



Masterclass 2: Understanding Finance and Sustainable Chemicals Management

Masterclass on best practices to shift financial flows to sustainable chemicals management

GFC OEWG Multi-Stakeholder Day

26th Jun 2025, 1:00 p.m. – 1:45 p.m



Agenda

#	Agenda Item	Speakers
1.	Welcome & Introduction (~5 min)	Johannes Heister, World Bank
2.	Pollution Guidance for banks (~10 min) - Why should financial institutions care about sustainable management of chemicals (Navigating Pollution: A Blueprint for the Banking Sector) - Presentation of UNEP FI Pollution Guidance for banks in the agriculture sector, developed under the GEF FARM Programme	Benjamin Warr, UNEP FI
3.	Presentations and panel discussion (~30 min) - Presentation of examples of best practices to shift financial portfolios - Key issues to address to accelerate and scale up finance alignment <u>Presenters and Panelists:</u> - ING, Anna Chilton - BNPP AM, Rachel Crossley - EOS at Federated Hermes, Tsitsi Griffiths	Facilitated by Peggy Lefort, UNEP FI
4.	Conclusion (~5 min)	Johannes Heister, World Bank

Speakers



Peggy Lefort
UNEP FI
Facilitator



Johannes Heister
World Bank
Facilitator



Benjamin Warr
UNEP FI
Presenter



Anna Chilton
ING
Presenter/ Panelist



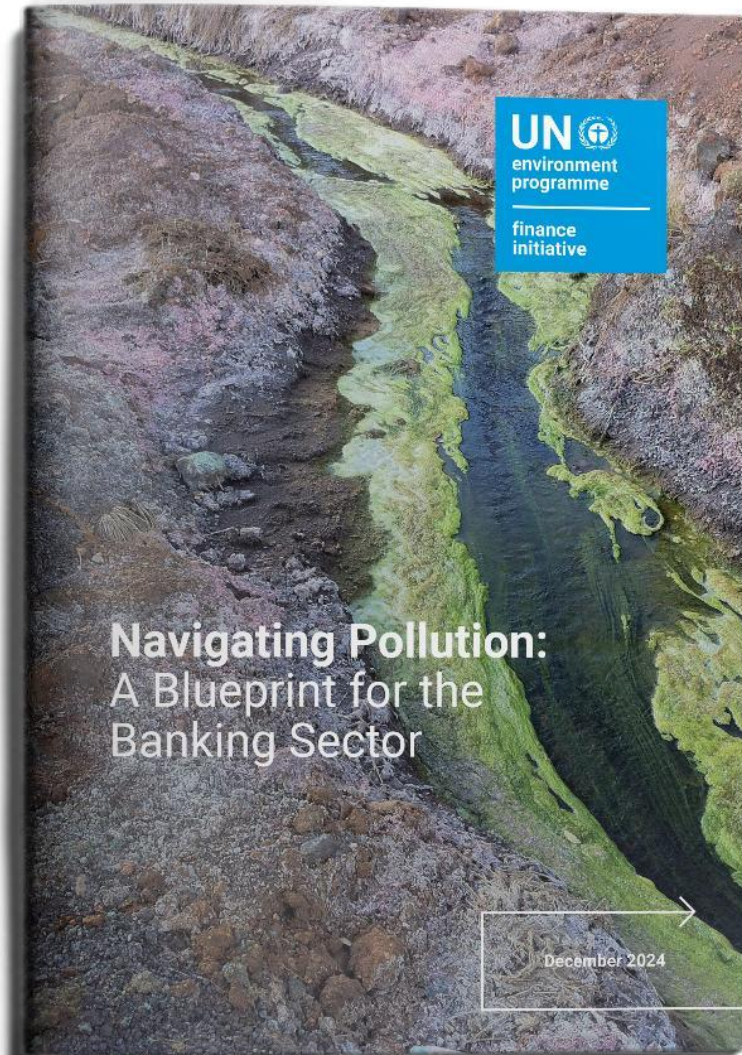
Rachel Crossley
BNP Paribas Asset Management
Presenter/ Panelist



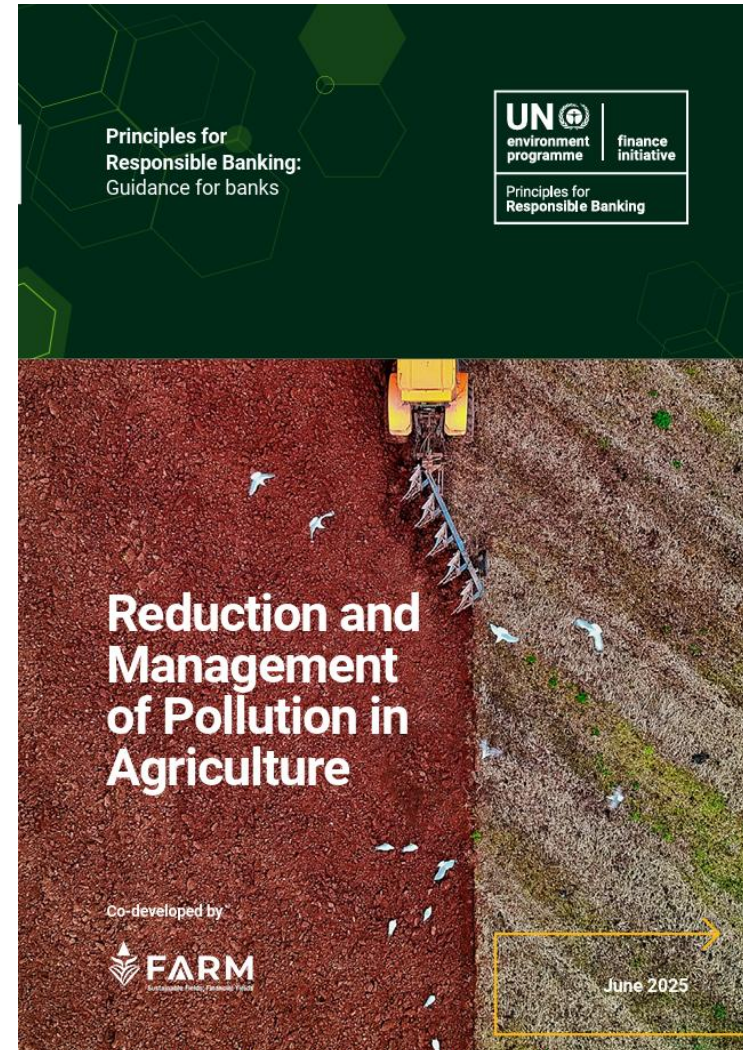
Tsitsi Griffiths
EOS at Federated Hermes Limited
Presenter/ Panelist

Pollution Guidance for banks

Two publications and a progressive approach



Access the paper [here](#)



Access the guidance [here](#)

In **Navigating Pollution**, 6 Principles for Responsible Banking are applied across 5 sectors:

- Alignment
- Impact and Target Setting
- Clients and Customers
- Stakeholders
- Governance and culture
- Transparency and accountability

In the **Guidance**, 4 Implementation Actions:

- Policies, process and culture
- Client engagement
- Portfolio composition and financing
- Stakeholder engagement and partnerships

are developed in the agriculture sector.

Impact of lending and investment has environmental, social and economic costs.

- Combined they represent approx. USD 20 trillion per annum (or 20% of the entire global economic system)
- Estimating the costs and risks is challenging

Direct economic costs:

- Readily quantifiable

Indirect economic costs

- Hard to quantify

1. Complexity of pollution
2. Measurement and data availability
3. Lack of markets and cost reflective prices
4. Complexity of economic systems

Media	Direct economic costs	Indirect economic costs/losses	Annual loss (USD)
Air	▪ Medical expenses for pollution-related illnesses ▪ Agricultural losses ▪ Reduced property values ▪ Control and cleanup measures	▪ Reduced labour productivity ▪ Loss of tourism revenue ▪ Yield decline from soil acidification ▪ Damage to infrastructure	8.1 trillion (World Bank 2022)
Soil	▪ Reduced crop yields ▪ Increased production costs ▪ Loss of property value ▪ Soil remediation costs	▪ Health care costs ▪ Loss of ecosystem services ▪ Loss of biodiversity ▪ Loss of amenity value	6.3–10.6 trillion (ELD 2015)
Fresh water	▪ Increased water treatment costs ▪ Reduced agricultural productivity ▪ Loss of fisheries revenue ▪ Property value decline	▪ Health care costs ▪ Industrial losses ▪ Loss of ecosystem services ▪ Loss of amenity value	0.5 trillion (UNDP 2016)
Oceans	▪ Fisheries decline ▪ Coastal property damage ▪ Cleanup costs ▪ Loss of fisheries revenue	▪ Loss of ecosystem services ▪ Increased costs for industries ▪ Impact on food security ▪ Amenity value decline	3.7 trillion (plastics only) (WWF 2021)

