

DECEMBER 2023

COP28

Key takeaways and implications



COP28
UAE

Key takeaways from COP28 (1/2)

COP28 was anchored by the **first Global Stocktake (GST)** since the Paris Agreement and showed that we are on a **2.1-2.8°C global warming trajectory**, requiring a **dramatic acceleration** to keep 1.5°C within reach.

COP28 delivered **10 meaningful pledges** – including 3 on energy transition and the **first-ever pledge on food systems transformation**. Commitments around the just transition were concretized across mitigation, adaptation, and loss & damage, but the gap to finance the energy transition in developing countries remains large. **The dual challenge of energy supply and climate change** proved the most contentious to address, and parties made a last-hour breakthrough to include fossil fuel transition in the final text for the first time.

COP28 saw the highest-ever attendance by global CEOs, underscoring the role of business in driving climate outcomes.

COMMITMENTS & DELIVERY



On the back of the GST, **countries have been asked over the next two years to set ambitious, economy-wide emissions reduction targets in their Nationally Determined Contributions (NDCs)** covering all GHGs and in line with limiting global warming to 1.5°C. Beyond NDCs, countries will also need to submit biennial transparency reports and national inventory reports by end of next year.

The final GST focused on “transitioning away from fossil fuels in energy systems in a just, orderly and equitable manner,” making it **the first COP to formalize fossil fuel transition in the text**. Countries are expected to take this agreement into account in updated NDCs.

JUST TRANSITION



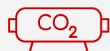
COP28 placed a heightened emphasis on just transition. The text calls for developed countries to **meet their commitment to jointly mobilize \$100B per year for mitigation** to developing countries and **double adaptation finance** from 2019 levels by 2025; there were also calls for parties to continue to increase transparency on implementation.

Pledges toward adaptation from developed parties totaled ~\$330M across the Adaptation Fund, Least Developed Countries Fund, and Special Climate Change Fund.

COP28 saw commitments of \$792M to the Loss & Damage Fund, and the **World Bank was designated as the interim trustee** for 4 years.

Key takeaways from COP28 (2/2)

CARBON MARKETS



COP28 turned the tide on the narrative around **voluntary carbon markets in developing countries** through several public- and private-sector initiatives, such as UNDP's High-Integrity Carbon Markets Initiative, the World Bank, John Kerry's Energy Transition Accelerator, and major announcements by NGOs to strengthen the governance of voluntary carbon markets. Despite the Presidency's focus on carbon markets as a tool for climate action and consistent support from leaders across forums, COP28 **did not advance decisions on how to trade carbon credits between countries** for NDC purposes, with draft texts on Articles 6.2 and 6.4 rejected.

ENERGY TRANSITION



Through a series of initiatives billed the Global Decarbonization Accelerator, countries and energy companies made **commitments to scale green energy systems, abate emissions from legacy systems, and address non-CO₂ GHGs**. 130 countries committed to triple renewable energy capacity by 2030 and double the rate of energy efficiency improvement to over 4%. 20+ countries committed to triple nuclear generation by 2050. 52 oil and gas companies, including several large NOCs, committed to decarbonize operations by 2050 and near-zero methane by 2030. 37 countries agreed to pursue mutual recognition of hydrogen certifications, aimed to unlock a key trade barrier for low-carbon hydrogen.

FOOD & NATURE



COP28 saw **the first-ever declaration around food systems resilience**, and the UAE Declaration on Agriculture, Food & Climate supported by 158 countries and 200+ non-state actors will tie the agri-food system to emissions targets. 20+ companies launched **the First Movers Coalition for Food** to scale demand signals for the procurement of low-carbon agri-food commodities, while the Regenerative Landscapes Initiative reinforced supply-side efforts. Collective **financial pledges of ~\$7B were mobilized toward food, nature, and health transformation**, and **GFANZ has committed to integrating nature** in net-zero transition planning in 2024.

FINANCE



\$85B was mobilized in total, including \$10.4B for Lives & Livelihood and Inclusion and a \$30B UAE fund that expects to draw a further \$250B of climate investments by 2030. Climate finance transformation was a key theme at COP28, with **meaningful alignment toward ISSB as the global disclosure standard** with ~400 organizations from 64 jurisdictions committing to advance the adoption of the ISSB climate-related reporting framework. GFANZ scaled to 675+ institutions at COP28, following strong adoption of the Net-Zero Transition Plan Framework at COP27.

COP28 delivered 10 meaningful pledges

PLEDGE (# of signatories)

DETAILS

DECLARATION ON AGRICULTURE, FOOD & CLIMATE

158

Incorporating agriculture and food systems into NDCs and national plans – promoting resilience and emissions reduction by scaling public, philanthropic, and private financing

DECLARATION ON CLIMATE & HEALTH

143

Integrating health considerations into climate policy processes, including the next round of NDCs, national strategies, and adaptation plans

GLOBAL RENEWABLES & ENERGY EFFICIENCY PLEDGE

130

Accelerating deployment of renewables (to triple global installed capacity by 2030) and energy efficiency (to double global average annual rate of energy efficiency improvement through 2030) through domestic action

DECLARATION ON CLIMATE RELIEF, RECOVERY & PEACE

80

Enhancing financial support for climate adaptation and resilience and investing in design, piloting, delivery, and scaling of climate adaptation and conflict-sensitive approaches to avoid climate grievances

DECLARATION ON GENDER-RESPONSIVE JUST TRANSITIONS

76

Building on female leadership and decision-making capabilities to achieve gender equality while supporting the transformational impacts of adaptation, mitigation, and finance efforts

COALITION FOR HIGH-AMBITION MULTILEVEL PARTNERSHIPS PLEDGE

71

Enhancing cooperation with subnational governments in the planning, financing, implementation, and monitoring of climate strategies, to maximize climate action and increase adaptation and resilience

DECLARATION ON COOLING

66

Reducing cooling-related emissions across all sectors by 68% by 2050 (vs. 2022 levels) through national cooling plans addressing building codes, minimum energy performance standards, and public procurement

