

COP30 REPORT

POLICY MATTERS

FROM PLEDGES TO DELIVERY
A DECADE AFTER PARIS

NOVEMBER 2025

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ABOUT THIS REPORT

This year's 'Policy Matters' report is intended for policy makers and regulators looking to advance their net zero policy and regulatory work; and more broadly for corporations, financial institutions and other non-state actors (NSAs) committed to supporting decarbonisation goals, in alignment with their duties to clients, beneficiaries and constituents. It provides insights and recommendations for developing high integrity corporate and financial policies that drive rapid and substantial reductions in greenhouse gas emissions.

It builds on '[Net Zero Policy Matters](#)' 2024, which showed that policy action is taking place worldwide – in both developed and emerging markets – on a much broader scale than previously envisaged. In the 2025 edition, we examine progress made since COP29 across the G20 countries, using the [Oxford Climate Policy Monitor](#) 2025 survey, expanding the scope to draw qualitative examples from selected non-G20 countries.

For the research, the Taskforce collaborated with knowledge partners and researchers from Oxford Climate Policy Hub, OECD, InfluenceMap, SouthSouthNorth, Oxford Sustainable Finance Group, European University Institute, University of Melbourne, Climate Analytics, Vulnerable Twenty (V20) Group, UN CCD, among others. We drew insights from data, research, initiatives and good practice policy examples for each of the practice areas from the Global North and Global South.

The findings are organised around four foundational pillars identified as critical for effective net zero policy:

1. Transition planning integrity;
2. Resilience-focused policies;
3. Carbon credit markets;
4. Accountability mechanisms.

As the policy landscape grows increasingly complex, we acknowledge that there are other areas worthy of assessment, but actions taken under these four pillars will allow for meaningful policy progress.

The impetus for the Taskforce's work on 'Policy Matters' was the UN [High-Level Expert Group's](#) (HLEG) 2022 mandate to develop recommendations on standards and definitions for 'net zero' targets by non-state actors. They included: credibility criteria for assessing these actors' objectives, measurements and reporting; processes for verifying and accounting for progress in a transparent manner; and a roadmap to translate standards and criteria into international and national regulations in the context of a just transition.



FOREWORDS



Helena Viñes Fiestas

**Co-Chair of the Taskforce on Net Zero Policy,
UN HLEG member and Commissioner of the
Spanish Financial Markets Authority**

Ten years ago, the countries of the world came together in an unprecedented moment of hope and solidarity, pledging under the Paris Agreement to limit global temperature rise to 1.5°C. A decade on, we find ourselves at a critical juncture. It is now inevitable that humanity will overshoot this target, with devastating consequences for people and the planet. The first climate tipping point linked to greenhouse gas emissions has been reached, with coral reefs now facing terminal decline. Other catastrophic thresholds – melting polar ice caps, the failure of the Amazon rainforest ecosystem, and the disruption of the Atlantic Ocean current system – are drawing dangerously near.

Yet, science tells us there is still a window of opportunity to change course and avert irreversible damage. We must act urgently to minimise both the scale and the duration of the overshoot. The coalition of nations accelerating climate action continues to expand, despite political headwinds. At the UN Climate Summit in September, nearly 100 countries committed to advancing economy-wide targets covering all greenhouse gas emissions – including, for the first time, China, Barbados, Nepal, Nigeria, and Singapore.

This year's report confirms that net-zero policy implementation and stronger accountability mechanisms are gaining momentum across most countries – driven by enhanced disclosure frameworks, sustainable taxonomies, transition planning elements, corporate governance reforms, and the expansion of carbon markets. This should give us reason for hope.

But to stabilise average temperature increases to 1.5°C, we must confront existing gaps and inconsistencies. While most of the world moves toward establishing policy frameworks to help companies and financial institutions transform their business models to become

more sustainable and resilient, a counter-narrative is emerging in some regions – one that defies science and delays action. Such delays increase the risk of a disorderly transition, which would come at a far higher economic cost and inflict widespread human suffering, forced migration, and irreversible environmental damage. To avoid these outcomes, we must counter unscientific denial that serves only narrow, vested interests.

Despite significant progress, a disconnect remains between climate frameworks and broader economic and industrial policies, limiting their overall effectiveness in achieving net zero goals within the next 25 years. Many policies remain high-level or advisory, focusing on risk management without driving meaningful capital reallocation or preventing carbon lock-in.

Accountability is also weak, particularly regarding alignment of corporate incentives and advocacy practices with climate objectives. This underscores the need for integrated, granular policy frameworks that combine corporate and sustainable finance measures with real economy tools – such as carbon pricing, sectoral pathways, and support for technology innovation and scale up – to deliver systemic impact. The private sector needs policy visibility, reliability and consistency, as well as clear guidance on targets, transition pathways and financing.

