Carnstone

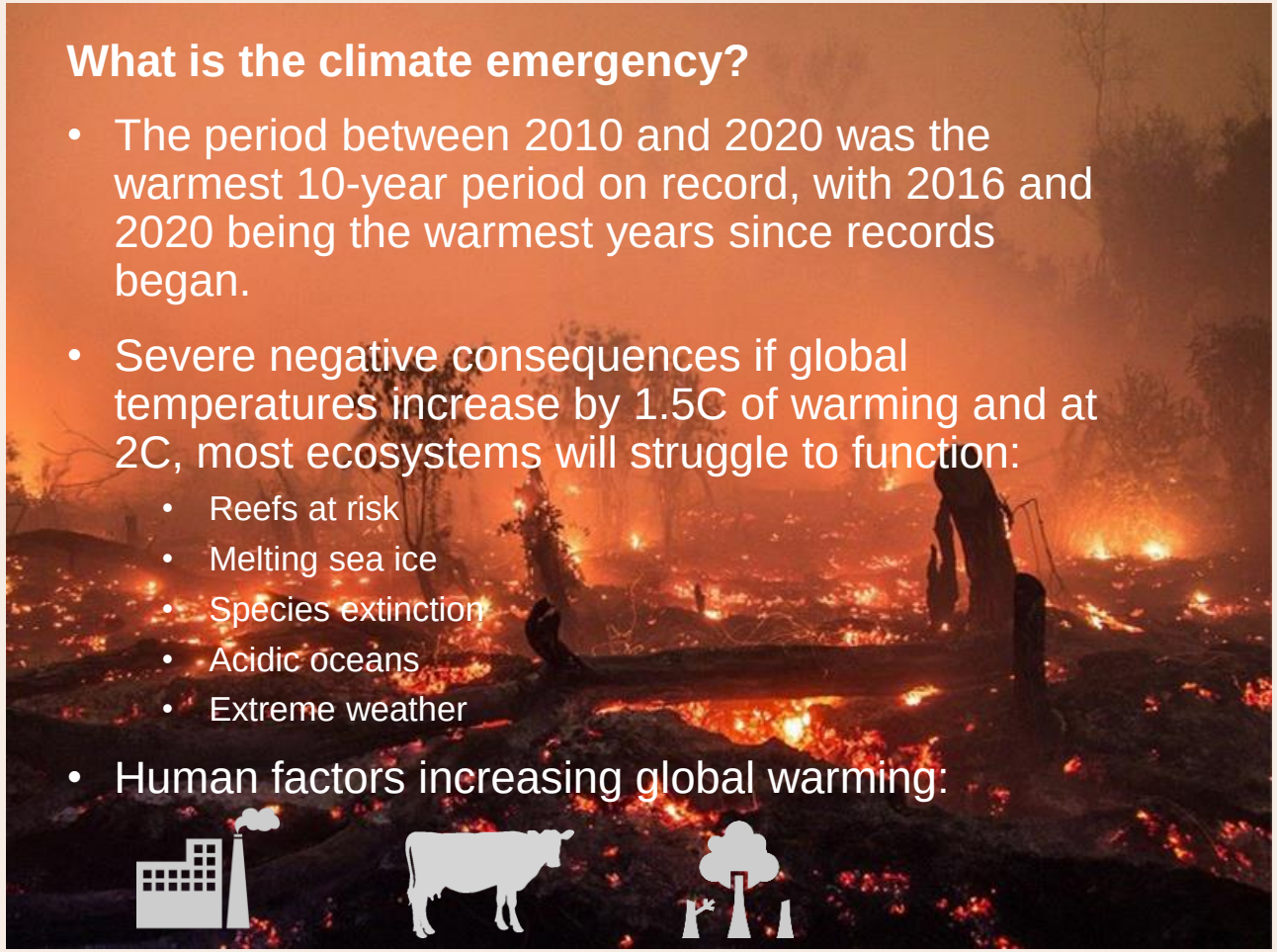
7 June 2022

Climate & Forests

Book Chain Project USA Seminar

BOOK CHAIN PROJECT

Climate change emergency



What is the climate emergency?