DECLARATION ON HYDROGEN

37

Establishing mutual recognition of certification schemes for renewable and low-carbon hydrogen and hydrogen derivatives

DECLARATION ON CLIMATE, NATURE & PEOPLE

18

Committing to incorporate considerations for biodiversity and land preservation in climate action plans, scaling finance and investment for nature, and encouraging interoperability in data, metrics, and reporting

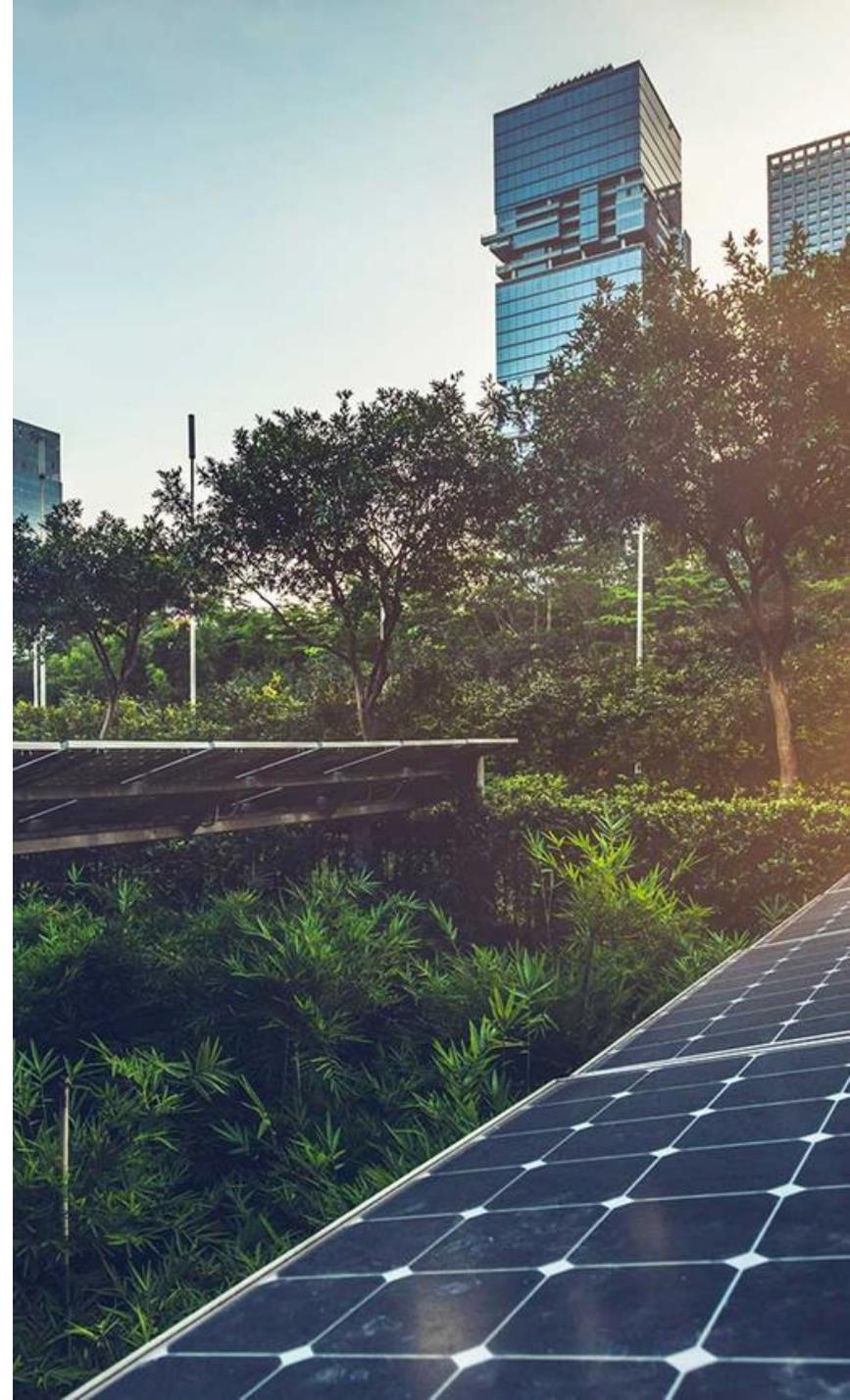
DECLARATION ON CLIMATE FINANCE

13

Bolstering investment to green the global economy, esp. in support of emerging and developing economies, via more concessional and private finance and more effective MDBs and carbon markets

Implications for corporates

- 1 Accelerate action by linking carbon and energy transition to value creation** both through commercialization of low-carbon offerings as well as by leaning in to build the demand signals necessary to bring new solutions down the experience curve
- 2 Develop a robust climate transition action plan** that advances from ambition setting to delivery, defining a credible pathway that embeds considerations around resilience and adaptation; use it as key instrument to constructively engage capital markets
- 3 Collaborate with stakeholders across the value chain** to identify opportunities to advance through coordinated action, establish sector-specific enablers, and accelerate the uptake of low-carbon solutions
- 4 Engage in policy and regulatory dialogue** to anticipate policy's influence on cost, technology, and markets; consider evolving toward a policy shaper role to get the voice of business reflected in policies that can accelerate the energy and carbon transition
- 5 Proactively prepare for disclosure** against global and national standards (e.g., ISSB, CSRD, SEC) by embedding climate-related opportunities and risks into your business strategy rather than focusing on pure compliance
- 6 Engage workers and communities to advance a just transition**, understanding the impacts of business activities across the value chain and embedding considerations around mitigation and adaptation into transition planning