Double materiality of pollution

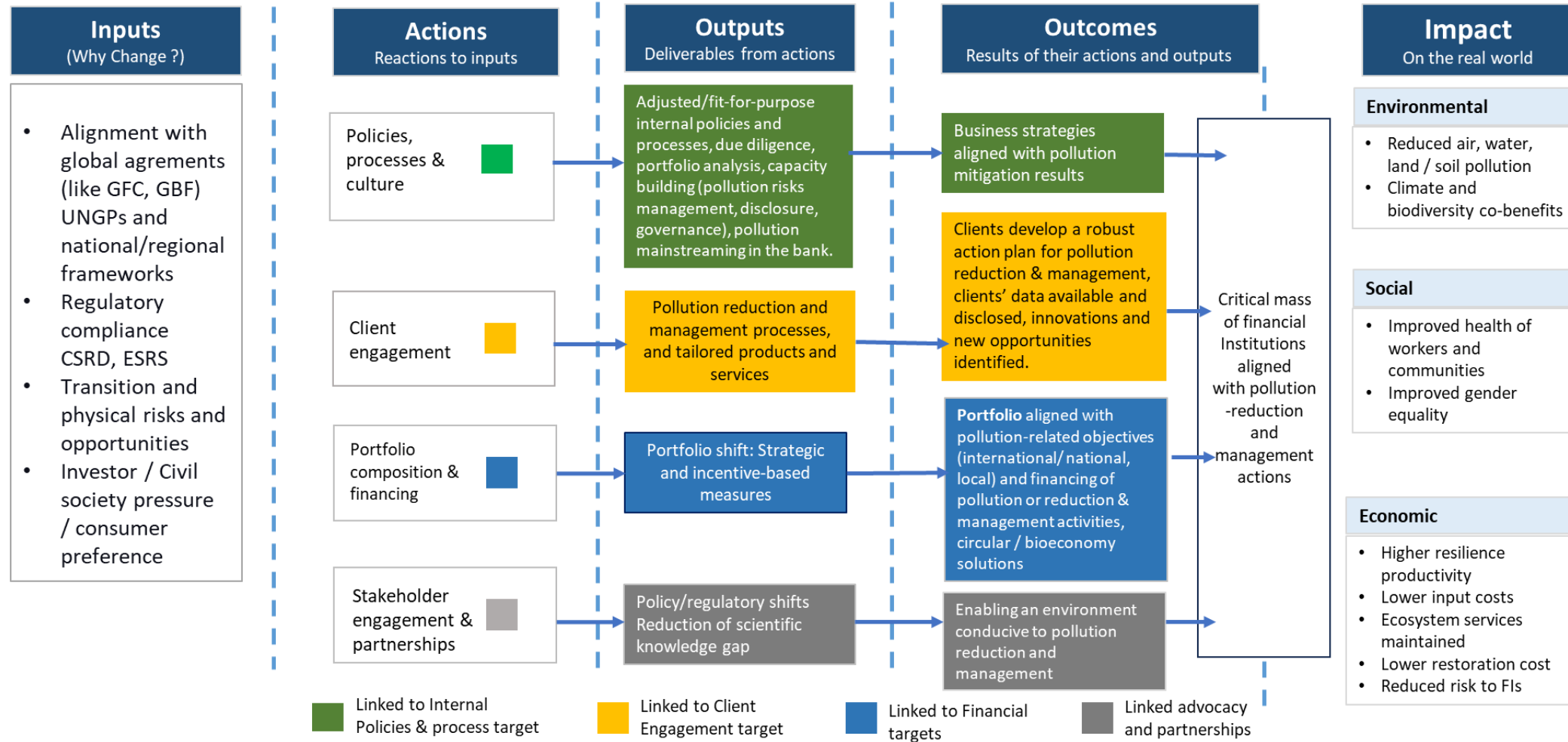
Impact materiality	
How the banks’ portfolio composition and business practices contribute to pollution	
Environmental	• Degradation of air, water and soil quality • Habitat destruction and biodiversity loss • Climate change, leading to rising temperatures, sea level rise, and more extreme weather events
Social	• Negative health effects respiratory diseases, cardiovascular disease, cancer, neurological disorders • Socioeconomic losses: Job losses, reduced productivity, and higher costs for healthcare and worker compensation. • Inequity and social justice: Pollution disproportionately impacts marginalized groups, exacerbating inequalities and violating rights to health, a clean environment, and housing.
Economic	• Economic costs including the costs of cleaning up pollution, treating health problems, and mitigating the impacts of climate change. • Economic opportunities: Not achieving a just transition to a cleaner economy could stifle the creation of new economic opportunities • Convergence issues: Pollution's economic impacts vary by region, causing convergence issues and potential trade tensions.

Financial materiality	
How external factors related to pollution affect banks’ financial health	
Credit Risk	Pollution-related incidents can cause financial losses, reduce collateral value, or lead to fines and legal liabilities, leading to default by borrowers
Market Risk	Pollution incidents can trigger asset price fluctuations, shifts in investor sentiment, and demand changes, especially under stricter regulations or consumer preferences for sustainability
Underwriting Risk	Increased insured losses and higher insurance costs can arise from pollution-related impacts and gaps in coverage.
Operational Risk	Banks can face risks from accidents, spills, or regulatory breaches affecting operations and supply chains of polluting industries.
Liquidity Risk	Pollution-related incidents may lead to higher liquidity needs, forcing banks to raise funds to cover cleanup costs or losses.
Liability Risk	Failure to assess pollution risks can result in lawsuits, fines, and reputational damage from financing harmful activities.

Some opportunities for pollution reduction and management

Environmental	Economic	Social
• Systems change • Promote Circular Economy • Support Nature Preservation • Enhance Climate Mitigation Example: • Redesign of monocrop, pesticide dependent agricultural systems towards regenerative biodiverse systems that sequester carbon, reduce pesticide use and restore soil health.	• Cost Reduction & Risk Mitigation • New Growth Markets: • Strengthened Portfolios Market Potential: • SDG Financing Gap: Estimated at USD 30 trillion (UNCTAD, 2023). • Green Finance Products: Growing demand for sustainable investment solutions. Example: • Banks mobilized USD 2.3 trillion in sustainable finance as PRB signatories (2023), but pollution remains underprioritized.	• Human Health Improvements • Job Creation & Workforce Resilience • Productivity enhancement • Inclusive Growth Example: • Pollution control measures promote income resilience and improved working conditions across emerging clean sectors.

Guidance – Theory of Change



Four key actions under the Principles for Responsible Banking

1. Policies, processes and culture

- Prioritize environmental and social safeguards
- Integrate pollution mitigation criteria into lending frameworks
- Utilize enhanced due diligence for high-impact sectors
- Incentivize regenerative agriculture

2. Client Engagement

- Encourage data sharing & transparency
- Foster sustainable practices with technical help
- Offer favourable financing for pollution-reducing technologies & gender equality promoting projects

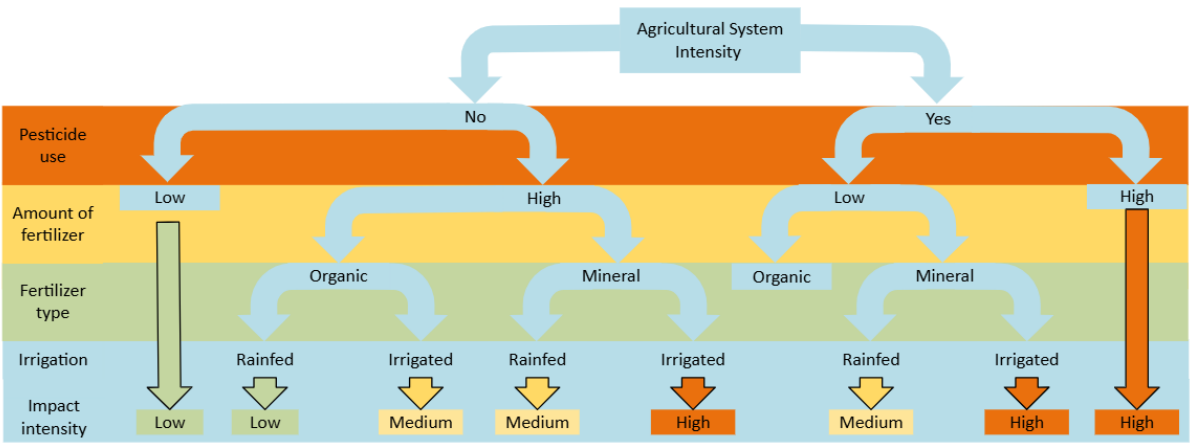
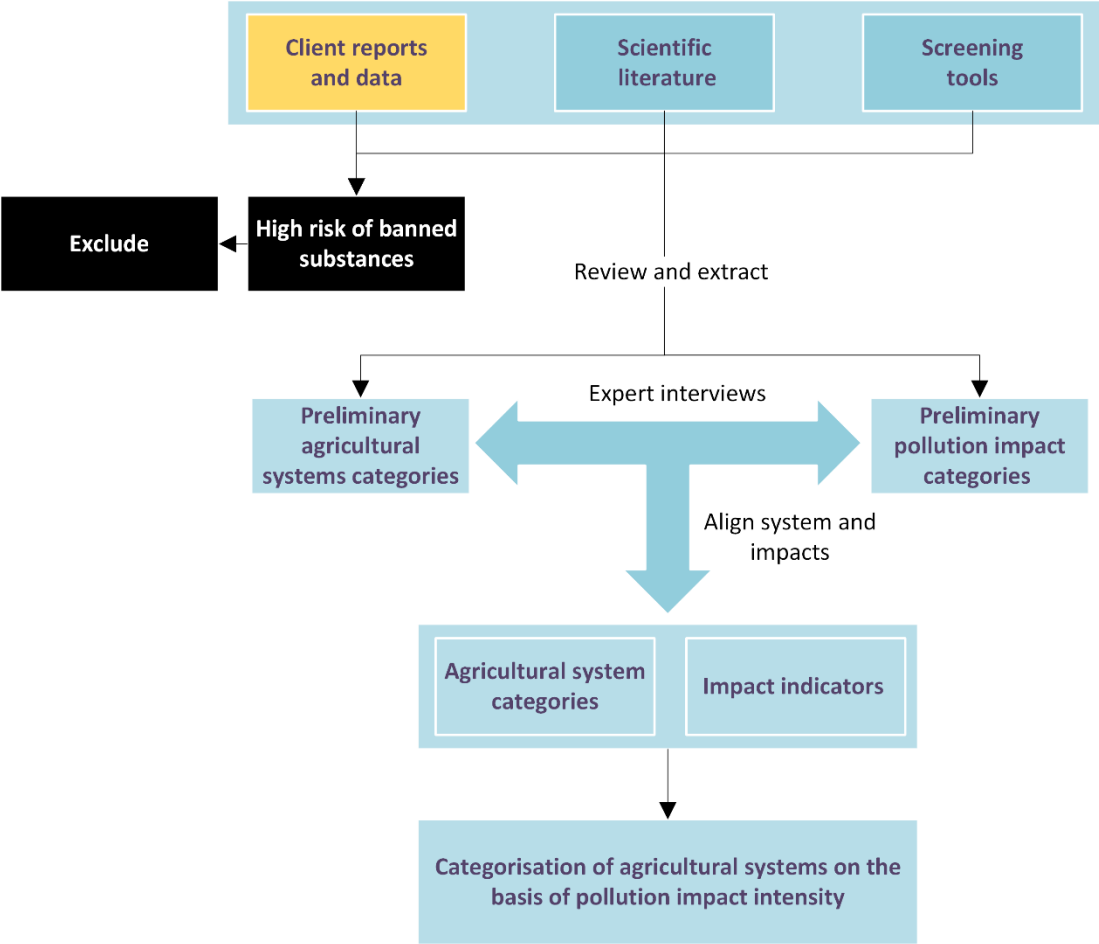
3. Portfolio composition and financing

- Allocate capital to lower-risk, sustainable agriculture
- Divest from unsustainable practices

4. Stakeholder Engagement and partnerships

- Partner with governments, industry groups, and non-profits
- Support stronger water quality regulations & farmer training programs

An example: Preliminary impact baseline



Establishing a preliminary impact baseline is a critical starting point following Alignment.