- The period between 2010 and 2020 was the warmest 10-year period on record, with 2016 and 2020 being the warmest years since records began.
- Severe negative consequences if global temperatures increase by 1.5C of warming and at 2C, most ecosystems will struggle to function:
  - Reefs at risk
  - Melting sea ice
  - Species extinction
  - Acidic oceans
  - Extreme weather
- Human factors increasing global warming:

Why does it matter to publishers?

- The paper and pulp industry is the **4th** most energy intensive in Europe and **5th** globally.
- Many publishers have made commitments to drive environmental sustainability.
- Increasing policy & reputational risk (carbon taxes, stakeholder expectations)

More than 40 countries agree to phase out coal-fired power

ipcc
INTERGOVERNMENTAL PANEL ON climate change

SUSTAINABLE DEVELOPMENT GOAL 13
Take urgent action to combat climate change and its impacts*

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Corporate action on climate change has been increasing

PUBLISHING DECLARES

PUBLISHING DECLARES CLIMATE ACTION *Sign the pledge*

Our ideas and stories are limitless, but the planet's resources are not.

Glasgow Leaders' Declaration on Forests and Land Use

- "We commit to working collectively to **halt and reverse** forest loss and land degradation by 2030."
- 141 countries signed, representing >90% of the world's forests
- This is not the first such declaration. But what is new:
  - Significant financial backing: $19bn of public & private funds
  - Important forest countries (e.g. Australia, Brazil, DR Congo, Indonesia) have signed.

Carnstone BOOK CHAIN PROJECT

Without aggressive climate mitigation, the impacts of global warming will be severe – including on forests

Impacts of climate change on forests

- 5 key impacts
  - Tree migrations
  - Forest Fires
  - Droughts
  - Pest and Pathogens
  - Carbon Competition
- UPM Kymmene climate scenario analysis re-emphasises some of the impacts mentioned above including the intensity of forest fires, droughts and biotic damage risk increasing as the temperature rises.

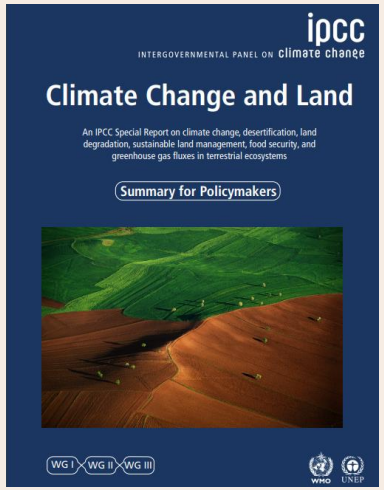
Carnstone BOOK CHAIN PROJECT

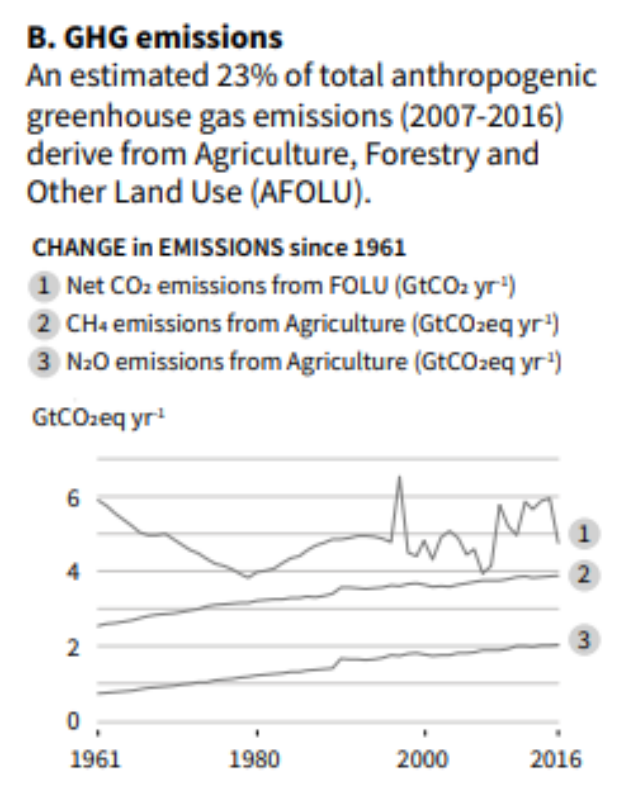
Results of UPM Kymmene's scenario analysis