Agenda



COP28: KEY TOPICS,
ACHIEVEMENTS,
AND CHALLENGES



IMPLICATIONS FOR
KEY SECTORS



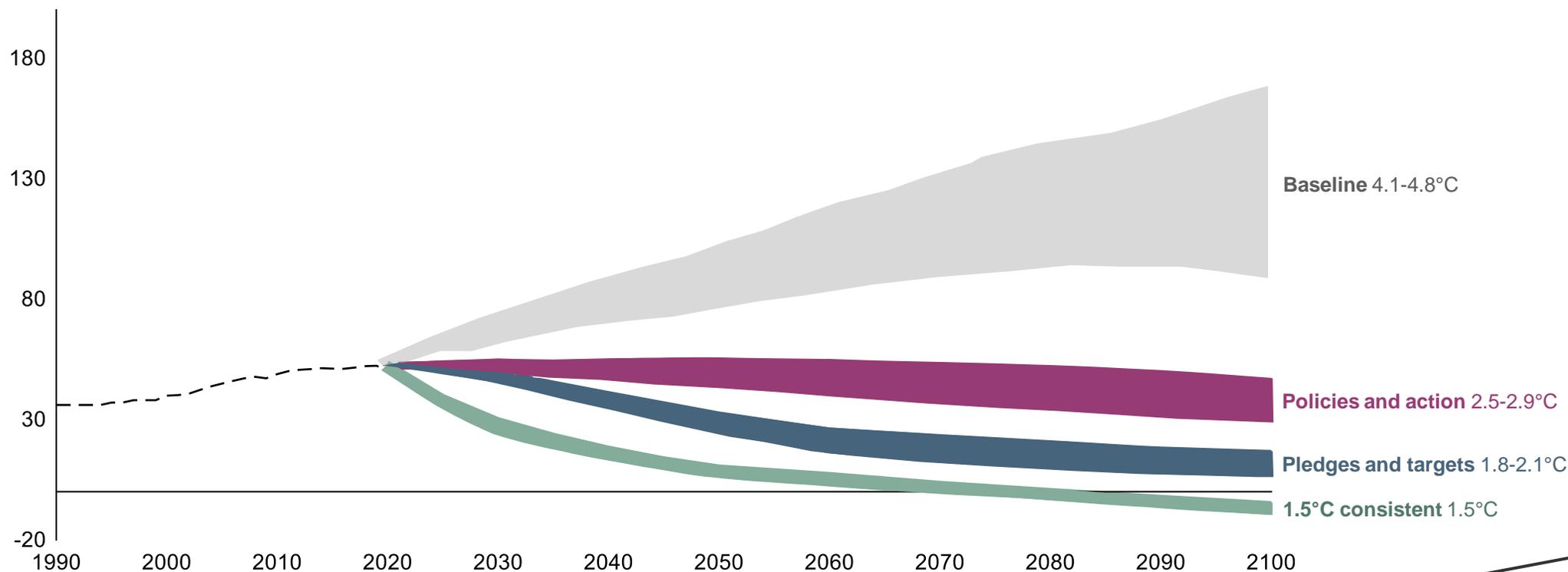
BEYOND COP28: AN
ACTION PLAN FOR CEOS

Following COP28 commitments, the world is facing a 2.1°C temperature rise by end of century based on pledges and targets (higher vs. 2.0°C post-COP27)

2100 Warming Projections –

Emissions and expected warming based on pledges and current policies¹

Global greenhouse gas emissions (gigatonnes CO₂e / year)



COP
Pledges and targets continue to change overall path

↓

FROM
~2.8°C
AT COP25²

↓

TO
~2.1°C
AT COP26³

↓

TO
~2.0°C
AT COP27⁴

↓

TO
~2.1°C
AT COP28

↓

"This change is due to weak existing targets rather than any major shifts in new NDC updates."
- Climate Action Tracker¹

Note: Baseline estimate from Climate Action Tracker December 2018 Update

Source: Time series data from (1) [Climate Action Tracker, December 2023](#); (2) [Climate Action Tracker, December 2019](#); (3) [Climate Action Tracker, November 2021](#); (4) [Climate Action Tracker, November 2022](#);

One of the biggest challenges is ensuring national net-zero plans are credible; to date ~75% of targets set by countries fall somewhat short

~89% of global emissions covered by countries' net-zero targets

Net-zero emissions target announcements by region¹
(% of global emissions covered by target in region)



Global emissions covered by targets

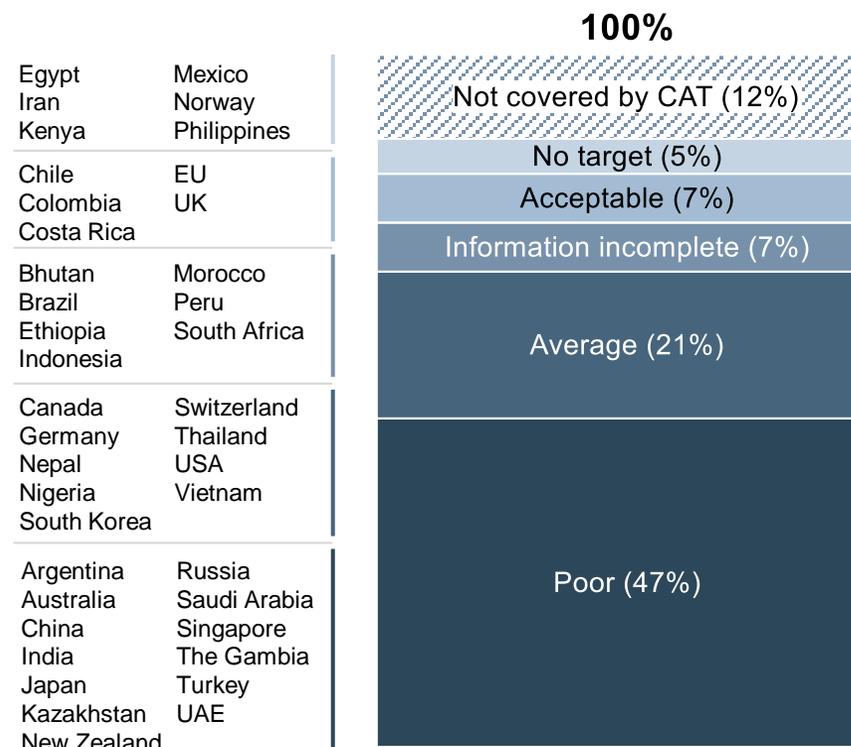
89%

of global emissions covered by targets

Up from 88% after COP27

However, targets representing ~75% of emissions are inadequate

CAT³ target quality grouping
(% in group of global emissions)