Identifying where to focus efforts across the banks’ portfolio involves determination of materiality.

Internal policies and processes can be developed and refined to engage with clients and secure necessary data, that can subsequently be used to adjust portfolios and design new financial products that incentivise and reward risk reduction.

Thank You!

UNEP FI
Industry and Economy Division





Examples of best practices to shift financial portfolios

Speakers



Anna Chilton

Nature Lead

ING



Rachel Crossley

Head of Stewardship, Europe

Sustainability Centre

BNP Paribas Asset Management



Tsitsi Griffiths

Engagement Manager

EOS at Federated Hermes Limited



Pollution research ING

June 2025

Anna Chilton / Nature Lead, Global Sustainability



do your thing

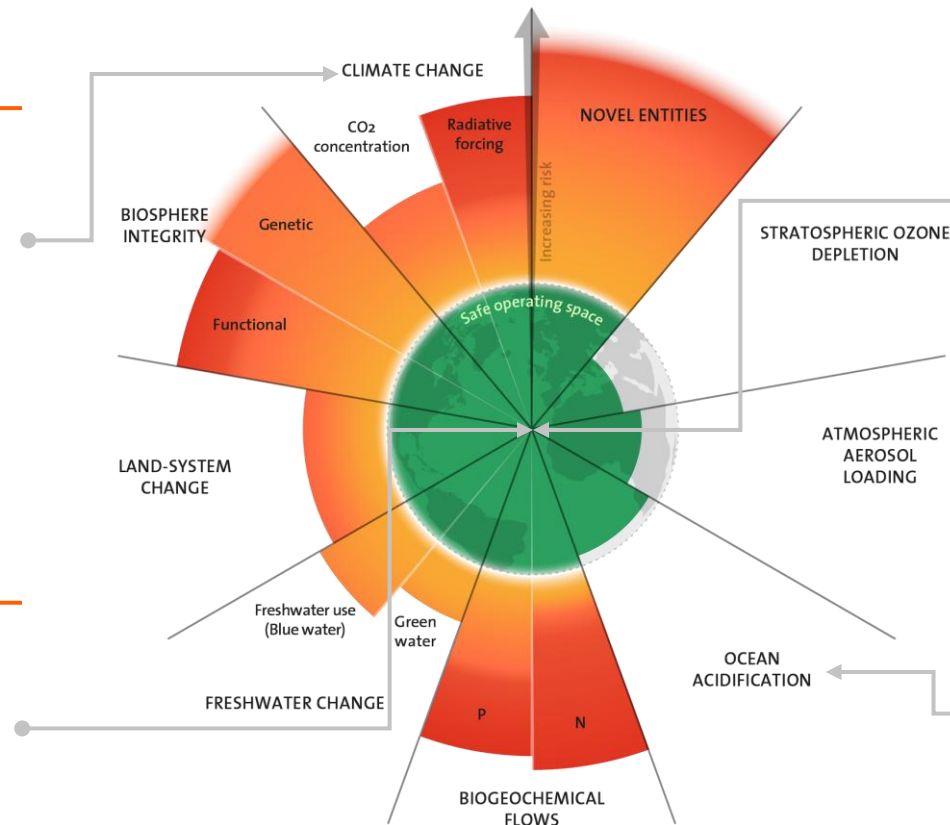
Including environmental topics, such as pollution, supports the effectiveness of our climate approach

Climate change is one environmental boundary

1. ING's climate approach is focused on reducing emissions associated with its financial activities to play a role in limiting climate change.

There is a clear imperative for nature

2. To limit the harmful effects of climate change or any other boundary, a cross-boundary approach is required, as they are inextricably linked.



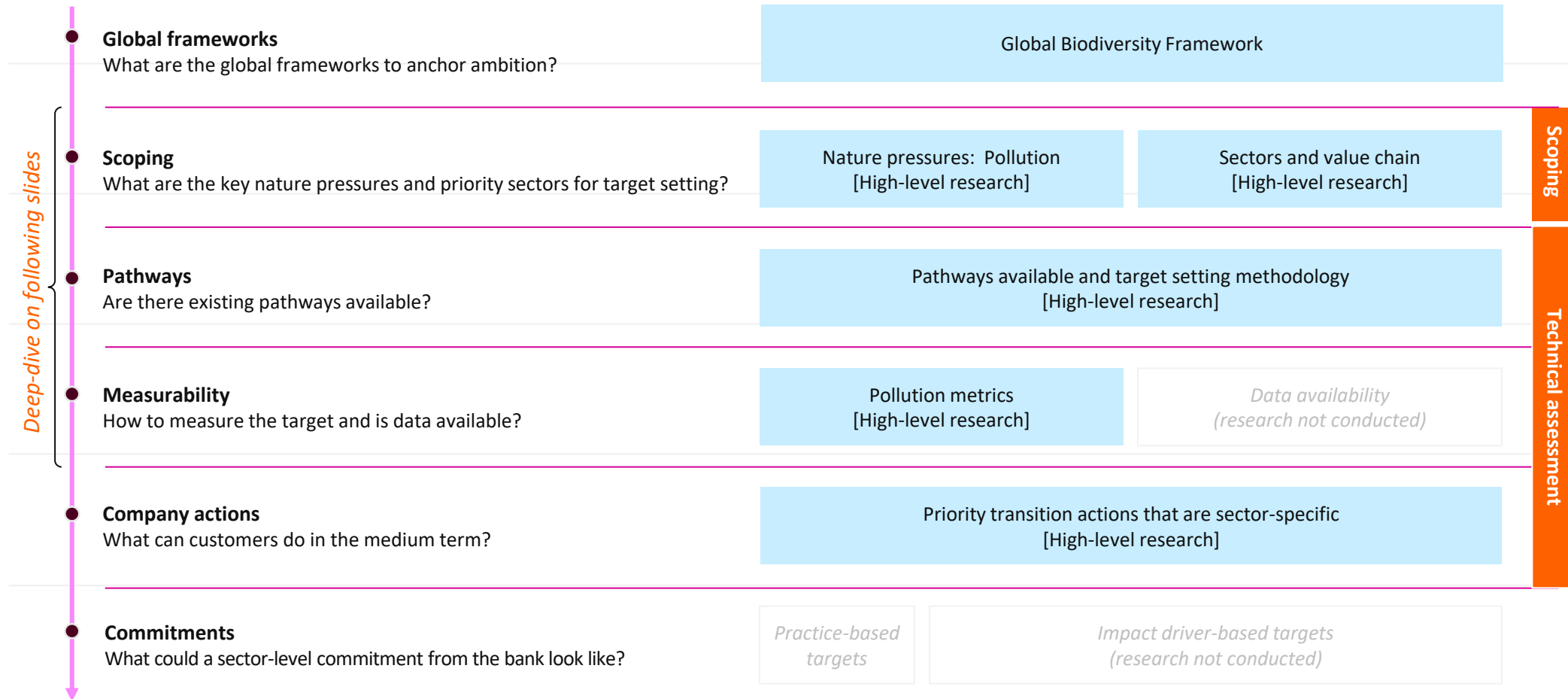
Other boundaries influence climate change

3. To reduce emissions adequately, other boundaries must be controlled, such as land-system change, including deforestation that releases stored emissions into the atmosphere.

Climate change influences other boundaries

4. Reducing emissions decreases the number of emissions absorbed by oceans, which helps prevent ocean acidification and protects marine life.

Methodology for evaluation of pollution nature pressure targets



Findings on pathways available

Global frameworks

What are the global frameworks to anchor ambition?

Scoping

What are the key nature pressures and priority sectors for target setting?

Pathways

Are there existing pathways available?

Measurability

How to measure the target and is data available?