We must urgently scale up climate finance for mitigation and adaptation, embedding social justice, biodiversity and nature into all frameworks. Now is the time to be bolder: the economic case is clear, corporate and financial accountability is gaining momentum, and the clean energy transition is accelerating. We must unlock finance for the most vulnerable – especially Least Developed Countries and Small Island Developing States – and harness nature as a key ally in mitigation and resilience.

This is not a moment for despondency. We have the tools, the technologies and the commitments. At a time of rising political uncertainty, bold, system-wide policy action is essential to limit the scale and duration of the 1.5°C overshoot – and to reduce its economic and human cost. COP30 in Brazil offers a vital opportunity to put the Paris Agreement back on track and chart a credible path to mobilising the US\$ 1.3 trillion needed annually in climate finance by 2035.

FOREWORDS



Andrea Meza Murillo

**Co-Chair of the Taskforce on Net Zero Policy,
Deputy Executive Secretary to the United Nations
Convention to Combat Desertification (UNCCD)**

As COP30 approaches, the urgency of building resilience and advancing climate adaptation has never been clearer. Solutions dialogues will address both mitigation and adaptation, nature and just transition, underscoring that resilience lies at the heart of a sustainable transition. This report highlights three critical priorities. First, it underscores the essential role of finance in scaling up investments in resilience and embedding adaptation into transition plans. Yet adaptation finance remains dangerously off-track. According to UNEP's 2024 Adaptation Gap Report, current flows meet only a fraction of estimated needs – eight to 14 times smaller than required – and annual funding has stagnated even as climate impacts intensify. Implementation of adaptation plans is also lagging: fewer than half of countries report measurable progress, with actions still underfunded, fragmented, and insufficiently scaled. Bridging these twin gaps – finance and implementation – is vital to protecting lives, livelihoods and ecosystems.

Second, the report underlines the pivotal role of non-state actors. In an era of disruption and uncertainty, NSAs can benefit from positioning and resourcing climate-related policy engagement as a core component of their investment strategy, ensuring that proactive engagement is based on positions aligned with their long-term goals. Companies adopting international standards and strengthening corporate governance on mitigation and adaptation are reducing future risk exposure, opening their horizons to new transition opportunities and sustainability-linked finance, and futureproofing their continued operations.

Third, the report emphasises the need for resilience-focused policies. The UN High-Level Expert Group on Integrity and the 2024 Net Zero Policy Matters report call for the integration of adaptation, nature and just transition considerations into mitigation policies and corporate and financial strategies. Policy makers and regulators must create economy-wide enabling frameworks that support NSAs in aligning with the Paris Agreement and delivering credible, high-integrity transition and resilience strategies. While we have seen improvements across G20 disclosure regimes, taxonomies and transition planning requirements, much remains to be done. Policies that systematically link sustainability issues through double materiality assessments can unlock private finance, enhance interoperability, and ensure that climate, social and nature, water and land goals reinforce one another rather than operate in silos.

Progress is visible – but uneven and insufficient. Disclosure regimes increasingly require physical risk and resilience assessments, while taxonomies and transition plans are beginning to integrate adaptation, biodiversity and just transition objectives. Yet few jurisdictions have binding requirements or consistent implementation. Embedding resilience from the outset is critical – to avoid costly retrofits and to build coherent policy environments where mitigation, adaptation, nature, water and land and equity work in synergy. COP30 and the Action Agenda's six pillars provide a pivotal opportunity to accelerate this integrated approach, aligning finance flows, corporate strategies, and policy instruments to deliver systemic, climate-resilient outcomes.

This year's report outlines how policy makers and regulators can support NSAs in aligning to the goals of the Paris Agreement and the Rio Conventions and delivering credible, high-integrity transition plans and resilience strategies. We hope that it provides both encouragement and a useful tool to advance NSA action.



FOREWORDS



Nathan Fabian

Chief Sustainable Systems Officer, Principles for Responsible Investment (PRI)

A core tenet of the PRI's activities is that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system must, by definition, have high integrity in terms of capturing the costs and benefits of economic activities that rely on planetary systems to support economies. This is why the PRI and its signatories, as one key NSA sector, support net zero as part of economic policies, including for the activities of non-state actors.