CAT target quality

75%

of global emissions covered by inadequate targets

Up from 74% after COP27

Note: 1) Agreed in law, as part of an initiative, or under discussion; 2) EU27; 3) Evaluated with Climate Action Tracker's (CAT) design blueprint for transparent, comprehensive, and robust national net-zero targets
Source: [Climate Action Tracker, December 2023](#); Bain analysis

Meaningful progress made across most areas covered by COP28, and challenges remain (1/3)

Key topic	Outcome	Agreements	Challenges
COMMITMENTS & DELIVERY	1 Nationally Determined Contributions (NDCs) 	 <ul style="list-style-type: none"> ○ Countries are requested to revisit and strengthen the 2030 targets in their NDCs (intended to cover commitments from 2025-2035) as necessary to align with the Paris Agreement temperature goal by the end of 2024¹ 	<ul style="list-style-type: none"> ○ To address implementation gap between NDCs and policies, governments will need to effect policy changes at the national and state levels to prompt action from public and private actors
	2 Global Stocktake (GST) 	 <ul style="list-style-type: none"> ○ With the Global Stocktake (GST) as a prompt, the latest policies and actions are expected to yield temperatures of +2.1-2.8°C by the end of the century¹ 	<ul style="list-style-type: none"> ○ Parties are not yet collectively on track to achieve Paris Agreement goals¹ ○ Each nation to determine contribution based on own circumstances, pathways, and approaches
JUST TRANSITION	3 Mitigation finance 	 <ul style="list-style-type: none"> ○ 6 countries jointly pledged \$3.5B (\$3B from US) to the Green Climate Fund (now \$12.8B total from 31 countries) to support developing countries in achieving NDCs³ ○ Coal Transition Accelerator was created by countries and organizations to share expertise, design new policies, unlock public and private financing to facilitate just transition from coal⁵ ○ Vietnam signed a JETP worth nearly \$16B to meet 2030 and 2050 climate targets⁴ ○ \$5B pledged by the GCF, Allied Climate Partners, and Allianz Global Investors to unlock \$20B in long-term capital to advance climate action¹¹ 	<ul style="list-style-type: none"> ○ Emphasis on transparent delivery of funds and ease of access for developing countries, given history of announcements exceeding contributions and inconsistent impact on local communities¹⁷ ○ Specification on who to provide grant-based and concessional finance
	4 Adaptation finance 	 <ul style="list-style-type: none"> ○ Pledges toward adaptation from developed parties totaled ~\$330M across the Adaptation Fund, Least Developed Countries Fund, and Special Climate Change Fund² ○ 80 countries and 43 organizations endorsed the Declaration on Climate, Relief, Recovery & Peace to provide resources to those most affected by fragility, conflict, or humanitarian needs² 	<ul style="list-style-type: none"> ○ Adaptation finance gap is widening – need for MDBs and other institutions to scale commitments ○ Ensuring pledges are fulfilled in timely manner ○ Progress on targets via Global Goal on Adaptation have stalled²⁸
	5 Loss & damage compensation 	 <ul style="list-style-type: none"> ○ Contributions to Loss & Damage Fund now total \$792M with hopes of quickly reaching \$1B² ○ The World Bank will serve as interim trustee and host of the fund for four-year period¹ 	<ul style="list-style-type: none"> ○ Developed countries are yet to agree on contributions, timeline, or criteria for the disbursement of funds to affected countries ○ Long-term host undecided amid concern donors will have outsized influence via World Bank¹

Source: (1) Final COP28 Text, (2) COP28 Website and Tracker, (3) Green Climate Fund, (4) UK Government, (5) EU Commission, (6) EU Commission, (7) WBCSD, (8) COP28 Summary Update, (9) COP28 Press Release, (10) UNEP, (11) COP28 Press Release, (12) US Department of Energy, (13) US Commodities Futures Trading Commission, (14) WEF, (15) GFANZ, (16) COP28 Press Release, (17) Bloomberg, (18) Inter-American Development Bank, (19) IFRS, (20) UNDP, (21) International Carbon Action Partnership, (22) World Bank, (23) NASDAQ, (24) Bloomberg, (25) IFRS, (26) ICP, (27) NZDPU, (28) WRI, (29) ICVCM, (30) US Department of State, (31) World Bank Press Release

Degree of success vs. post-COP27 expectations:  Low  High

Meaningful progress made across most areas covered by COP28, and challenges remain (2/3)

Key topic	Outcome	Agreements	Challenges
CARBON MARKETS	6 Compliance markets 	<ul style="list-style-type: none"> Governments and international bodies around the world showed strong support for the establishment of carbon markets²⁴ – Turkey is set to launch its ETS in 2025²¹, and Canada announced a cap-and-trade system for oil and gas companies²³ UNDP launched ‘High Integrity’ initiative to support access to carbon markets, mitigate social / environmental risks, and promote accurate carbon accounting²⁰ 	<ul style="list-style-type: none"> No consensus on Article 6.2 for country-to-country cooperation (including centralization and oversight) in carbon markets, with no rule or guidelines in the final GST text; discussions to continue¹ Failure to agree on text for Article 6.4 implementation of global carbon market
	7 Voluntary markets 	<ul style="list-style-type: none"> Initiative by GHGP, SBTi, ICVCM, VCMI, CDP, WMB launched to develop integrated, end-to-end guidance for corporate use of carbon credits²⁹ 6 independent crediting organizations announced a standards coalition to align carbon standards to new integrity guidance²⁶ US CFTC proposed guidance for listing voluntary carbon credit derivative contracts¹³ Launch of Energy Transition Accelerator, under sponsor Special Envoy John Kerry³⁰ The World Bank announced plans for high-integrity carbon markets with 15 countries to earn income from sale of credits generated from forest preservation by 2028³¹ 	<ul style="list-style-type: none"> Failure of Article 6.4 requires private sector to fill void, generating demand by scaling number of companies prepared to invest
ENERGY TRANSITION	8 Energy supply 	<ul style="list-style-type: none"> 130 countries pledged to triple renewable power capacity to 11,000 GW by 2030² 52 energy companies committed via O&G Decarbonization Charter to no routine methane flaring and near-zero methane emissions by 2030 and net-zero emissions by 2050⁸ 20+ countries committed to triple nuclear generation by 2050¹² 37 countries have endorsed or approved mutual recognition for hydrogen standards via the Declaration on Hydrogen² Final text included language on “phasing out inefficient fossil fuel subsidies”¹ 	<ul style="list-style-type: none"> Energy companies’ pledges do not include short-term targets; commitments primarily EMEA-based⁹ Policy enablement to ensure labor and infrastructure required to deploy 3x renewables to grid
	9 Energy demand 	<ul style="list-style-type: none"> 130 countries committed to double the rate of energy efficiency gains from 2% to over 4% each year through 2030² 66 countries committed to the Global Cooling Pledge to cut air conditioning emissions by 68% by 2050¹⁰ 	<ul style="list-style-type: none"> Political execution in rolling back direct and indirect subsidies for fossil fuels while ensuring access and affordability of energy