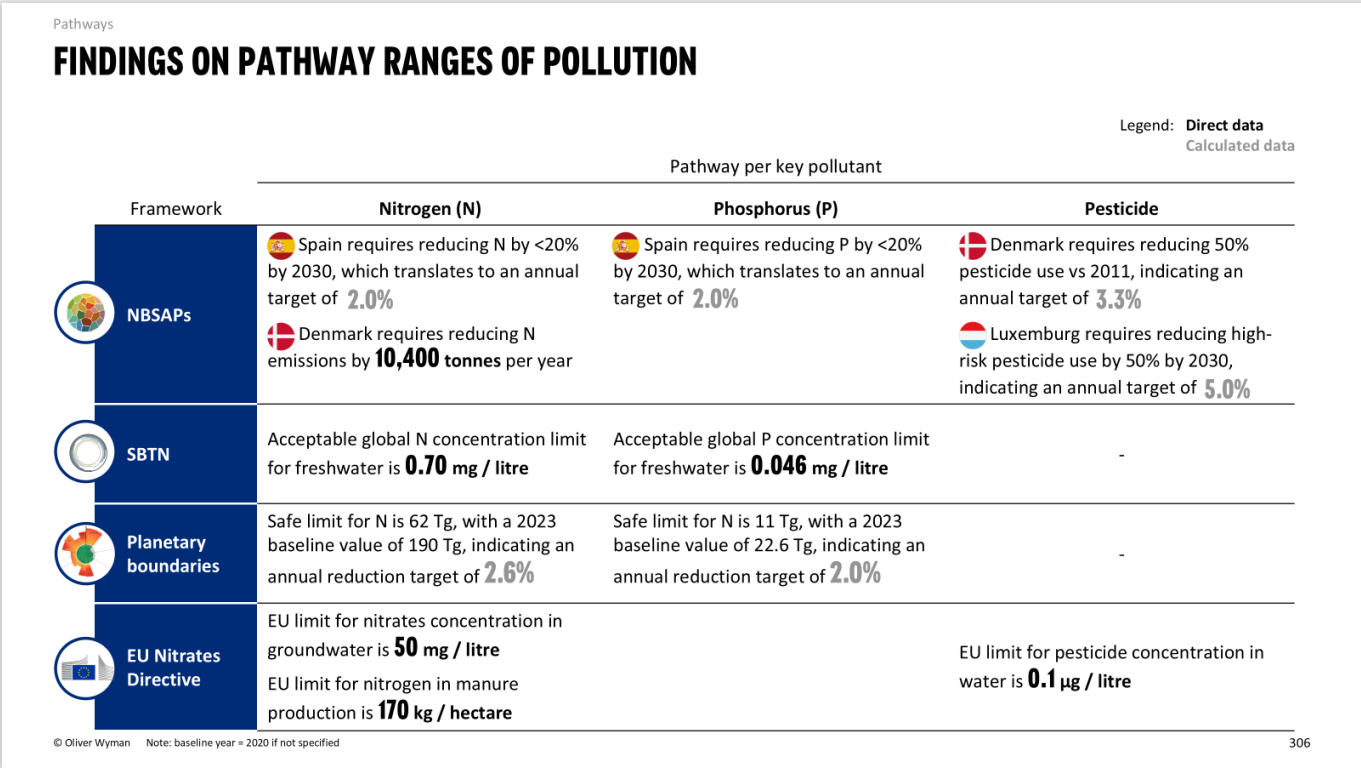
Company actions

What can customers do in the medium term?

Commitments

What could a sector-level commitment from the bank look like?

Zoom in



Findings on metrics available

- **Global frameworks**
What are the global frameworks to anchor ambition?
- **Scoping**
What are the key nature pressures and priority sectors for target setting?
- **Pathways**
Are there existing pathways available?
- **Measurability**
How to measure the target and is data available?
- **Company actions**
What can customers do in the medium term?
- **Commitments**
What could a sector-level commitment from the bank look like?

Zoom in



Measurability

THERE IS A WIDE RANGE OF POLLUTION METRICS ACROSS THE FRAMEWORKS, WITH TRACKING EMISSIONS TO WATER AND USE OF PLASTICS EMERGING AS MAIN METRICS

		Source			
Overview of metrics					
1	Volume of emissions to water in own operations (in mass unit) (e.g. nitrates, phosphates, pesticides)	✓		✓	
	Reduction in nutrient load in specific basin by kg P or N per year		✓		
2	Microplastics or plastics generated or used by the undertaking (e.g. plastic footprint as measured by total weight (tonnes) of plastics (polymers, durable goods and packaging) used/sold broken down into the raw material content)	✓		✓	✓
	Air pollution and respective specific loads in direct operations (in mass unit)	✓			✓
	Pollution to soil and respective specific loads in direct operations (in mass unit)	✓			✓
	Substances of concern and substances of very high concern in direct operations (in mass unit)	✓			
	Gray-water footprint in a specific basin per year (in volume unit)		✓		✓
	Volume of wastewater treated, reused or recycled (m³)				✓
	Volume of pollutants removed from land, atmosphere, ocean and freshwater (tonnes)				✓
	Weight of hazardous and non-hazardous waste generated by type (tonnes)				✓

Transition actions for addressing pollution prioritization at sector level



Step 1: Aggregate long-list of actions



Step 2: Short-list of actions



Step 3: Priority client engagement actions for banks



- Research nature transition actions across the three priority sectors by gathering information from key sources:



See deep-dive on the following pages

- Develop comprehensive inventory of potential transition actions, with expert input

- Filtering principle: action is specific and well-defined for experts to assign a potential impact on nature
- Iterate and refine the long list by engaging with industry experts/scientists

- Define and apply 4 selected criteria to finalize the prioritized set of transition actions:

- 1 Regulatory directions, using NBSAPs as an anchor point
- 2 Sector direction of travel, leveraging CDP questionnaire
- 3 Sampled company priority, using primary interviews
- 4 Feasibility of financing, using a qualitative assessment of capex requirement

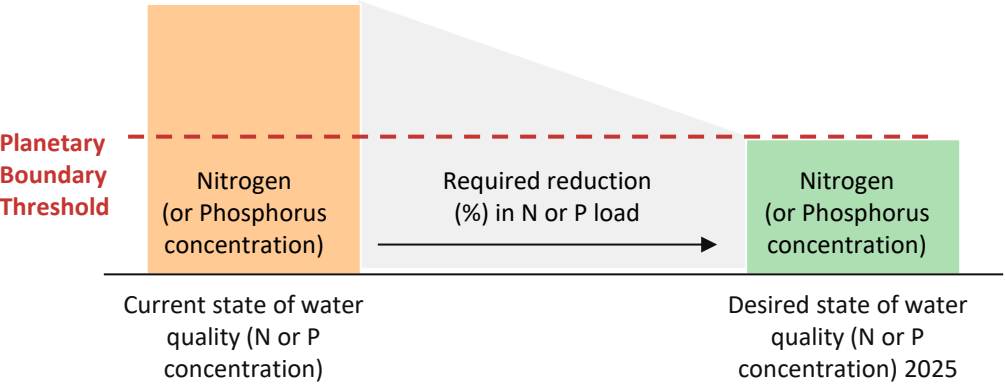
See deep-dive on the following slides

Example of target setting for Pollution: Nitrogen and Phosphorous scientific pathways *(no pathways for plastics yet)*

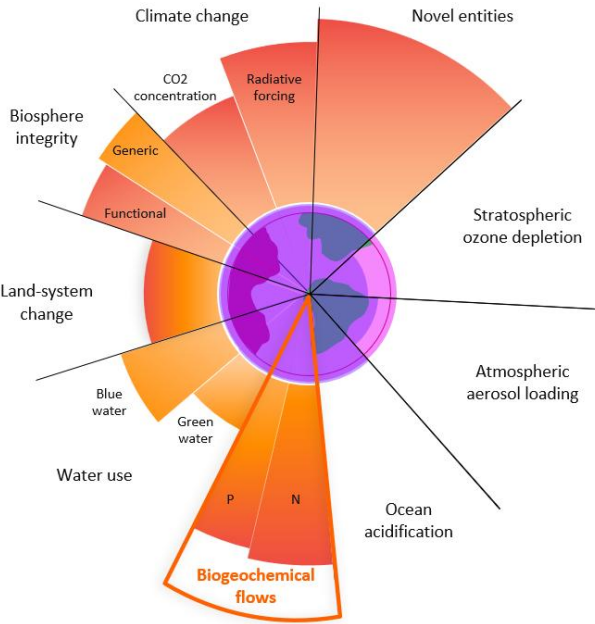
To address the impact of **producers** and **users** of pollutants, the Chemicals and Food industries are in scope of ongoing research



Example pathway - pressures on freshwater quality



	Planetary Boundary ¹	2023 baseline ¹	Excess load	Annual reduction 2050 goal
Phosphorus Tg of P year ⁻¹	11	22.6	11.6	0.45 or 2.0% annually
Nitrogen Tg of N year ⁻¹	62	190	128	4.92 or 2.6% annually



Biogeochemical flows are among the boundaries most severely transgressed according to planetary boundaries.

1. Richardson et al., Earth beyond six of nine planetary boundaries. Sci. Adv.9,eadh2458 (2023)



do your thing

HOW CAN INSTITUTIONAL INVESTORS SUPPORT THE TRANSITION TO SAFE AND SUSTAINABLE CHEMISTRY?



RACHEL CROSSLEY, HEAD OF STEWARDSHIP, EUROPE
GFC, OPEN-ENDED WORKING GROUP
26TH JUNE 2025



BNP PARIBAS
ASSET MANAGEMENT

The sustainable investor for a changing world

BNP Paribas Asset Management | Sustainability is embedded in our strategy

- **€602 billion** in assets under management as of 31/03/2025
- **Global broadly diversified investor**
- **Institutional investor:** manage money for individuals, pension and insurance funds, sovereign wealth funds
- **Sustainability embedded for >20 years**
- **Why?**
 - **To exercise our fiduciary duty**
 - **To deliver better long-term returns to our clients**

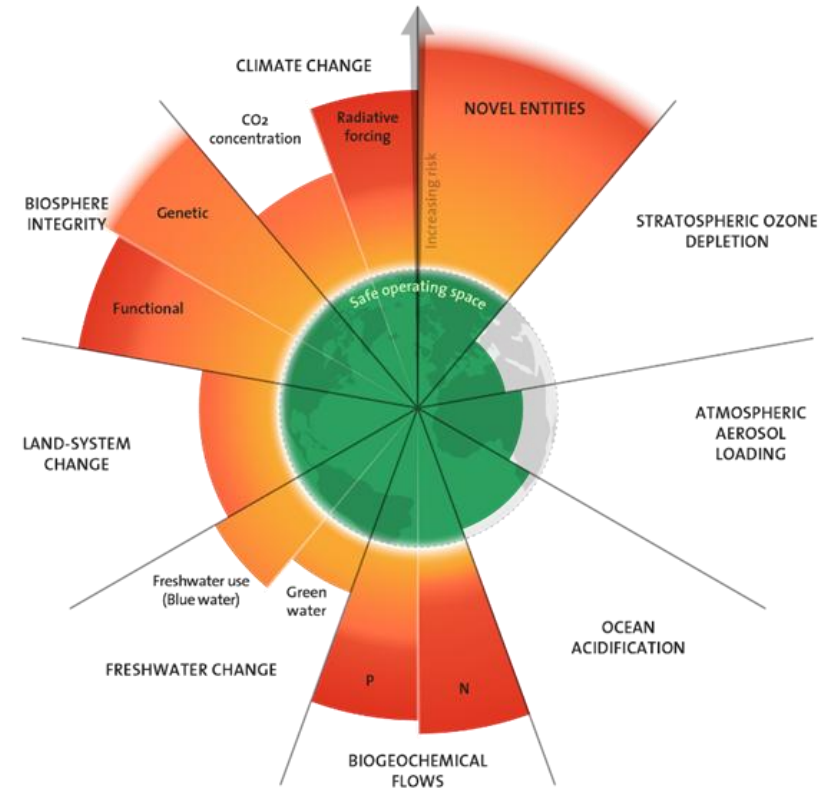


The sustainable
investor for a
changing world

It is in our clients' interests that we actively tackle global systemic risks

We have already crossed **six of the nine planetary boundaries**

- Chemical sector contributes substantially to several, interlinked, long-term, global impacts and **systemic risks**
- GFC recognizes these impacts and risks, and aims to tackle them



Source: Stockholm Resilience Centre, 2023.