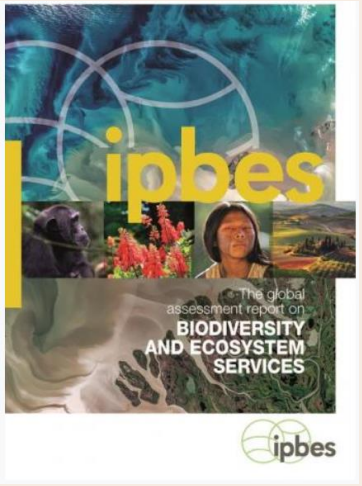
	RCP2.6	RCP4.5	RCP8.5
Impact on Finnish forests	Excluding spruce, forests benefit from the higher CO2 concentration and longer growing season. Slightly increased forest fire danger and biotic damage risk.	Spruce forests suffer from drought in southern and central Finland. Pine and birch benefit of change. Increased forest fire danger and biotic damage risk. Reduced soil frost hampers forest harvesting.	Spruce forests suffer seriously from drought in southern and central Finland. Forest fire danger increases manifold. Increased snow damage risk in northern and reduced in southern parts of country. Seriously increased biotic damage risk. Largely reduced soil frost hampers forest harvesting.
Changes in southern Germany by 2050s	Annual mean warming 1.6°C relative to **1971-2000**. Occasional drought risk in summer.	Annual mean warming 2.0°C relative to **1971-2000**. Drought risk in summer.	Annual mean warming 2.7°C relative to **1971-2000**. Severe drought risk in summer.
Changes in Uruguay by 2050s	Annual mean warming 0.9°C relative to **1971-2000**.	Annual mean warming 1.3°C relative to **1971-2000**. Minor increase in flood risk.	Annual mean warming 1.8°C relative to **1971-2000**. Increasing risk of floods in Southern Hemisphere summer and autumn.
Changes in eastern China by 2050s	Annual mean warming 1.6°C relative to **1971-2000**. Some increase in flood occurrence in Yangtze river.	Annual mean warming 2.0°C relative to **1971-2000**. Increasing occurrence of floods in Yangtze River but not as severe as under RCP8.5.	Annual mean warming 2.7°C relative to **1971-2000**. Increasing occurrence of floods in Yangtze river in summer.


UPM Kymmene

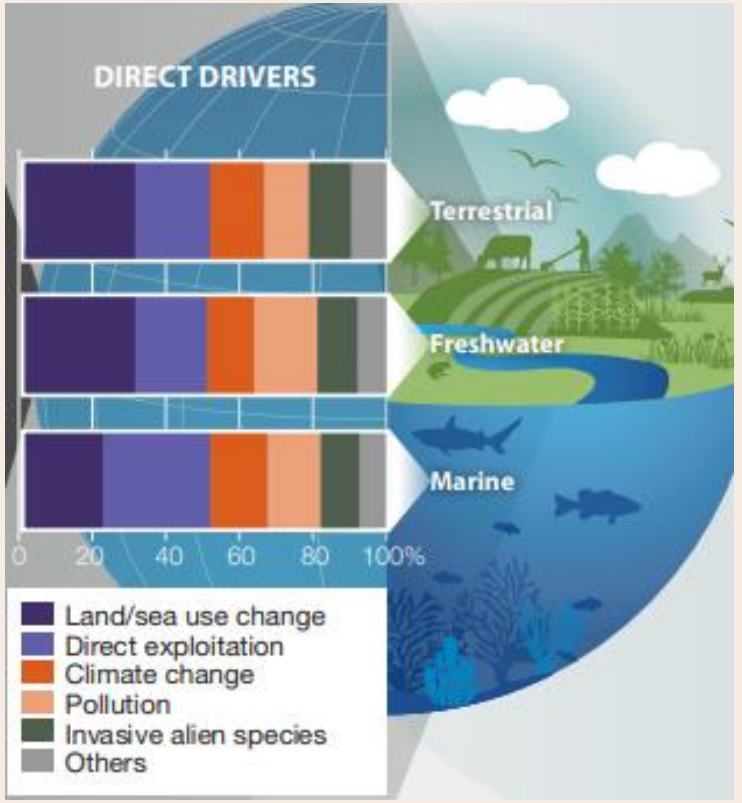
Climate & biodiversity loss are linked – and Forests are at the nexus