Source: (1) Final COP28 Text, (2) COP28 Website and Tracker, (3) Green Climate Fund, (4) UK Government, (5) EU Commission, (6) EU Commission, (7) WBCSD, (8) COP28 Summary Update, (9) COP28 Press Release, (10) UNEP, (11) COP28 Press Release, (12) US Department of Energy, (13) US Commodities Futures Trading Commission, (14) WEF, (15) GFANZ, (16) COP28 Press Release, (17) Bloomberg, (18) Inter-American Development Bank, (19) IFRS, (20) UNDP, (21) International Carbon Action Partnership, (22) World Bank, (23) NASDAQ, (24) Bloomberg, (25) IFRS, (26) ICP, (27) NZDPU, (28) WRI, (29) ICVCM, (30) US Department of State, (31) World Bank Press Release

Meaningful progress made across most areas covered by COP28, and challenges remain (3/3)

Key topic	Outcome	Agreements	Challenges
FOOD TRANSFORMATION	10 Food systems transformation 	 <ul style="list-style-type: none"> 158 countries signed the Declaration on Agriculture, Food & Climate to include emissions from agriculture and farming in NDCs² 20+ companies established the First Movers Coalition for Food, committing to \$10-20B in sustainably produced and low-emissions agricultural commodities by 2030¹⁴ 	<ul style="list-style-type: none"> Incorporating food systems into NDCs with pathway to address while ensuring food security Public climate finance will need to rebalance toward food systems; private climate finance for food will need to scale
	11 Nature and nature-based solutions 	 <ul style="list-style-type: none"> 25+ leading agri-food organizations, through the Regenerative Landscapes Initiative, committed to scale regenerative agriculture, accelerating transition of >160M hectares to protect soil and limit carbon emissions with an initial investment of \$2.2B⁷ GFANZ named the priority to integrate nature into net-zero transition plans in 2024¹⁵ EU Commission launched Team Europe Initiative on Deforestation-Free Value Chains, supporting GST push to halt and reverse deforestation by 2030⁶ 18 countries endorsed the Declaration on Climate, Nature & People recognizing the impact of climate on biodiversity and land degradation² 	<ul style="list-style-type: none"> Driving investment into technologies that prioritize climate-smart production of staples and non-staples Need to establish clear standards, certification, and messaging to credential food produced with regenerative, sustainable practices
FINANCE TRANSFORMATION	12 Capital realignment 	 <ul style="list-style-type: none"> COP Presidency mobilized \$85B in total for climate agenda² ALTERRA, a \$30B UAE fund with 100% focus on catalyzing climate solutions, aims to attract \$250B of investment by 2030¹⁶ World Bank increased financing by \$9B for '24-'25 (to >\$40B) for climate projects²² Bloomberg, GFANZ, IMF, PRI, and others founded the Global Capacity Building Coalition to provide technical assistance to developing market financial institutions¹⁷ Multilateral development banks committed to triple climate financing to \$150B over the next 10 years¹⁸ 13 countries endorsed the Declaration on Climate Finance to make finance available, accessible, and affordable globally² 	<ul style="list-style-type: none"> Private and public sectors will be challenged to partner effectively to unlock investment and ensure financial pledges translate into capital flows Multiple US reps. suing GFANZ on antitrust matters
	13 Financial disclosure 	 <ul style="list-style-type: none"> ~400 organizations from 64 jurisdictions committed to adopt ISSB climate-related reporting¹⁹ IFRS Foundation launched hub to support global drive toward ISSB standards²⁵ Proof-of-concept for Net-Zero Data Public Utility (NZDPU) unveiled with data from ~400 companies to provide consistent structure for reported data²⁷ 	<ul style="list-style-type: none"> Aligning diverse global regulatory frameworks with ISSB standards will require legislative and regulatory updates and coordination across parties

Source: (1) Final COP28 Text, (2) COP28 Website and Tracker, (3) Green Climate Fund, (4) UK Government, (5) EU Commission, (6) EU Commission, (7) WBCSD, (8) COP28 Summary Update, (9) COP28 Press Release, (10) UNEP, (11) COP28 Press Release, (12) US Department of Energy, (13) US Commodities Futures Trading Commission, (14) WEF, (15) GFANZ, (16) COP28 Press Release, (17) Bloomberg, (18) Inter-American Development Bank, (19) IFRS, (20) UNDP, (21) International Carbon Action Partnership, (22) World Bank, (23) NASDAQ, (24) Bloomberg, (25) IFRS, (26) ICP, (27) NZDPU, (28) WRI, (29) ICVCM, (30) US Department of State, (31) World Bank Press Release

Agenda



COP28: KEY TOPICS,
ACHIEVEMENTS,
AND CHALLENGES



IMPLICATIONS FOR
KEY SECTORS



BEYOND COP28: AN
ACTION PLAN FOR CEOS

Early View on COP28 Implications: Energy and Natural Resources (1/2)

