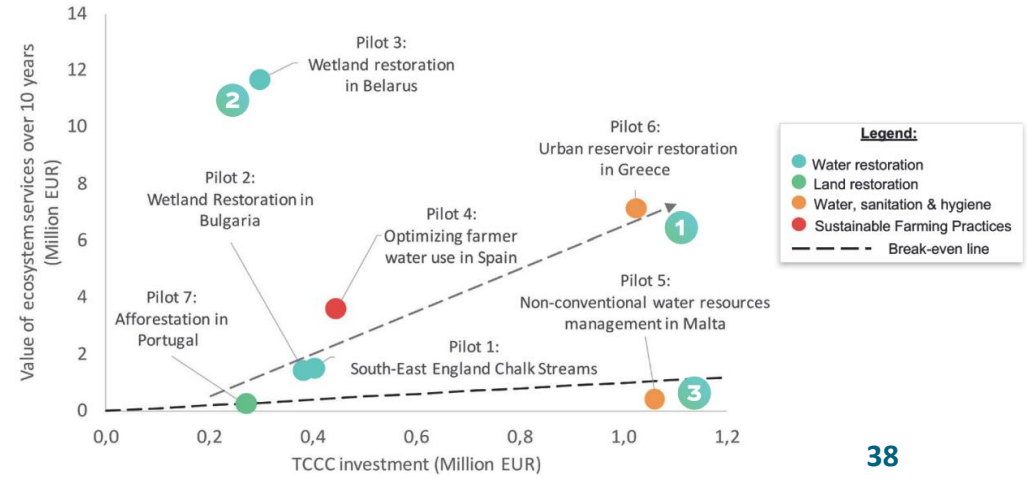
Example from The Coca-Cola Company

STRATEGY: From water replenishment to Nature-Based Solutions

Example pilot:
Yelnya, Belarus
(5th largest peat bog in Europe)



Investment: 297 500 EUR
Value of ES per year: 1 046 500 EUR
Payback time: ~0.3 years (4 months)
Value of ES in 10 years: 10 465 000 EUR
Investment multiplier in 10 years: 35



Hear more about this on the 23rd of March as part of the WVN programme (09:00 – 10:30 CET)!

Example for supply chain

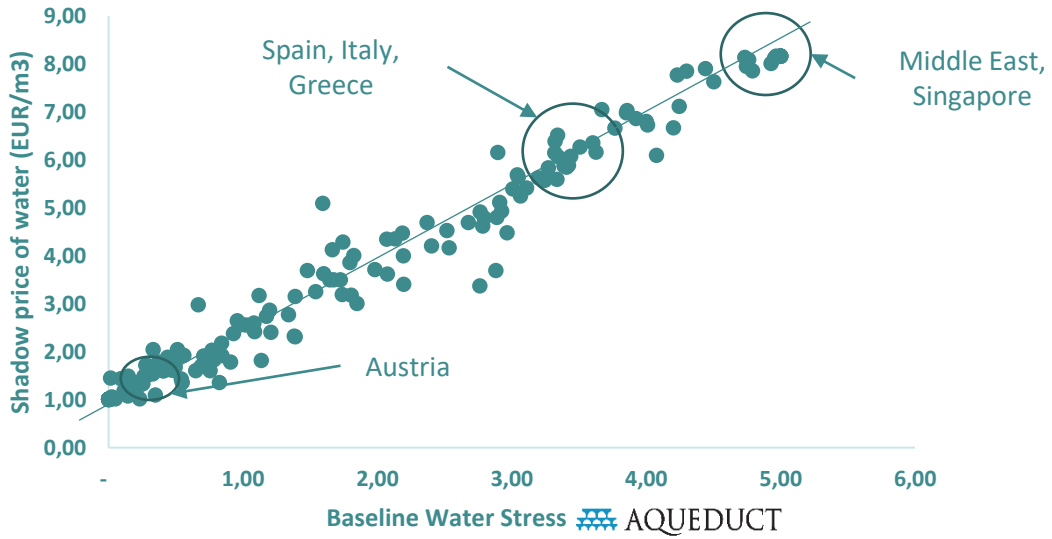
IMPLEMENTATION: Guiding investment via a Shadow price of water

Goal: Integrating water-related risks in investment decisions.

Scope: ~200 bottling plants across the world.

Approach: Valuation of natural & social capital benefits of water, taking into account its local importance (water stress).

Outcomes: Water-related risks can be integrated into financial decision making, esp. in cost-benefit analyses of measures for water efficiency improvement.