"Scenarios show that meeting the Sustainable Development Goals and the 2050 Vision for Biodiversity depends on taking into account climate change impacts in the definition of future goals and objectives." – *IPBES Global Assessment Report 2019*.



Biodiversity rapidly rising up the agenda

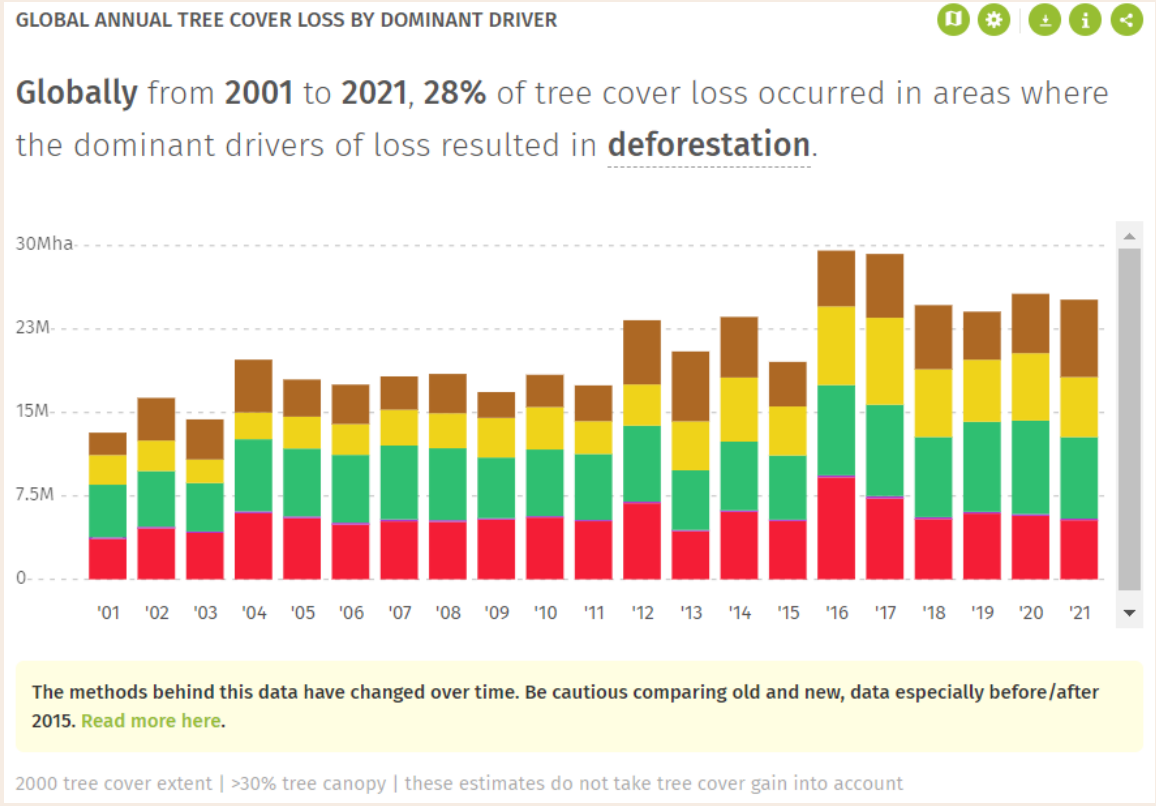
Source: Stockholm Resilience Centre

- By some metrics, biodiversity loss is a bigger crisis than climate change
- Politicians, civil society & business leaders are starting to pay more attention and we see nature rising up the ESG agenda
- Increasing efforts to tackle both problems together instead of in isolation. One example is the Deforestation Pledge made at COP26.