Climate change is now a clear and present danger. We now know that the policy response to climate change has been insufficient to avoid impacts that now threaten many NSAs' core activities. For example, a growing body of evidence shows physical climate impacts are affecting the value of assets and putting insurance business models at risk. If we can't stabilise warming to 1.5°C – and catastrophic 'feedback loops' are triggered – we will experience permanent changes in planetary systems and disruptive changes in our economies. Under this scenario, the risk and return assumptions that have enabled the viability of many economic and financial activities in today's economy, are under threat.

The transition is uneven but is continuing. Despite political and economic volatility in some regions, a global transition and adaptation response is now well underway. While the journey may be slow in some regions, the intended destination has not changed, and it is imperative that NSAs stick to the objective of stabilising temperature rise to around 1.5°C to avoid potentially cascading economic and financial risks. A diversified and long-term focus on climate-related risks and transition opportunities can safeguard net-zero aligned plans, even where government decarbonisation policy is changeable in some jurisdictions.

Policy engagement is a critical lever for NSAs seeking to manage systemic risks. This year's report maps progress in the global policy landscape, offering examples of good practice from across the G20. NSAs can use these insights to inform their engagement with policymakers, improve their own implementation of net zero policies, and ensure that integrity and policy effectiveness go together.

As countries submit enhanced NDCs for COP30, NSAs will play an increasingly important role in realising ambition. Despite negative narratives that climate action is detrimental to NSAs, evidence shows the opposite. Implementing net zero policy is not without short-term costs to NSAs, but organisations and entities that can build capacity, transparency and transition effectively stand to prosper the most in the future.

It is time to move from pledges to delivery.



EXECUTIVE SUMMARY

In the past decade, the world's climate policy landscape has transformed beyond recognition.

At the heart of national and regional climate strategies are policies designed to steer companies and financial institutions along credible net zero pathways. **Since 2020, the number of such targeted policies in G20 has tripled.** Our analysis last year identified over 1,000 policy instruments across the G20 linked to corporate and financial sector transitions to net zero. Two broad policy types have emerged: those specifically targeting companies and financial institutions through corporate and financial regulation, and those originating in the real economy that include explicit requirements for corporate and financial actors.

As we mark the 10th anniversary of the Paris Agreement in 2025, policy development in this area has continued apace since COP29, with growing sophistication and maturity. While we have seen a policy reversal at the US federal level, and a period of recalibration in the EU, with potential dilution of some flagship measures, traction has accelerated elsewhere. The centre of gravity is shifting to the Global South and Asia Pacific, where policy innovation and ambition are increasingly driving the global climate agenda.

Significant progress has been made on disclosures, taxonomies and transition planning. Over 60% of global GDP is now covered by jurisdictions that have made progress towards the full adoption or other use of ISSB Standards. Close to 60 sustainable finance taxonomies are developed or in progress, with ambition to cover more than 65% of global GDP. A growing number of policy approaches now require or incentivise companies and financial institutions to undertake transition journeys and to publish their progress, including prudential requirements incorporating climate scenario analysis, public procurement frameworks, sectoral transition plans, transition-planning guidance, and policies establishing emissions caps – whether through emissions trading schemes or carbon budgets. These diverse measures illustrate different policy pathways toward the same goal: setting and delivering credible emissions reduction targets.

While progress in the policy sphere is undeniable, weak points remain – and the details matter, if 1.5°C, despite an inevitable overshoot, is to stay within reach.

Trade-offs between mitigation, resilience, nature and social inclusiveness must be addressed, highlighting the need for integrated approaches.

Since 2024, there has been a growing call for climate resilience investments and strategies, as physical risks increasingly threaten economic progress across geographies. Resilience, nature and just transition considerations are increasingly reflected in disclosure requirements, as well as in taxonomies and transition plans, even if they remain a narrow and secondary focus.

Climate policy has faced intense lobbying from oil and gas, automotive and heavy industries, seeking to weaken ambition and policies aimed at combating greenwashing and enhancing transparency and accountability. Some of this lobbying has been effective. Regulation ensuring transparency and accountability in lobbying remains limited, undermining public trust and net zero delivery. Concurrently, **climate litigation is accelerating globally,** prompting policy makers to strengthen legal and regulatory frameworks and ensure that climate commitments are credible, comparable and enforceable.

Policy is not sufficiently granular, allowing for loopholes. Critical gaps – such as avoiding carbon lock-in, ensuring the integrity and proper use of carbon credits, and setting sunset dates for high-emission activities where low-carbon alternatives exist – must be addressed to convert ambition into effective action. These measures are not yet fully embedded in broader economic systems through a whole-of-government approach, nor consistently applied. Transition planning, carbon pricing, fiscal incentives and sustainability taxonomies should align to reshape incentive structures, while national trajectories ensure long-term direction and policy coherence.