Our goal: decarbonise and ‘detoxify’ the chemical value chain – supply and demand

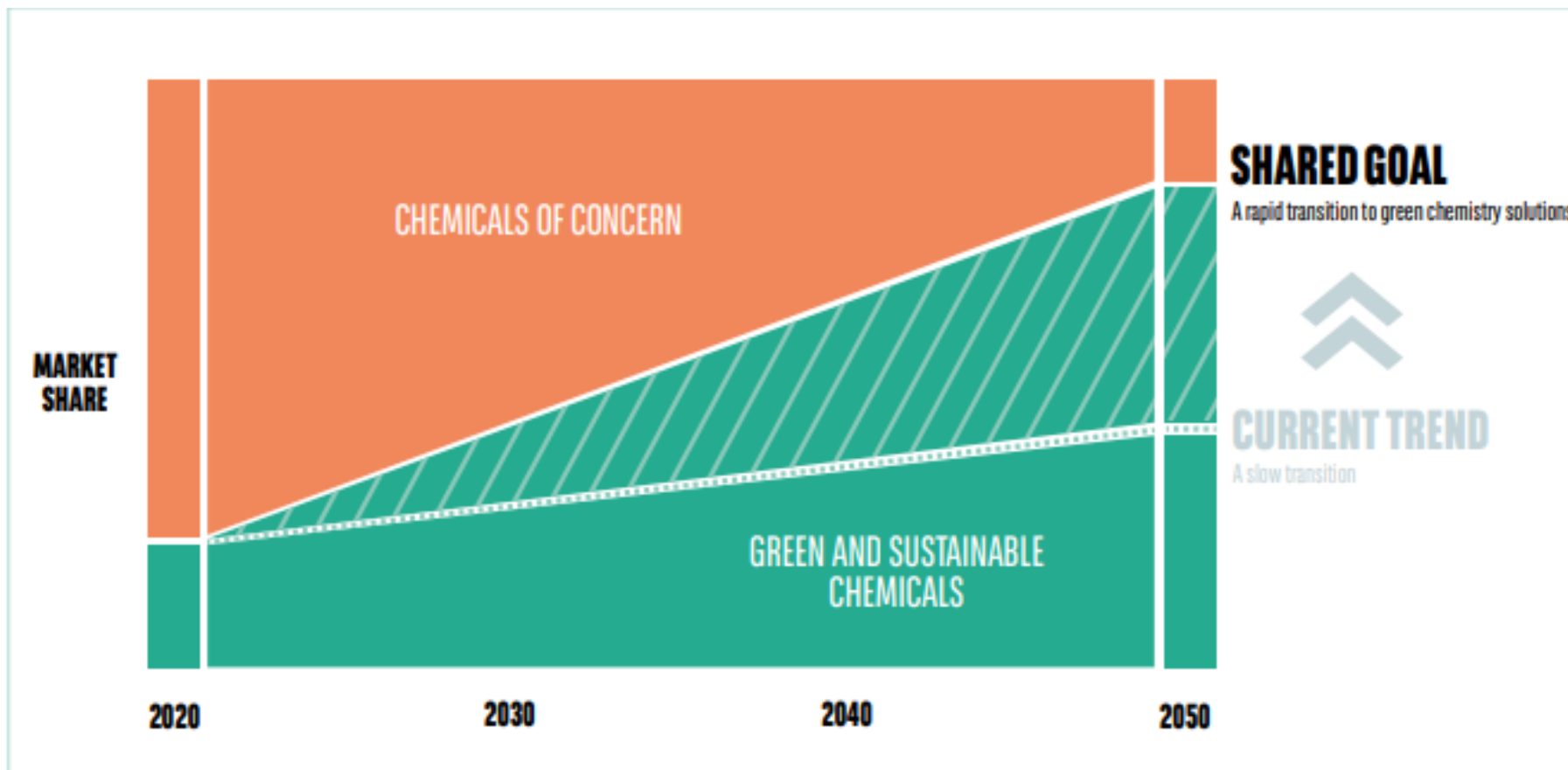


Image modelled on original produced by Institute for Safer Alternatives

How we exercise our fiduciary duties to support implementation of the GFC

TARGET D3: By 2030, the private sector, **including the finance sector**, incorporates strategies and policies to implement the sound management of chemicals and waste **in its finance approaches and business models**, and applies internationally recognized or equivalent reporting standards.

Integration			Stewardship			
Portfolio exclusions	Thematic investment in solutions providers	Investment research + decisions	Voting	Engagement with companies – we invest in, along the value chain, to drive change	Participation in multi-stakeholder initiatives to develop guidelines, standards	Supporting policy development

How we integrate ESG factors into our investment processes

Investment Universe - Screening

Removing most sensitive sectors or issuers, addressing the worst ESG risks, based on Sector Exclusion Policies / Responsible Business Conduct Policies / financial product label definitions and others

ESG Research

ESG information & analysis for 13,000 issuers is undertaken in-house and made available to support investment decision

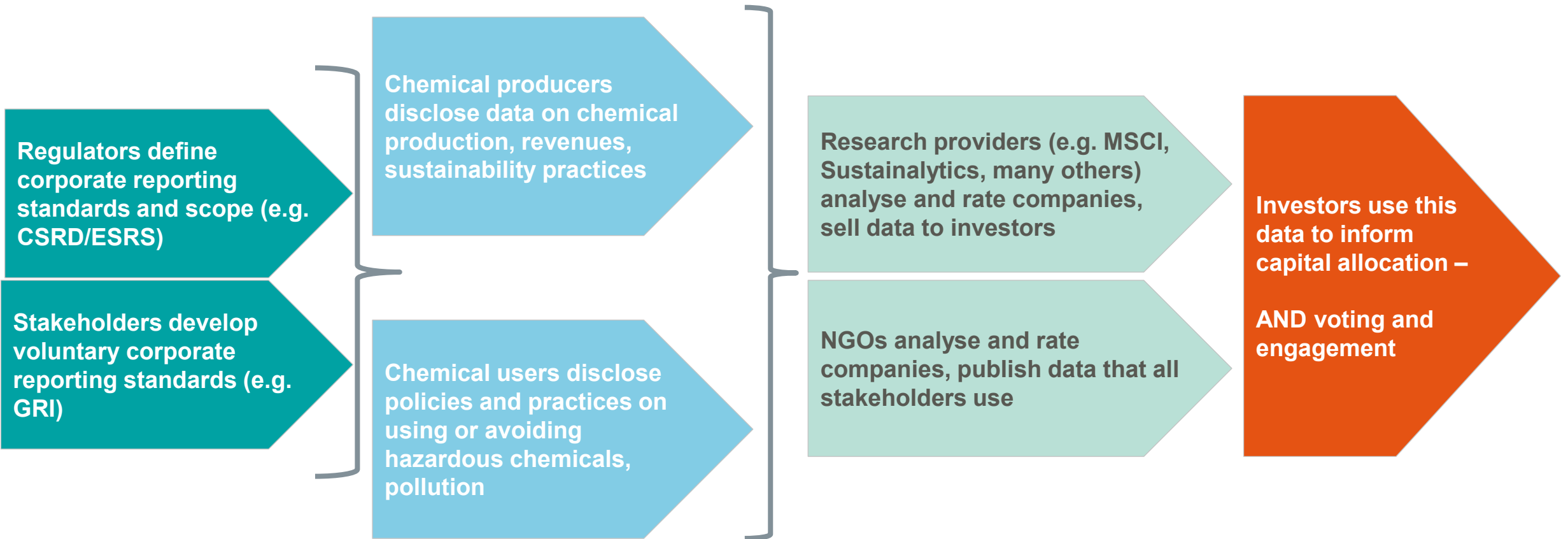
Security Selection

ESG research is provided to investment teams to monitor ESG risk, do financial modelling, identify securities suitable for different types of portfolios