"For far too long we've tended to see climate and biodiversity as separate issues, so our policy responses have been very siloed. Climate has simply gotten more attention." – Pamela McElwee, Associate professor in the Department of Human Ecology at Rutgers University.

Demand for forest commodities = major cause of deforestation

- Rate of forest loss has slowed globally since 2000, but this is distributed unequally, and no net deforestation ≠ no impact on biodiversity
  - Global net rate of forest loss has halved since 1990s, largely because of increases in temperate & high latitude forests. Biodiversity-rich tropical forests continue to dwindle.
- Causes: agricultural, urban & infrastructure expansion; population and consumption growth.
- Logging caused 290m Ha of native forest loss in 1990-2015; planted forest area grew by 110m Ha



Source: Global Forest Watch

Government action on biodiversity

COP15 (Kunming, China) got delayed a 4th time. Now planned for Q3 2022.

- UN wants to agree a “Paris-style” plan to halt biodiversity loss:
  - Restore >20% of terrestrial, freshwater & marine ecosystems
  - Protect >30% of land and sea area
  - Eliminate all plastic waste pollution
- EU pushing agenda, arguing for stronger monitoring & implementation, including a global stocktake & ratchet mechanism

- Stable negotiating text agreed in Geneva in March 2022. Next meeting in Nairobi 21-26 June.
- Concern for another Copenhagen moment as disagreements persist on financing and “biopiracy”.
- Business involvement through Business for Nature reported as a positive driving force.
- But WWF & others say there is still a “yawning gap” between the science and the draft deal.

Spot the difference

TCFD

Figure 4

Recommendations and Supporting Recommended Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

TNFD

Governance	Strategy	Risk Management	Metrics & Targets
Disclose the organisation's governance around nature-related risks & opportunities.	Disclose the actual and potential impacts of nature-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.	Disclose how the organisation identifies, assesses and manages nature-related risks.	Disclose the metrics and targets used to assess and manage relevant nature-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
A. Describe the board's oversight of nature-related risks and opportunities.	A. Describe the nature-related risks and opportunities the organisation has identified over the short, medium, and long term.	A. Describe the organisation's processes for identifying and assessing nature-related risk.	A. Disclose the metrics used by the organisation to assess and manage nature-related risks and opportunities in line with its strategy and risk management process.
B. Describe management's role in assessing and managing nature-related risks and opportunities.	B. Describe the impact of nature-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	B. Describe the organisation's processes for managing nature-related risks.	B. *[Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG emissions, and the related risks.]* *Adaptation under consideration by TNFD*
	C. Describe the resilience of the organisation's strategy, taking into consideration different scenarios.	C. Describe how processes for identifying, assessing, and managing nature-related risks are integrated into the organisation's overall risk management.	C. Describe the targets used by the organisation to manage nature-related risks and opportunities and performance against targets.
	D. Describe the organisation's interactions with low integrity ecosystems, high importance ecosystems or areas of water stress.		

Figure 3: TNFD draft disclosure recommendations

Carnstone BOOK CHAIN PROJECT

Science-Based Targets for Nature

- Science-Based Targets for Nature have initial guidance focussing on the process.
- Full guidance on materiality, scope & boundaries, integrated targets expected this year.