Water price (EUR/m3) + Additional OPEX (EUR/m3) + Shadow price of water (EUR/m3) = "True" cost of water (EUR/m3)

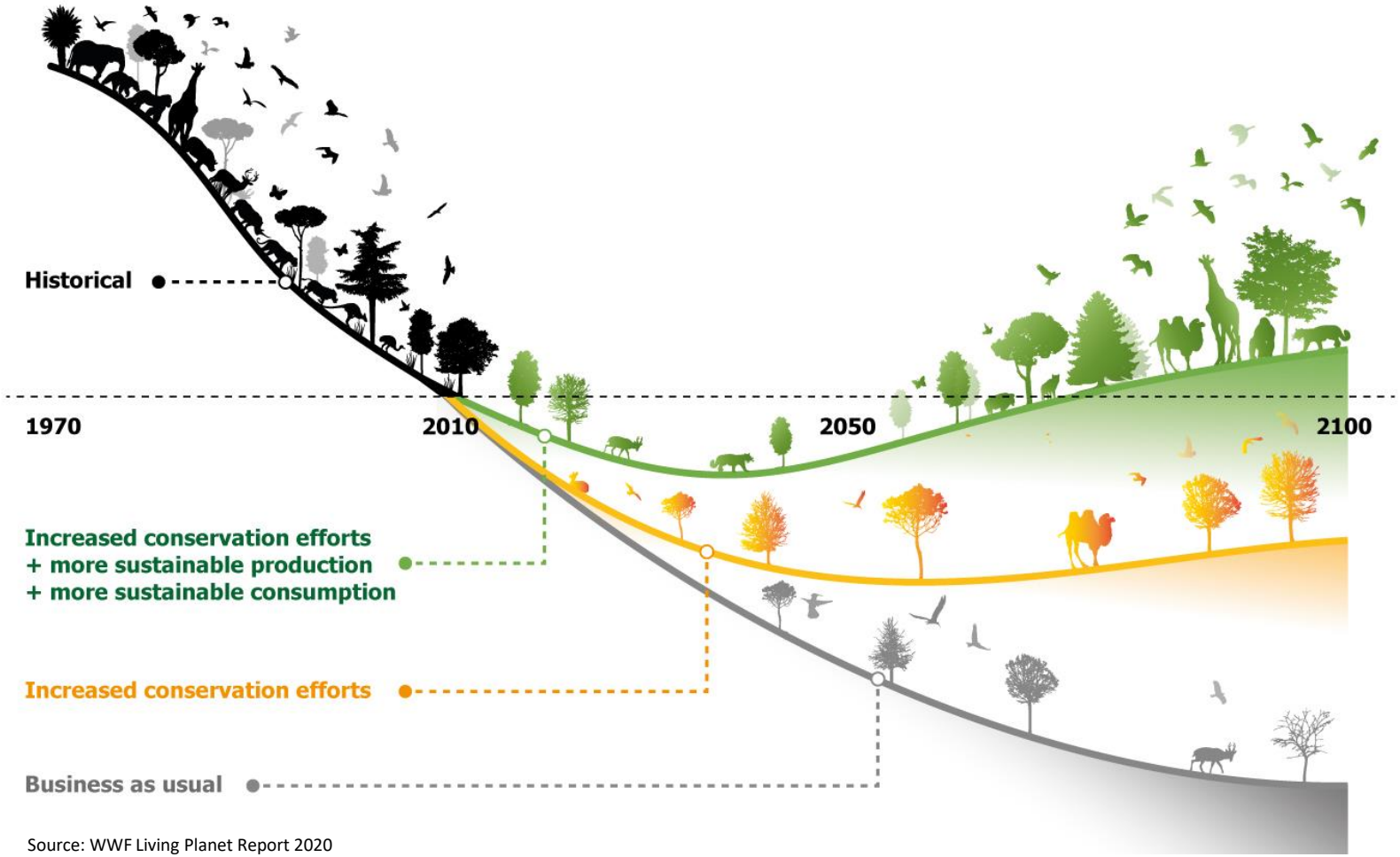
In vast majority of cases, does not cover any impacts on nature.

Adding additional water-related expenses (pumping, treatment, etc.) gives a fuller appreciation of value but still does not cover nature-related issues.

Shadow price of water reflects potential costs for other users (agriculture, sanitation, ecosystems). Depends on local water stress.

Can more adequately guide financial decisions, considering water-related risks.

Bending the curve!



Source: WWF Living Planet Report 2020

To sum it up

What is expected already („must-haves“)

- Committment & action on climate
- Based on existing standards, such as GHGP, SBTi, TCFD …
- Climate action becoming mainstream in major markets – harder to be a frontrunner!
- Scientific (+ policy) insights show biodiversity as emerging risk + topic to engage for companies
- Biodiversity seen as material topic for certain sectors – hard to grasp for many others!