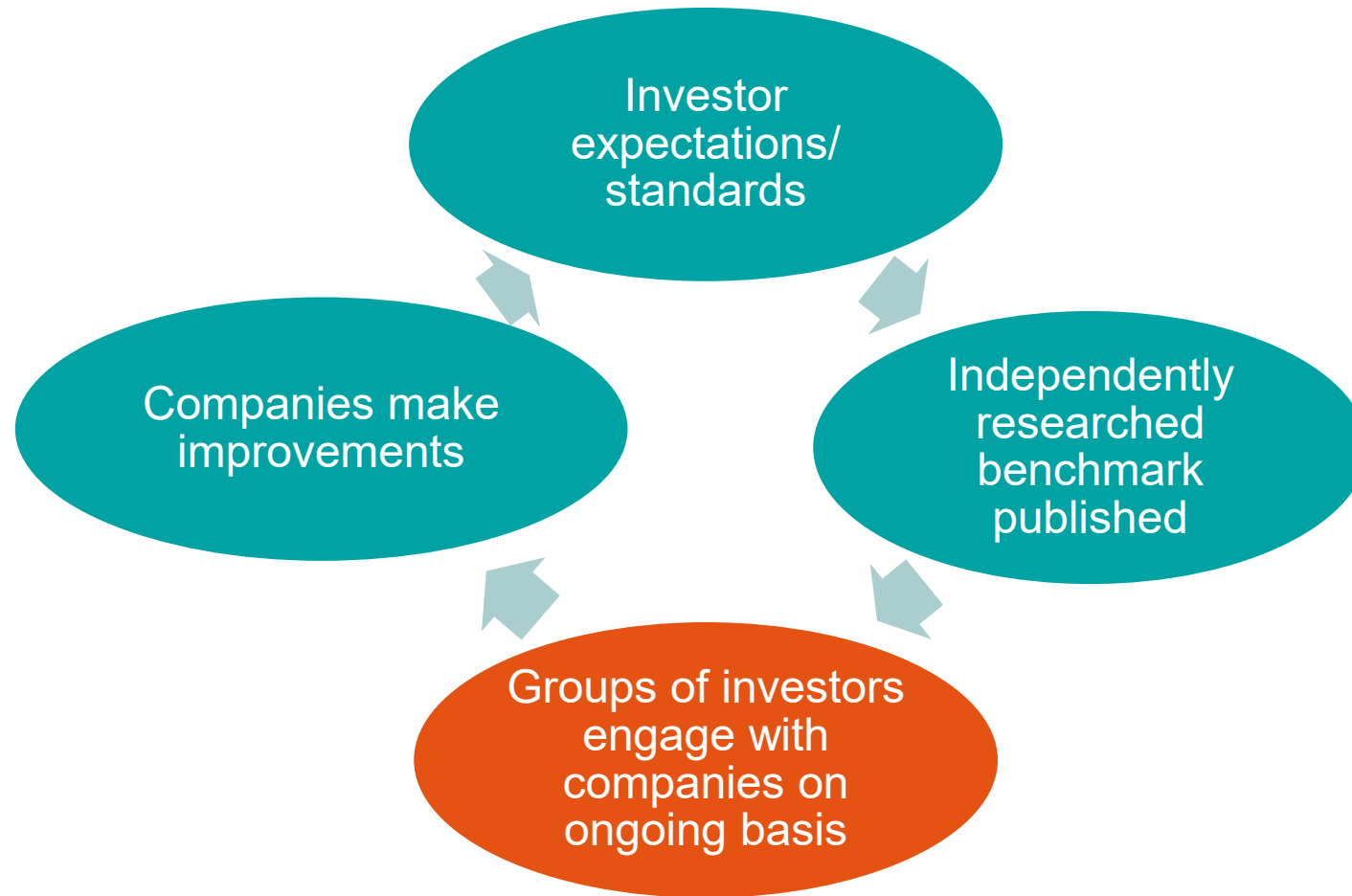
Portfolio Construction

ESG research informs idea generation and the selection of securities for inclusion in portfolios

Corporate disclosure is critical to investment decisions and capital allocation



Investor engagement initiatives set expectations for corporate policies, practices and disclosure



Investor engagement initiatives aim to address systemic risks



- 600 signatories
- Aligned to Paris Agreement
- Focuses on decarbonisation
- Sets expectations for transition to net zero on 1.5 degree pathway
- Includes 8 major **chemical producers** (BASF, Bayer, Dow, Dyno Nobel, Air Liquide, LyondellBasell, SABIC, Toray Industries)



Chemical
Decarbonisation
Investor
Coalition

Engaging the chemical sector to push for rapid decarbonisation

- 44 investor members
- Asks companies to set targets and publish plans aligned to Paris Agreement
- Engagement with c. 10 major European **chemical producers** since 2022



- 200 signatories
- Aligned to GBF
- Focuses on reducing nature loss
- Sets expectations for companies in addressing impacts, risks and dependencies on nature, including those related to chemical use
- Includes **c. 10 chemicals producers and other high-impact sectors**



- c. 15 investor members
- Aligns to best-practice, hazard-based chemical management practices
- Asks **consumer-facing** companies to advance solutions and strategies to transform business practices through strategic tools and partnerships, including the Chemical Footprint Project.

Detailed example: Investor Initiative on Hazardous Chemicals (IIHC)

Investor engagement process

- Letters to all CEOs in July 2025 to request active participation in research
- Letters to all CEOs when results released in November 2025 to make 4 requests
- Annual investor group engagement calls with c. 20-25 companies to discuss 4 requests

✓ Increase transparency

Disclose both the share of revenue and production volume of products that are, or contain, hazardous chemicals.

✓ Phase-out of persistent chemicals

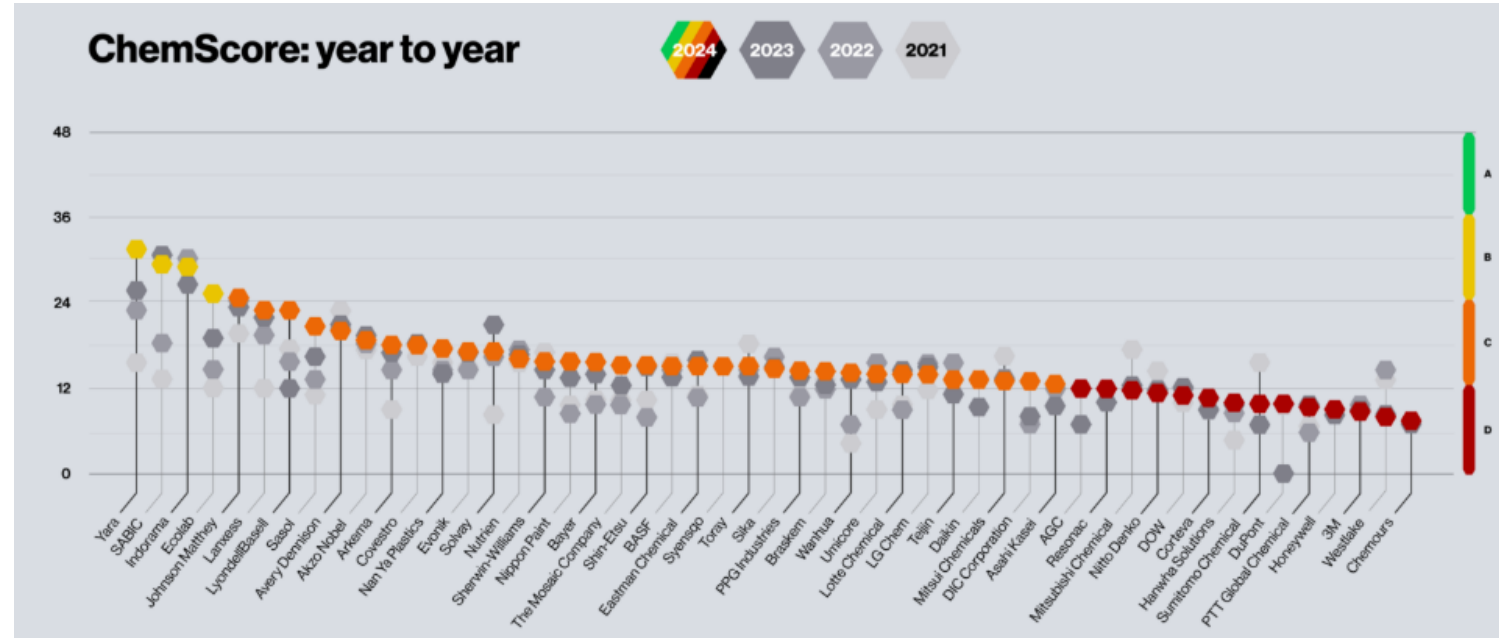
Publish a timed action plan on how to eliminate all persistent chemicals, with clear KPIs covering revenues and volumes to show progress.

✓ Reduce hazardous product portfolio

Draw up a strategy to reduce the company's production of hazardous chemicals with clear KPIs covering revenues and volumes to show progress.

✓ Increase share of safer solutions

Set a 2030 target for the share of revenue generated by safer solutions and publish a strategy to achieve it.



Investor support for effective comprehensive public policy development is also critical



Investor Statements on Chemicals and Biodiversity

2 members

Chemical pollution is a major driver of biodiversity loss and an escalating global risk. In response, a coalition of investors and NGOs has produced two investor statements: one directed at the chemical industry and the other at governments, calling upon each to transition to a nature-positive chemical sector.

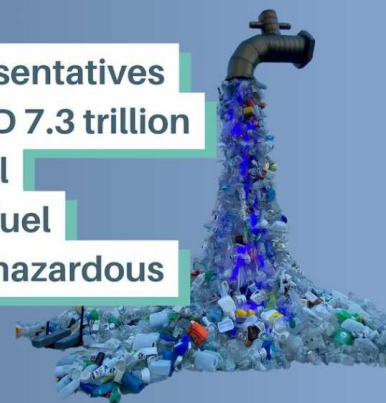
Investor Statement

80 investors and their representatives with combined assets of USD 7.3 trillion are calling on petrochemical companies to reduce fossil fuel dependency and eliminate hazardous chemicals in plastics.



Open for investors to sign

Planet Tracker



Credit: Giant Plastic Tap by Benjamin von Wong

Waste management & recycling [+ Add to myFT](#)

Big investors call on companies to slash use of plastics

Coalition overseeing \$10tn in assets warns on financial risks of inaction



The Dutch Association of Investors for Sustainable Development estimates that plastic pollution costs society more than \$100bn a year © Milkos/Dreamstime



BNP PARIBAS
ASSET MANAGEMENT

The sustainable investor for a changing world

Key closing messages

- We stand ready to contribute to the development of implementation plans and delivery of the GFC
 - **We would value dedicated facilitation / support in that role**
- Investors need corporate data
 - **Comprehensive, mandatory disclosure regulations**, consistent across markets and which are based on the 'double materiality concept' are critical
- We **already engage with companies – will continue to do so** - across the value chain - **to drive the transition to sustainable business models that deliver safe chemistry. We hope more investors will join us**
- Critical that companies **invest more in R&D and innovation** to find safe and sustainable solutions

EOS at Federated Hermes Limited

Masterclass on Understanding Finance and Sustainable
Chemicals Management

GFC

Tsitsi Griffiths, Engagement,
EOS at Federated Hermes Ltd

For professional investors only

EOS at Federated Hermes Ltd

Stewardship service provider

- We advise on over \$2.1 trillion in assets, representing over 70 institutional investors and asset owners (as at March 31st 2025)

We provide corporate engagement and proxy voting services

- Our engagement and related voting recommendations enable long-term institutional investors to be more active owners of their equity and fixed income assets, with the objective of enhancing long term, enduring business performance.