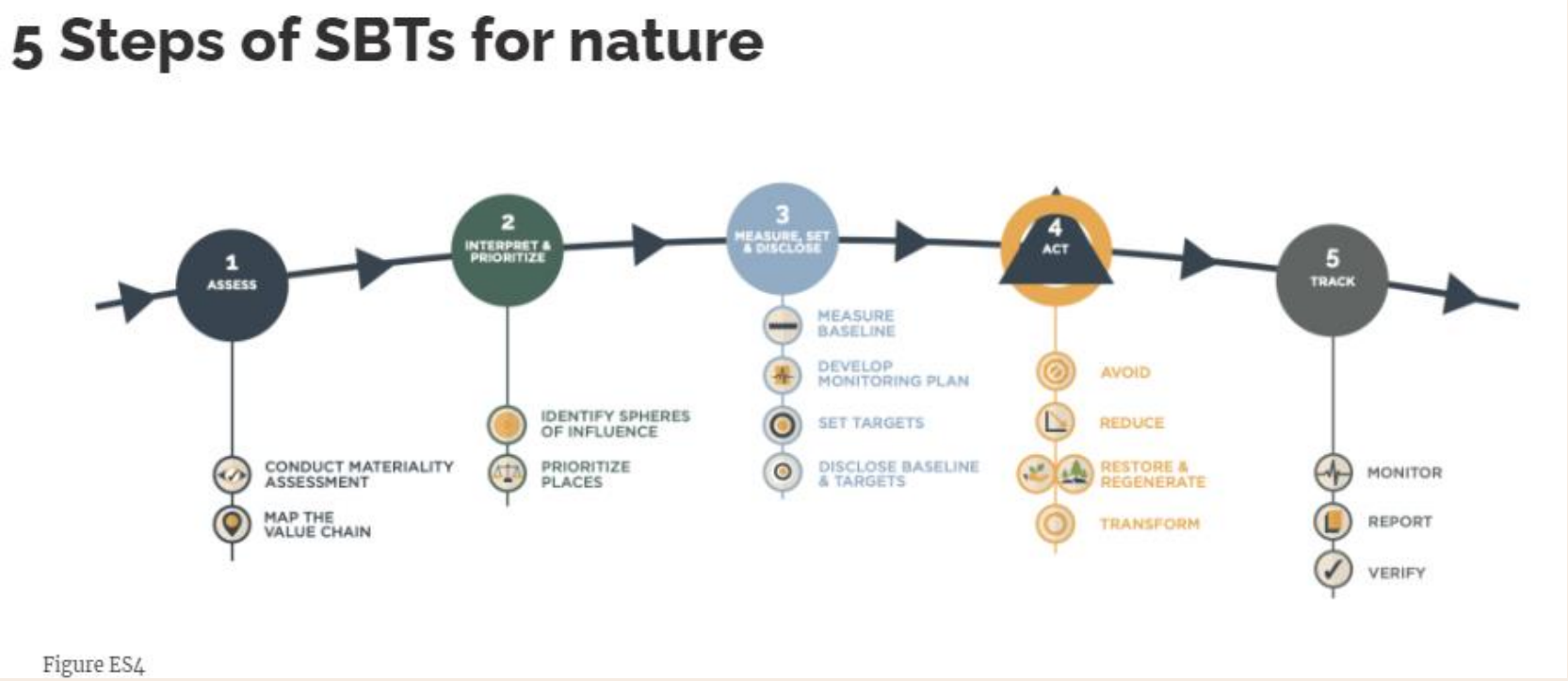
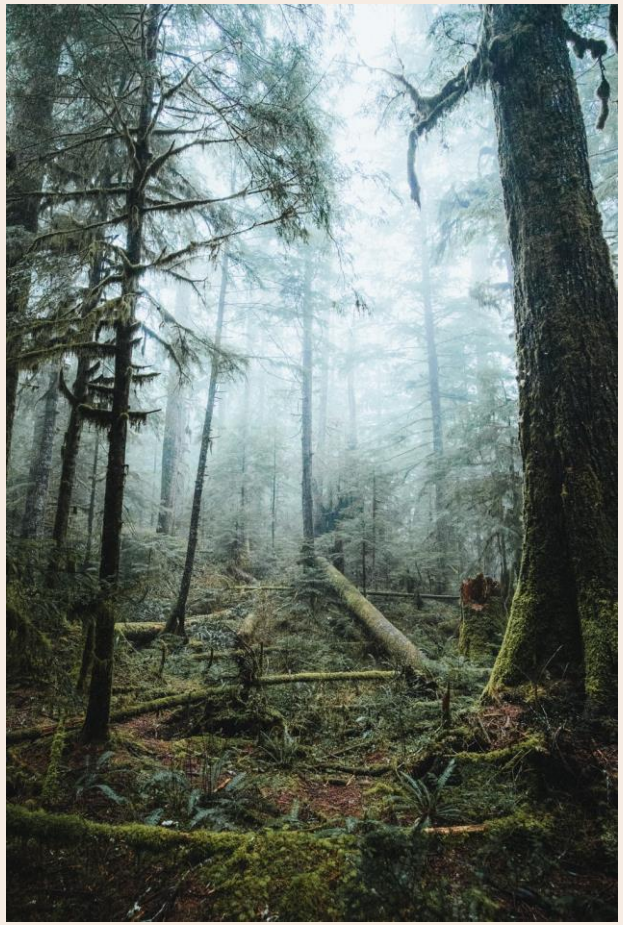