Policies must be system-wide, maximising synergies and minimising trade-offs, to boost competitiveness and increase effectiveness. They should aim to be coherent at jurisdiction level, and interoperable across markets: enhancing efficiency across jurisdictions, while reducing transaction costs for companies and financial institutions.

A shifting geography of climate policy is redefining the global landscape.

Nearly a decade of policy development – accelerating over the past five years – has produced a myriad of policies targeting companies and financial institutions to support their transitions. Looking ahead, the time has come for **progress across three areas:**

- **Develop integrated, granular policy frameworks capable of driving systemic delivery through a whole-of-government approach, supporting economic growth alongside climate ambition.**
- **Assess the effectiveness of policies that have been implemented to improve policy design, investment decisions and competitiveness.**
- **Enhance cross-jurisdictional coordination, interoperability and governance arrangements to facilitate access to finance and financial flows – particularly in support of the most vulnerable and least developed countries.**

The Taskforce recognises the need to strengthen policy both within and between jurisdictions, by assessing effectiveness, improving systemic and granular implementation within and enhancing cross-jurisdictional coordination and interoperability.

Drawing on emerging examples from G20 countries and looking toward COP31, it will aim to highlight best practices, foster policymaker exchange, and clarify how frameworks overlap and converge. Sustainable finance and economic policy are interdependent, with tools such as sectoral roadmaps and taxonomies forming the connective tissue that aligns financial instruments with economic measures. By reinforcing these instruments, the Taskforce seeks to enable policy frameworks that channel capital toward climate solutions, support effective transition plans, and drive real decarbonisation across markets and the real economy.



KEY TAKEAWAYS FROM THE FOUR FOCUS AREAS OF THE 2025 TASKFORCE REPORT

TRANSITION PLANNING INTEGRITY

We provide a stocktake of net-zero corporate and financial policy adoption across the G20 (and selected non-G20 countries), zooming in on three areas: sectoral roadmaps, carbon lock-in provisions and corporate policy engagement. While data showcase a marked increase in policy, signals remain mixed, and significant gaps remain – both in terms of clear economy-wide goals, and granular direction and guidance that enables companies and Financial Institutions (FIs) to make sound investment decisions.

Recommendations:

- **Advance transition planning by companies and financial institutions** by combining disclosure provisions with requirements that avoid warming beyond 1.5°C, tailored to local market conditions. Instruments should focus on setting robust emission reduction targets, capital expenditure plans, and alignment with existing sustainable taxonomies – to avoid carbon lock-in.
- **Develop interconnected sectoral emission, technology and investment roadmaps based on science-based carbon modelling**, and build them out to sector transition plans by embedding them into policy frameworks.
- **Promote transparency and accountability in climate-related corporate policy engagement** – including that of trade associations – and strengthen responsible and accountable lobbying practices.

RESILIENCE

We analyse progress made towards integrating resilience through sustainable finance policies (disclosures, taxonomies and transition plan guidance). We highlight progress in real economy reform aligning with the goals to accelerate adaptation finance, particularly in jurisdictions facing acute climate impacts. Good practice exists in policy action to accelerate climate-resilient finance, but progress still needs to be made to align the risk management of private sector actors with national and regional resilience targets.

Recommendations:

- **Embed resilience into disclosures, taxonomies, and transition plan requirements** from the start, subject to risk assessment based on the concept of double materiality.
- **Adopt common resilience policy elements into regulatory frameworks**, including robust risk assessments, Do No Significant Harm safeguards, alignment with national plans, early and meaningful
- **Continue the development of real economy policies aiming to support private sector investments in resilience**, focusing on regulatory coherence, inclusive implementation, and support for capacity building.

CARBON CREDIT MARKETS

We provide a stocktake of carbon credit policy across the G20 (and selected non-G20 countries), finding 58 G20 policies that regulate carbon credit generation, use and exchange. We focus on how policy and regulation is addressing integrity concerns in voluntary and compliance markets domestically and internationally, exploring overall supply and demand integrity, then zooming in on offsetting claims, carbon removals, social integrity and on how international carbon markets are evolving under Article 6 of the Paris Agreement.

Recommendations:

Use policy and regulation to support supply, demand and exchange of high-integrity carbon credits, ensuring strong social and environmental safeguards and co-benefits. In particular:

- **Implement clear policy** on the disclosure and use of high-integrity carbon credits and the claims that are made by NSAs, to prevent greenwashing and maximise impact.
- **Use policy incentives and derisking mechanisms to support high-integrity, high durability carbon removals and embed removals** into national policy and international methodological guidance to send stable demand signals.
- Implement Paris Agreement **Article 6 mechanisms as a starting point, applying stringent integrity standards** to the use of credits to extend NDC ambition and **define how Article 6 trading mechanisms will be used**.