Engagement with wide range of chemical companies across the world

- Safe and sustainable management of chemicals throughout their entire life cycle is a material concern for chemical companies, their supply chain, investors, end-users (customers) and communities

Key issues for investors in Chemical Companies and their value chain

Data Transparency

- Lack of transparency and disclosure about portfolio of chemicals that are persistent and pose an environmental and health & safety risk
 - Sound chemicals and waste management demonstrates a responsibility to protect consumers, workers and the environment
 - Risk Management (financial risk, reputational risk, litigation risk, regulatory risk)

Benchmarking

- Limited ability to benchmark and compare companies in the sector (non-standardised of data, fragmented industry)

Research & Development

- Insufficient investment into R&D for the development of safer alternatives
 - Short-term pressure for shareholder returns vs long-term sustainable returns with increased innovation and technology

Public Policy

- Insufficient public policy framework to support chemical companies with new technology but lack the funding to scale-up

How we address chemical risk management and environmental and social concerns related to chemicals

Company Engagement

- Direct engagement with chemical companies to understand impact of their chemical portfolio on the environment and address social concerns
- Investor collaborations e.g. IIHC, CA100+, NA100, NGOs
- Dialogue with chemical companies to encourage better quality of disclosure for investors to assess risk associated with chemical portfolio- financially material (litigation risk, environmental risk, social risk (licence to operate) and Health & Safety practices)

Value Chain Engagement

- Engagement throughout value chain (upstream and downstream)

Standard Setters Engagement

- Public Policy engagement (Policymakers, Governments)

Best Practice to support GFC D3 Target

Key issues for investors		Best Practice
Data Transparency	Lack of transparency and disclosure about portfolio of chemicals that are persistent and pose an environmental and health & safety risk	Data transparency for better understanding of associated risks (investors can price these risks in evaluation of companies)
	Sound chemicals and waste management demonstrates a responsibility to protect consumers, workers and the environment	Financial stakeholders (e.g. banks) implement a standardized framework for assessing risk and opportunity in chemical companies
	Risk Management (financial risk, reputational risk, litigation risk, regulatory risk)	
Benchmarking	Limited ability to benchmark and compare companies in the sector (non-standardised of data, fragmented industry)	Standardised reporting and disclosure e.g. CSRD, ISSB, GRI
Research & Development	Insufficient investment into R&D for the development of safer alternatives	Increased Investment into R&D (In-house research, collaborations and partnerships with peers, research bodies or academic institutions, Digital tools and AI)
	Short-term pressure for shareholder returns vs long-term sustainable returns with increased innovation and technology	
Public Policy	Insufficient public policy framework to support chemical companies with new technology but lack the funding to scale-up	Identifying and addressing barriers to innovation (Grants & Subsidies, Tax Credits, Streamlined Regulatory Approval Processes, Intellectual Property (IP) support)

D3 Target: “By 2030, the private sector, including the finance sector, incorporates strategies and policies to implement the sound management of chemicals and waste in its finance approaches and business models and applies internationally recognized or equivalent reporting standards.”

For professional investors only. This is a marketing communication. Hermes Equity Ownership Services Limited (“EOS”) does not carry out any regulated activities. This document is for information purposes only. It pays no regard to any specific investment objectives, financial situation or particular needs of any specific recipient. EOS and Hermes Stewardship North America Inc. (“HSNA”) do not provide investment advice and no action should be taken or omitted to be taken in reliance upon information in this document. Any opinions expressed may change. This document may include a list of clients. Please note that inclusion on this list should not be construed as an endorsement of EOS’ or HSNA’s services. EOS has its registered office at Sixth Floor, 150 Cheapside, London EC2V 6ET. HSNA’s principal office is at 1001 Liberty Avenue, Pittsburgh, PA 15222-3779. Telephone calls may be recorded for training and **monitoring** purposes.

Confidentiality: By reading this report, you acknowledge that its contents are confidential, and you agree to protect the confidentiality of this report. You may only use this report for your own internal business purposes. You shall not transmit or publish this report in whole or in part to any third party or such that it becomes public, in any form or format. Any breach of this obligation may result in EOS restricting your access to future reports.

Federated Hermes

Federated Hermes is a global leader in active, responsible investing.

Guided by our conviction that responsible investing is the best way to create long-term wealth, we provide specialised capabilities across equity, fixed income and private markets, multi-asset and liquidity management strategies, and world-leading stewardship.

Our goals are to help people invest and retire better, to help clients achieve better risk-adjusted returns and, where possible, to contribute to positive outcomes that benefit the wider world.

Our investment and stewardship capabilities:

- Active equities: global and regional
- Fixed income: across regions, sectors and the yield curve
- Liquidity: solutions driven by five decades of experience
- Private markets: private equity, private credit, real estate and infrastructure
- Stewardship: corporate engagement, proxy voting and policy advocacy

For more information, visit www.hermes-investment.com or connect with us on social media:  

Speakers



Anna Chilton

Nature Lead

ING



Rachel Crossley

Head of Stewardship, Europe

Sustainability Centre

BNP Paribas Asset Management



Tsitsi Griffiths

Engagement Manager

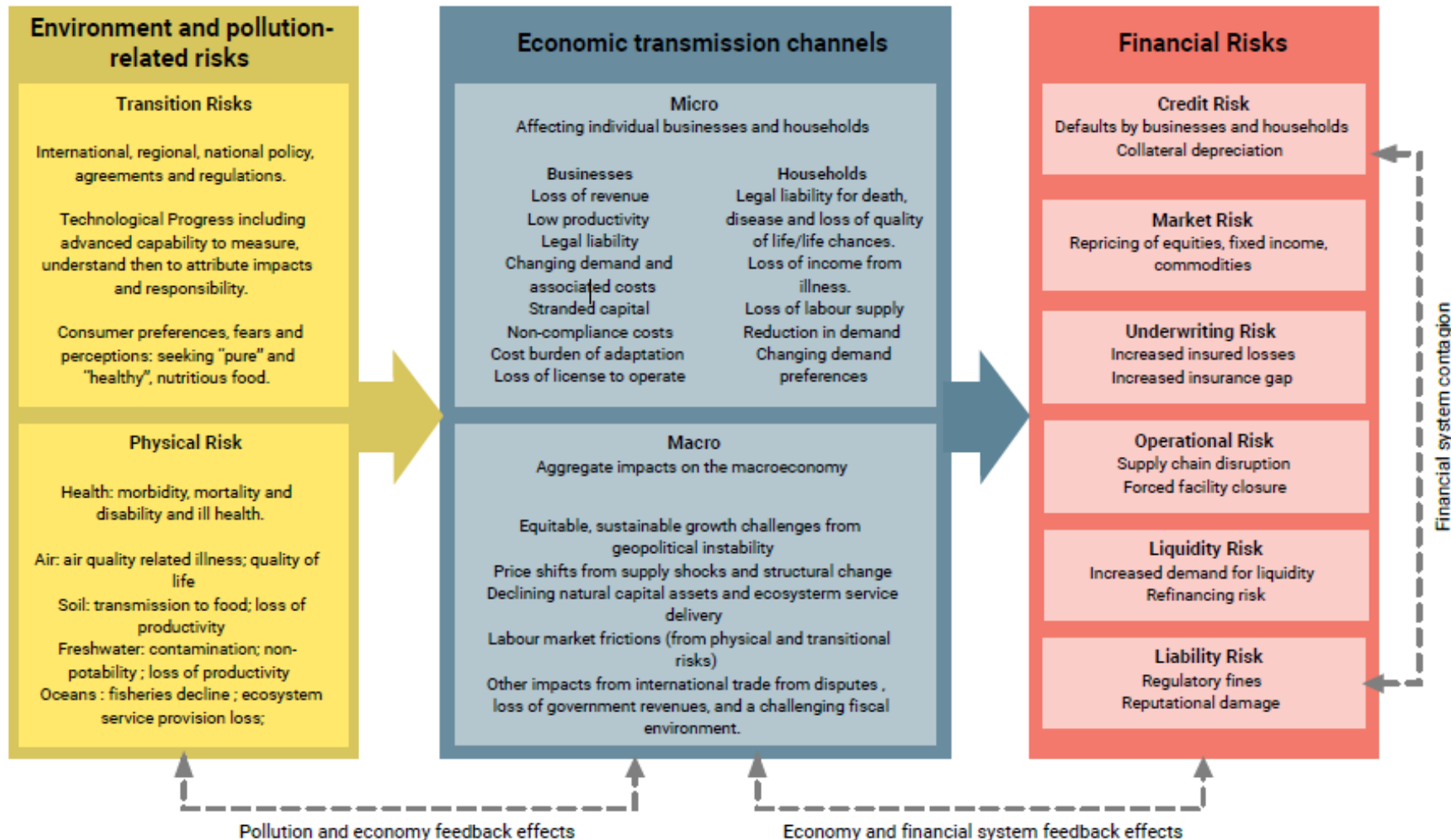
EOS at Federated Hermes Limited

Conclusion

—
Thank you!