UTILITIES & RENEWABLES

3 Mitigation & adaptation finance

4 Renewed commitment to reach \$100B threshold could support investment opportunities in renewable energy projects; Coal Transition Accelerator and final GST text increase pressure to accelerate phase down of unabated coal power

6 Compliance & voluntary markets

7 Companies may be able to generate additional revenue from selling carbon credits or be able to access an expanded market to purchase credits; a credible voluntary carbon market can prompt faster transition toward renewables as companies seek to offer or purchase more carbon credits

8 Energy supply & demand

9 Increased renewables commitments, emphasis on regulatory action, and emphasis on corporate net-zero transition plans (including transitioning away from fossil fuels) will continue to put pressure on the longevity and viability of coal fleets

13 Financial disclosure

Carbon credit buyers required to publicly report emissions inventory as well as their intended use; strong emphasis on transition action plans will increase value creation opportunities around utilities and renewables emissions

OIL & GAS

3 Mitigation & adaptation finance

4 Emphasis on shift to clean energy mix with fossil fuel subsidies likely to decelerate over time; Coal Transition Accelerator expected to increase pressure to phase out unabated coal usage

6 Compliance & voluntary markets

7 Formalized markets can provide clearer path to monetize investments into carbon capture and storage, accelerating business model transition; expansion will support feasibility of purchasing offsets to accelerate toward climate commitments

8 Energy supply & demand

9 Net-zero pledges – especially around Scopes 1 and 2 for both carbon and methane – increase pressure on transition plans and emphasis on delivery, including pressure to bolster existing infrastructure (e.g., to address methane leaks); placing downward pressures on fossil fuel demand will continue to be a focus for policymakers, NGOs, etc.

13 Financial disclosure

Potential requirements to disclose emissions inventories and progress toward reduction target (greenhouse gas emissions and mitigation costs); strong emphasis on transition action plans will increase value creation opportunities around oil and gas emissions

Early View on COP28 Implications: Energy and Natural Resources (2/2)

MINING

3 **Mitigation & adaptation finance**
4 Increased funding availability could lead to more investment opportunities in non-coal energy projects; Coal Transition Accelerator will increase pressure to phase out coal mining

6 **Compliance & voluntary markets**
7 Companies may be able to access an expanded market to purchase credits; could prompt faster transition away from coal as companies seek to offer or purchase more carbon credits

8 **Energy supply**
 Deeper focus on mining for metals used in renewables; national commitments and transition plans focus will put pressure on cutting methane emissions; phase down of unabated coal to impact opportunities on new coal projects

13 **Financial disclosure**
 Strong disclosure emphasis on Scope 3 and transition action plans will increase value creation opportunities around coal mining emissions

CHEMICALS

3 **Mitigation & adaptation finance**
4 Increased funding availability could lead to more investment opportunities in chemical production projects involving renewables, green raw materials, and green production processes

6 **Compliance markets**
 Companies may be able to access an expanded market to purchase credits

8 **Energy supply**
 Increase in commitments toward renewables and cleaner practices will lead to increased focus on chemicals players to decarbonize their energy sources

10 **Food systems transformation and nature & nature-based solutions**

11 Emphasis on sustainable agriculture will increase opportunities to address emissions and nature impacts from chemicals and fertilizers on the agri-food system

13 **Financial disclosure**
 Strong disclosure emphasis on Scope 3 and transition action plans will increase value creation opportunities around chemicals emissions

AGRIBUSINESS

1 **NDCs**
2 Updated national level commitments, including Emirati Declaration to include agri-food emissions in NDCs and sharpened emphasis on corporate net-zero transition plans, could prompt an uptick in focus on Scope 3 emissions, shift to regenerative agriculture and bring other solutions to on-farm emissions, especially in methane

6 **Compliance & voluntary markets**
7 Opportunity for some agri-food actors to monetize carbon sequestration in soils and / or plants

10 **Food systems transformation**
 Emirati Declaration expect to mount pressure for private actors to reduce emissions across the agri-food system; the First Movers Coalition for Food will create demand signals to transform sustainable food supply

11 **Nature & nature-based solutions**
 Focus on sustainable, low-carbon food systems will accelerate regenerative agriculture adoption; GFANZ inclusion of nature in net-zero plans will also bolster adoption of sustainable agriculture practices

13 **Financial disclosure**
 Strong disclosure emphasis on Scope 3 and transition action plans will increase value creation opportunities around agri-food emissions

Early View on COP28 Implications: Industrials and Transportation

METALS & MACHINERY

- 1 NDCs**
Updated national commitments will increase focus of emissions in metals and machinery, including adoption of renewable energy, secondary raw materials, and lower-carbon production processes
- 2 GST**
Sharpened emphasis on corporate net-zero transition plans, especially due to Industrial Transition Accelerator, will drive demand for green inputs and create new sources of financing for green production processes
- 6 Compliance & voluntary markets**
7 Further incentivizes investment in innovation and deployment of cleaner energy consumption, raw material use, production processes, and CCUS
- 13 Financial disclosure**
Strong emphasis on transition action plans will increase value creation opportunities around on metals, machinery emissions

CONSTRUCTION & BUILDINGS

- 1 NDCs**
Updated national commitments will increase focus of emissions in construction and buildings, including adoption of green building materials (e.g., steel, cement)
- 2 GST**
Sharpened emphasis on corporate net-zero transition plans, especially due to Industrial Transition Accelerator, will drive adoption of green building materials (e.g., steel, cement)
- 8 Energy supply & demand**
9 Net-zero pledges will increase pressure on transition plans, including adoption of renewables and a focus on energy efficiency for new and retrofitted construction and buildings
- 13 Financial disclosure**
Strong emphasis on transition action plans will increase value creation opportunities around construction, building emissions

AEROSPACE & DEFENSE

- 1 NDCs**
Updated national commitments will increase focus of emissions in aerospace and defense, especially due to ties to public procurement that will place additional focus on aerospace and defense companies' footprint
- 2 GST**
Sharpened emphasis on corporate net-zero transition plans, including adoption of renewable energy, green raw materials, and green production processes
- 6 Compliance & voluntary markets**
7 Further incentivizes investment in innovation and deployment of cleaner energy consumption, raw material use, and production processes
- 13 Financial disclosure**
Strong emphasis on transition action plans increase value creation opportunities around aerospace, defense emissions