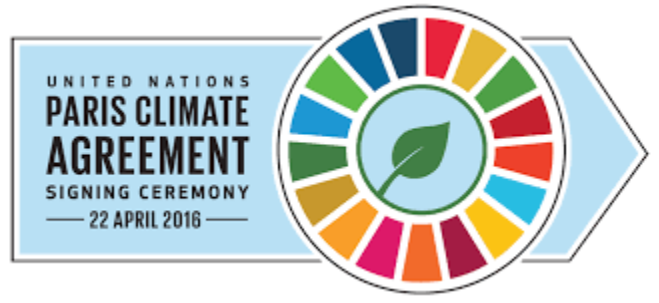
Figure ES4

USA – Current Forest Commitments



- At COP26, the USA signed on to the following joint pledges that clearly value forests:
  - Glasgow Leaders' Declaration on Forests and Land Use
  - Congo Basin Joint Donor Statement
  - Indigenous Peoples' and Local Communities' (IPLC) Tenure Joint Donor Statement
- At COP 26, the USA announced the Plan to Conserve Global Forests: Critical Carbon Sinks
  - By 2030, the United States intends to dedicate up to $9 billion of their international climate funding to support the objectives of the Plan
- Executive Order on Strengthening the Nation's Forests, Communities, and Local Economies
  - Section 1: Policy. Strengthening America's forests
  - Section 2: Restoring and Conserving the Nation's Forests, Including Mature and Old-Growth Forests.
  - Section 3: Stopping International Deforestation
  - Sec. 4. Deploying Nature-Based Solutions to Tackle Climate Change and Enhance Resilience

USA – Current Climate Commitments



President Biden re-joined the Paris Agreement.

50-52% GHG emission reductions

AIM FOR CLIMATE

- The Agriculture Innovation Mission for Climate (AIM for Climate / AIM4C) is a joint initiative by the United States and the United Arab Emirates. AIM for Climate seeks to address climate change and global hunger by uniting participants to significantly increase investment in, and other support for, climate-smart agriculture and food systems innovation over five years (2021 – 2025)

First Movers Coalition

- The First Movers Coalition is a global initiative harnessing the purchasing power of companies to decarbonize seven “hard to abate” industrial sectors that currently account for 30% of global emissions: Aluminum, Aviation, Chemicals, Concrete, Shipping, Steel, and Trucking; along with innovative Carbon Removal technologies
- Launched at COP26

U.S. SECURITIES AND EXCHANGE COMMISSION

- On March 21, 2022, the Securities and Exchange Commission (the “SEC” or “Commission”) proposed rules for climate change disclosure requirements for both U.S. public companies and foreign private issuers.
- The disclosures are derived from TCFD reporting framework and GHG Protocol

Example from GSK who has both climate and nature actions goals

Net zero impact on climate by 2030

Net positive impact on nature by 2030

Delivering on our targets – climate and nature action working together

So… what does this mean for publishers?

- Focus on climate moving from commitments to action, meaning changes to production and other business processes
- As companies deal with Scope 1 & 2, attention will increasingly go to the supply chain (Scope 3)
- Expect to be setting nature strategies and targets in the near future
- As climate change continues, resilience and adaptation will become increasingly important

Carnstone

Contact us:

Carnstone Partners Ltd
Durham House
Durham House Street
London WC2N 6HG

carnstone.com

Thanks.

Carnstone is an independent management consultancy, specialising in corporate responsibility and sustainability. We advise clients on the full range of social, environmental and ethical topics – from supplier management to community investment, from environmental modelling to corporate governance. We have offices in London and Shanghai.