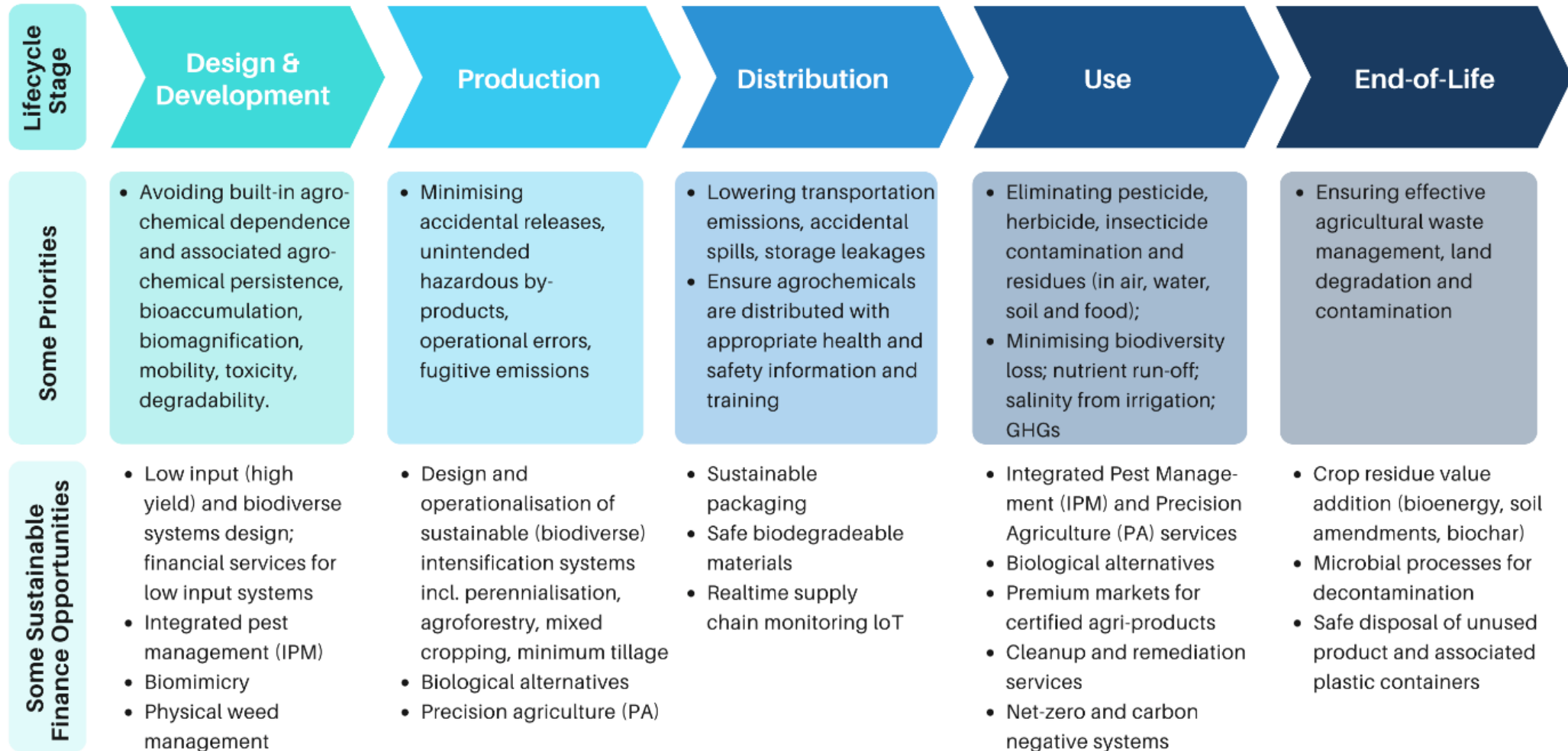


Transmission channels - impact materiality creates physical and transition risks to financial materiality that can affect a banks health



The paper compiles initiatives, frameworks, tools, guidance and data sources that can be used to assess risks stemming from impact materiality to financial materiality.

A life-cycle approach indicates upstream and downstream opportunities – Agricultural sector example



Five Key messages



Pollution from lending and investment by banks has **impact materiality** – environmental, social and economic impacts



Impact materiality of pollution creates risks to **financial materiality** that can affect a bank's health.



The dynamic of regulatory push and technology pull/consumer preference shapes risk and the **opportunities for eco-innovation** and beyond compliance benefits



There are significant challenges accounting for financial costs and risks – **data and uncertainty**



A life cycle approach indicates biggest opportunities spanning upstream (design of systems) and downstream (circular economy principles)

Actions by the banking sector to reduce pollution

Navigating Pollution
A Blueprint for the Banking Sector

Alignment with the Principles for Responsible Banking

Principle 1 Alignment	Principle 2 Impact & Target Setting	Principle 3 Clients and Customers
The negative impacts of pollution intersect with all SDGs but are of highest relevance to SDG 2, SDG 3, SDG 5, SDG 6 , SDG 11, SDG 12, SDG 13 , SDG 14, and SDG 15 . International agreements on pollution have direct implications for the banking sector: • Kunming-Montreal Global Biodiversity Framework (GBF) • Global Framework on Chemicals (GFC) • Stockholm Convention • Basel Convention • Rotterdam Convention • Montreal Convention • Minamata Convention on Mercury	• The UNEP FI Impact Protocol, Impact Mappings and Impact Analysis Tool can be used for all impact topics, including pollution • Target setting: Through effective client engagement and data, banks can set achievable targets to reduce their pollution-related negative impacts and increase their positive contributions to nature conservation. • Other resources for pollution impact assessment - World Bank: Environmental, Health, and Safety Guidelines, CDP, OECD sustainable chemistry	• Banks can prioritize high-pollution clients based on their impact (via mandatory disclosures or sustainable taxonomies) and business relevance, developing targeted client and sector engagement strategies. • Effective Client Engagement includes: a. governance, policies, and processes oversight, b. robust data collection and management, c. portfolio impact analysis, d. strategy development, and e. staff capacity building. • Sustainable Finance Products: Green bonds, green loans, pollution control bonds, and environmental impact bonds (EIBs).

Alignment with the Principles for Responsible Banking

Principle 4 Stakeholders	Principle 5 Governance & Culture	Principle 6 Transparency & Accountability
• Key stakeholders include policymakers, regulators, industry Associations, Sector-specific standard setting institutions, Academia/Scientists/ Research Institutions, Civil Society Organizations (CSOs), Communities • Stakeholder feedback can help identify potential pollution-related impacts (and subsequently associated risks) that may not be apparent through internal assessments and drive the development of innovative financial products and services that tackle the issue of pollution	• Embedding pollution considerations into governance helps mitigate risks and unlock sustainable finance opportunities • 5 pillars underpin sustainability governance in a pollution-specific context: a. Leadership: Build pollution expertise via advisory panels b. Governance: Assign roles and link targets to remuneration c. Integration: Embed pollution metrics into strategy and financing d. Knowledge: Train staff on pollution risks and opportunities e. Engagement: Collaborate with industry, NGOs, and clients.	Financial implications of pollution risks and mitigation strategies must be reported. Some frameworks are mandatory, and some voluntary Mandatory Frameworks - CSRD/ESRS: Requires double materiality assessments and disclosures on pollution impacts (e.g., air, water, soil contamination). Voluntary Frameworks - GRI, CDP, SASB Investor-Focused Standards: • ISSB: Incorporates SASB and TCFD into global sustainability disclosure standards (IFRS S1 & S2)., TNFD: Directly addresses pollution as a driver of biodiversity loss using the LEAP approach

A first approach to 5 high priority sectors

Navigating Pollution
A Blueprint for the Banking Sector

A first approach to 5 high priority sectors

Five high priority sectors : Mining, Textiles, Electronics, Pharmaceuticals, Agriculture

- **Impacts, Risks, Opportunities** for the five sectors are covered
- **Impacts** are environmental, social and economic
- **Common risk approach**
 - **transition risks** (regulatory, consumer preferences, technology)
 - **and physical risks** (declining productivity, liabilities from impacts to air, soil, water and human health)
- **Opportunities identified using life-cycle approach**

MiningTextilesElectronicsPharmaceuticalsAgriculture

Some opportunities for the 5 high impact sectors

	Mining	Textiles	Electronics	Pharmaceuticals	Agriculture
Upstream	• Life-of-Mine Planning: Integrate pollution controls and optimize resource usage during planning. • Tailored Financing: Provide sustainability-linked financial tools to drive responsible mining practices. • Support Artisanal Mining: Promote cleaner technologies through initiatives like PlanetGOLD.	• Improved Chemical Management: Reduce harmful pollutants and promote safer alternatives. • Innovation in Production: Invest in sustainable fibers, digital tracking, and circular production models. • Slow Fashion Principles: Encourage the design of durable, high-quality, and sustainable products.	• Alternative Materials: Use recyclable, non-polluting, and energy-efficient materials in product design. • Eco-Friendly Design: Support energy-efficient, durable, and easily recyclable products. • Technological Advances: Promote innovation in energy-efficient components and digital tools for transparency.	• Medicine Design: Develop safe, targeted medicines using degradable, natural biocompounds. • Advanced Delivery: Use real-time, personalized technologies to minimize waste and improve efficiency.	• Sustainable Practices: Promote precision farming, agroecology, and organic techniques to enhance resilience. • Technological Integration: Adopt smart irrigation systems, data analytics, and residue management for efficiency. • Responsible Chemical Management: Support safer pest control and biocontrol solutions.
Downstream	• Waste and Tailings Management: Fund solutions for waste reduction, mineral recovery, and global tailings standards. • Circular Economy Solutions: Invest in mineral recycling to foster sustainable value chains. • Mine Closure and Rehabilitation: Ensure financial liability management, land restoration, and post-closure monitoring.	• Life Cycle Analysis (LCA): Integrate LCA and circular principles to reduce pollution and waste. • Supply Chain Transparency: Enhance traceability and ethical sourcing across fragmented supply chains. • Responding to Trends: Align production with consumer demand for safer, sustainable textiles.	• E-Waste Management: Formalize recycling to recover valuable materials and reduce resource dependency. • End-of-Life Solutions: Fund responsible disposal and resource recovery, supporting USD 108 billion markets. • Climate Co-Benefits: Reduce emissions and conserve energy through efficient recycling practices.	• Reverse Supply Chain: Enable collection, redistribution, and repurposing of unused medicines. • Greener Production: Invest in recyclable packaging and advanced wastewater treatment technologies. • Equitable Access: Address global medicine shortages while reducing waste.	• Regenerative Farming: Reduce chemical use, promote eco-certifications, and enable premium pricing for sustainable products. • Biodiversity Conservation: Fund sustainable land-use planning to maintain ecosystems and balance. • Strategic Banking Role: Provide tailored financial tools to support farmers in sustainable transitions.