AIRLINES, LOGISTICS & TRANSPORT

- 6 Compliance & voluntary markets**
7 Creates additional opportunities from investment in energy-efficient or SAF-based aircraft or creates access to purchase additional credits
- 8 Energy supply & demand**
9 Net-zero pledges will increase pressure on transition plans, including adoption of SAFs and a focus on energy efficiency for new and retrofitted aircraft
- 10 Nature & nature-based solutions**
Emphasis on nature-based solutions will drive increased focus on SAF adoption
- 13 Financial disclosure**
Emphasis on transition action plans increases value creation opportunities around airline, logistics, trans. emissions

AUTOMOTIVE & MOBILITY

- 1 NDCs**
Updated national commitments will increase focus of emissions in automotive and mobility, especially the production, sale, and use of ZEVs
- 2 GST**
Sharpened emphasis on corporate net-zero transition plans, especially due to Industrial Transition Accelerator, resulting in increased focus on production, sale, and use of ZEVs
- 8 Energy supply & demand**
9 Net-zero pledges and commitments to 3x renewables will increase attention on transition plans (including adoption of ZEVs and energy efficiency for new and used vehicles); shift away from fossil fuel subsidies will increase ICE costs, expand ZEV adoption
- 13 Financial disclosure**
Strong disclosure emphasis on Scope 3 and transition action plans will increase value creation opportunities around automotive and mobility emissions

Early View on COP28 Implications: Consumer and Capital Markets

CONSUMER PRODUCTS

- 2 GST**
Sharpened emphasis on corporate transition plans, including adoption of renewable energy, green raw materials, and lower-carbon production processes

- 7 Voluntary markets**
Support for restoring confidence in voluntary markets can be incorporated into near-term transition planning

- 8 Energy supply & demand**
Net-zero pledges will continue to boost rapid scaling of solutions to deliver in both energy and food-related sectors

- 9**

- 10 Food systems transformation**
Pressure to collaborate with upstream supply chain to find scalable solutions and sources of low-carbon agricultural commodities

- 11 Nature & nature-based solutions**
Increased focus on agri-food emissions, especially methane emissions, can provide greater access to new funding sources to scale breakthrough innovation

- 13 Financial disclosure**
Emphasis on transition action plans enhances focus on delivering commitments at scale

RETAIL

- 2 GST**
Sharpened emphasis on corporate transition plans, including adoption of renewable energy and attention on upstream and downstream impacts of sold products

- 10 Food systems transformation**
Increased demand for low-carbon offerings provides opportunity to scale offerings leveraging regenerative agricultural techniques

- 11 Nature & nature-based solutions**
Push to reduce methane and food-related emissions accelerates opportunity to scale offerings that incorporate regenerative agriculture and deforestation-free production

- 13 Financial disclosure**
Emphasis on transition action plans increases need to understand footprint of product portfolio

FINANCIAL SERVICES

- 2 GST**
Increased attention on balancing need to reduce financed emissions with the continued role in financing the transition

- 3 Mitigation & adaptation finance**
Opportunity to play pivotal role as intermediaries for the flow of funds, scale climate and physical risk assessments and advisory services

- 4**

- 5 Loss & damage compensation**
Opportunity to help optimize the administration of funds to ensure delivery

- 6 Compliance & voluntary markets**
Potential to serve as a host or brokerage for the generation and trade of carbon credits or offsets; opportunity to purchase offsets given the rise of new financial vehicles linked to carbon credit (e.g., US derivatives)

- 7**

- 12 Capital realignment**
Role in ensuring accountability for NZ commitments and including emerging economies in access to financing

- 13 Financial disclosure**
Increased focus on funding and investments based upon the emissions they yield; pressure to maintain reliable sustainability data (e.g., NZDPU)

FINANCIAL INVESTORS

- 1 NDCs**
Opportunity to invest in companies that benefit from governmental incentives – directly or indirectly through customers

- 3 Mitigation & adaptation finance**
Opportunity to co-invest in projects tech, orgs supported by just transition funds; increased importance on climate and physical risk assessments

- 4**

- 6 Compliance & voluntary markets**
Carbon credits and offsets present a new class of tradable assets to further diversify portfolios and / or hedge against emissions of portfolio companies (including biodiversity credits)

- 7**

- 12 Capital realignment**
Role in ensuring accountability for NZ commitments by providing financing for the lowest-emissions investments; increased focus to invest in green technologies, renewables

- 13 Financial disclosure**
Increased pressure to maintain reliable sustainability data (e.g., NZDPU); added attention emissions supported across investment portfolio

Agenda



COP28: KEY TOPICS,
ACHIEVEMENTS,
AND CHALLENGES



IMPLICATIONS
FOR KEY SECTORS



BEYOND COP28: AN
ACTION PLAN FOR CEOS

Four themes define the evolving global context beyond the developments coming from COP28



Uncertainty around persistence of inflation and strength of recovery can inhibit investments in the transition



Higher cost of capital negatively impacts long-term capex investments fundamental for the transition



Coordination on policy across trade blocks is challenging, and policy competition to win the transition is intensifying



Corporate transparency on ambition and progress is reaching an inflection point driven by regulation and capital markets expectations

For corporates, greater pressure is expected to shift the discourse from ambition to delivery and value creation in 2024

FOUR THEMES...