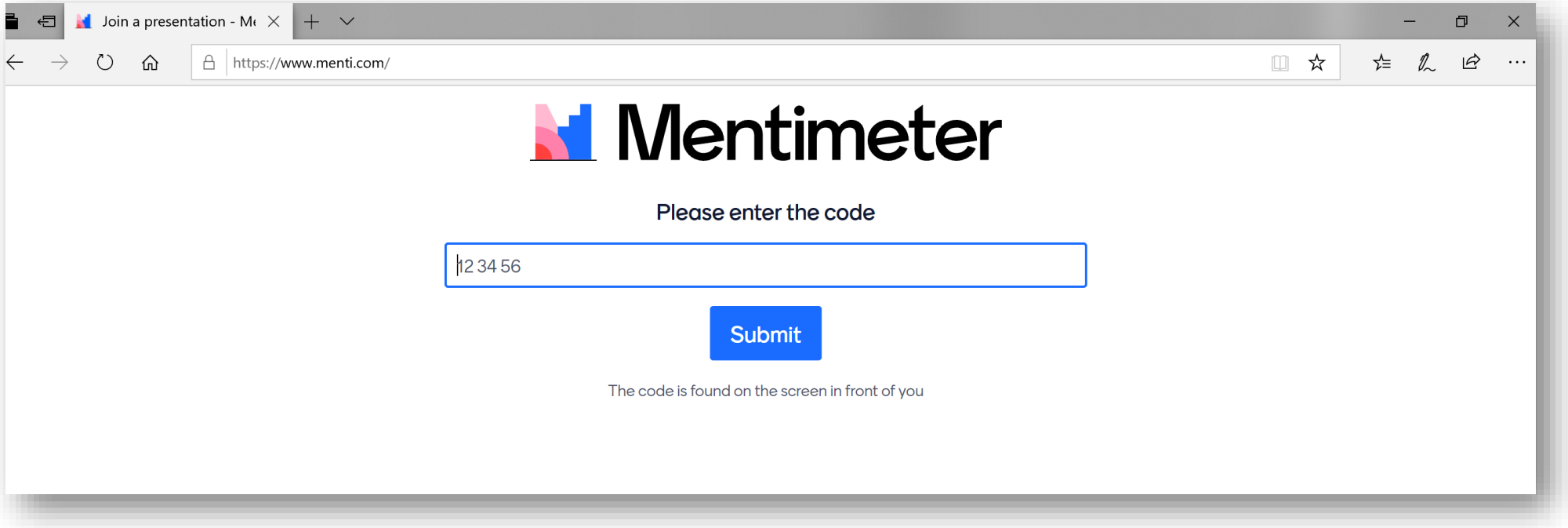
What will be expected (future „must-haves“)

- Committment & action on biodiversity
- Governmental policies are emerging
- Standards and methodologies for business are emerging
- You can already set targets and/or explore risks for multiple issues
- Awareness + action on biodiversity to emerge from niche topic into mainstream for all sectors
- Various stakeholders (NGOs, science, local commiunities …) expected to engage more on biodiversity

Ask us anything!

Please open your browser and type in: menti.com

Enter this code: 4436 6171 (will also post in the chat)



Thank you

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create sustainable value

Check out our latest publications!

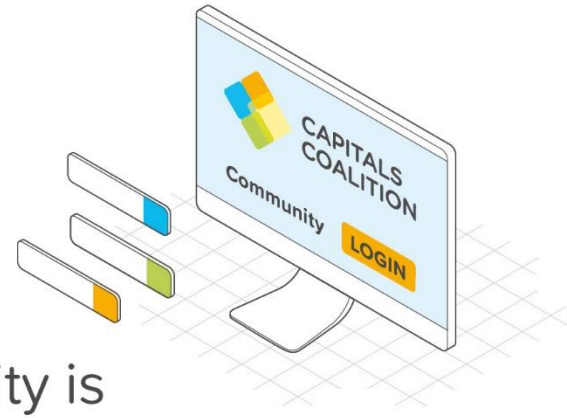
https://bit.ly/2TaYSvs

https://bit.ly/3bTEp8y

Join our We Value Nature event!

Water replenishment & Creating natural capital through nature-based solutions

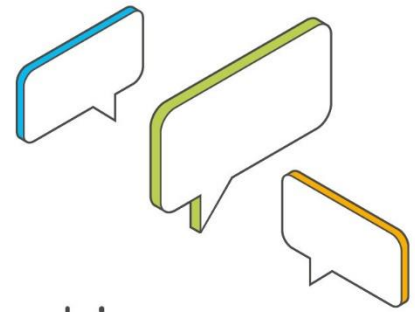
23rd March 2021, 9:00 - 10:30 CET



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