1 Shifting from ambition to accelerated delivery 

2 Making the math work 

3 Ensuring resilience and attractiveness of the business 

4 Understanding policy responses to climate 

... CAN EACH BE TACKLED WITH CARBON AND CLIMATE IN MIND

Address cost and carbon in tandem

Deliver against your decarbonization plan based on a robust understanding of the decarbonization cost, flexible pathways, and proven carbon delivery capabilities

Identify and capture the emerging value creation opportunity

De-average customers to understand emerging demand and willingness to pay, optimize government subsidies, and get investor multiple upside

Disclose with confidence, anchoring the transition plan in your business strategy

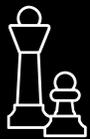
Assert the resilience and growth opportunities of your business based on quantified understanding of the climate transition and physical risks

Become a policy shaper

Identify policies that will inflect the transition and move from a policy taker to a policy shaper posture through proactive and constructive engagement

Lead with **Visionary Pragmatism**

... and embrace forward-thinking realism, keeping a clear-eyed focus on strategic execution and delivery



Strategic adaptation

Understand and monitor signposts that show the direction of travel and place a premium on strategic adaptation through a **living strategy**



Investor and lender resonance

Resolve dissonance between decarbonization and near-term profit by establishing **decarbonization proof points and flexible pathways to net-zero**



Customer-back decarbonization

Start decarbonization with the customer to capture value from your low-carbon offerings and become the partner of choice on the path to net-zero



Partnerships for results

Focus on the partnerships across the value chain that will move the needle and engage policymakers to constructively inform regulation



Top-to-bottom green organization

Embed decarbonization into how you run the business including performance management, while inspiring and upskilling the organization

CEO agenda for carbon and energy transition



STRATEGIC ADAPTATION

Understand your climate transition and physical risks and opportunities

Define your net-zero business strategy

Embrace a living strategy as you deliver



INVESTOR AND LENDER RESONANCE

Strengthen shareholder and lender dialogue

Leverage green finance for value and credibility



CUSTOMER-BACK DECARBONIZATION

Decarbonize with customers

Monetize your low-carbon offering

Unleash green innovation inside and outside

Address cost and carbon in tandem in operations

Make supply chain low carbon and climate resilient

Offset with intent



PARTNERSHIPS FOR RESULTS

Partner for results along the value chain

Become a policy shaper



EMPOWERED GREEN ORGANIZATION FROM TOP TO BOTTOM

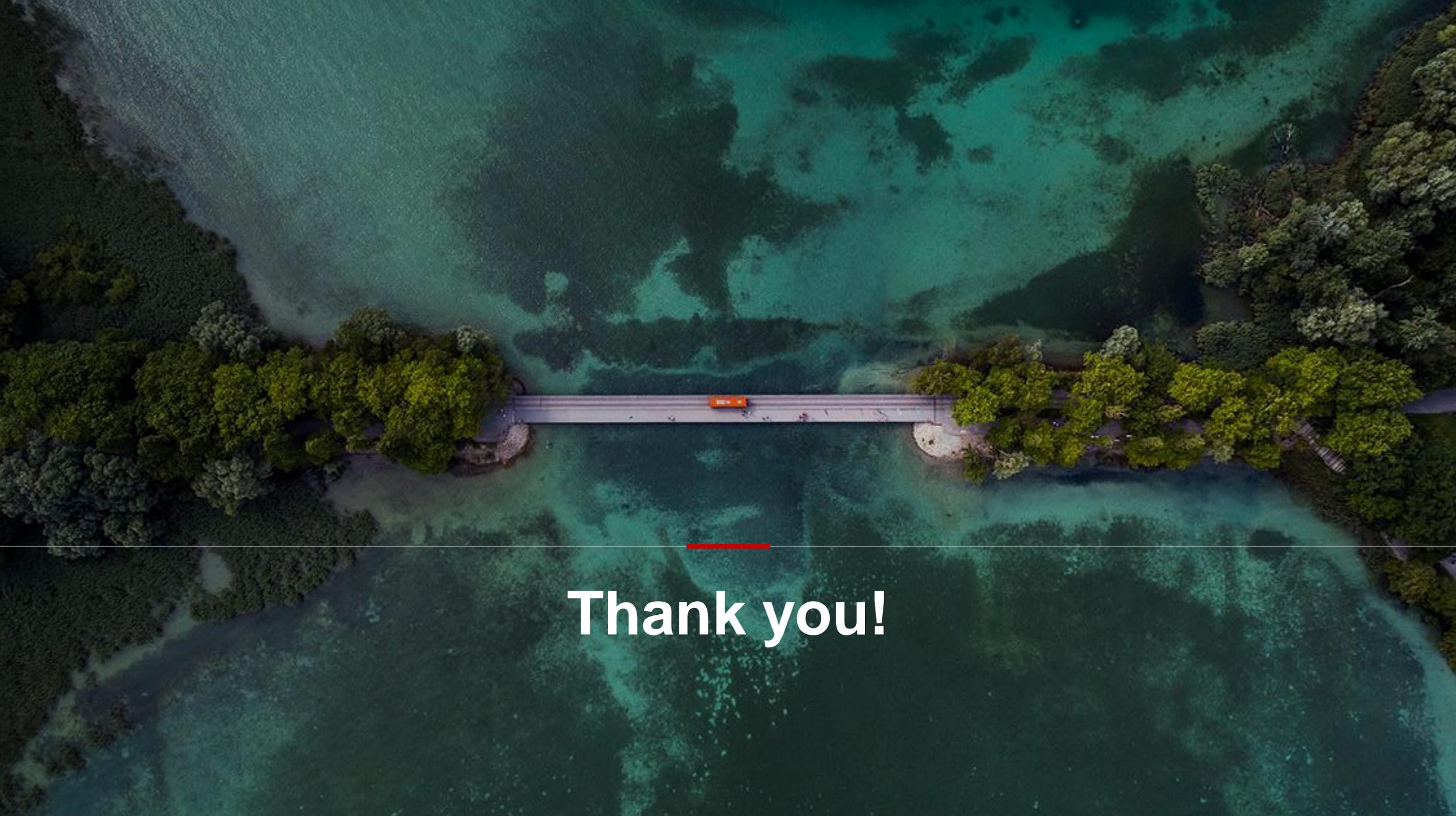
Manage your footprint like you manage cost

Implement internal carbon pricing in the decisions that move the needle

Embed sustainability in your performance management system

Upskill your organization where it matters and in a practical way

Inspire and create clarity for your organization, including green middle management



Thank you!