ACCOUNTABILITY

Accountability mechanisms that ensure data integrity, governance oversight, and external enforcement underpin the net zero transition. While climate disclosure rules are becoming more mandatory and standardised, transparency in risk assessments and transition plans still lags. Corporate governance is emerging as the bridge between ambition and action – driven by executive accountability, board oversight, and climate-linked pay. Rising climate litigation highlights the need for stronger legal and policy preparedness.

Recommendations:

- **Ensure climate data integrity:** Encourage science-based, transparent disclosures using internationally recognised standards as a baseline, supported by independent third-party verification and assurance.
- **Embed climate accountability in governance:** Integrate climate objectives into strategy, risk management and executive pay. Require fossil fuel and taxonomy-aligned capex disclosures to reveal carbon lock-in. Extend corporate due diligence to encompass human rights, environmental and climate impacts.
- **Build policy readiness for climate accountability:** Anticipate increasing climate litigation by strengthening disclosure and due diligence requirements, enhancing access to redress and enforcement, and ensuring policy coherence.

NET ZERO POLICY: 2025 PROGRESS AGAINST HLEG RECOMMENDATIONS

At COP29, the Taskforce's report concluded that there is rising global momentum in the adoption of policies that support corporate and FI's efforts on reductions in greenhouse gas emissions. Developments since our 2024 report show that despite a policy reversal on climate in the US, and flagship regulations being reviewed in the EU, the net-zero policy momentum has continued, with the epicentre of policy progress shifting to Asia Pacific, Latin America and Africa.

All jurisdictions examined in this report, except the US federal government, still have net zero targets – yet not all are in law or meet credibility criteria on scope, architecture, and transparency. The persistence of targets, alongside continued policy reforms, signal continued commitment, but an ambition gap remains and must be narrowed through successive NDC ratchets in line with states' obligations, as underscored by the 2025 International Court of Justice (ICJ) [Advisory Opinion](#). More must be done to support a sustainable global economic transformation if we are to honour the commitments of the Paris Agreement.

Box 1: Outlook on the 1.5°C limit

Near-term action is decisive for costs and opportunities – going beyond 1.5°C will lead to escalating, irreversible harm, while timely policy unlocks investment, innovation, jobs, energy security and resilience by accelerating efficiency, clean technologies and nature-positive measures, and by giving investors clarity and confidence. The ICJ advisory opinion confirms the 1.5°C threshold to be the parties' agreed primary temperature goal for limiting the global average temperature increase under the Paris Agreement. This limit is set in order to minimise harm. Exceeding 1.5°C will substantially and adversely affect food security, water availability, public health, and infrastructure – especially in regions with limited adaptive capacity.

The Intergovernmental Panel on Climate Change (IPCC) AR6 assessments show global GHG emissions must roughly halve by 2030 versus 2019 to keep 1.5°C in reach. However, existing and planned fossil fuels infrastructure already strains the remaining 1.5°C carbon budget. Under current policies and 2030 NDCs, warming is headed toward ~2.7°C.¹ Due to delayed mitigation action, we are now heading to a world where some level of overshoot is unavoidable.

If 1.5°C is temporarily exceeded, the Paris Agreement envisages rapid mitigation in line with net zero by the second half of the century to minimise overshoot and return below the limit while upholding its other elements. Decarbonisation must do the heavy lifting – swift cuts in CO₂ emissions and methane, and a managed phase-down of unabated fossil fuels – while land-based carbon removals (protecting and restoring ecosystems) play a supporting role. Limiting overshoot reduces long-lived damages and the future burden on removals; embedding justice and adequate finance ensures communities can adapt and share in the transition's benefits.²

Thus net zero is still an achievable policy goal, with strong opportunities from enhanced climate ambition. Well-sequenced packages that consider policy interactions can unlock positive tipping points: demand-side measures and efficiency, methane abatement as a near-term “handbrake”, and carefully designed green-industrial policies to speed innovation and deployment. This is an imperative that must be achieved alongside bringing workers and citizens on board; unlocking the potential of finance, investment and trade, and intensifying climate adaptation efforts and investments.³

Our analysis since COP29 shows progress on all nine areas of the UN HLEG recommendations. This progress is limited on the topics of phasing out fossil fuels and aligning lobbying and advocacy, with mixed signals on the ambition and depth of the needed policy reform.

The overall picture though is one of progress. Policymakers realise the need for a whole of government approach on net zero policy, and are increasingly filling the voids with relevant guidance, frameworks and regulation. Figure 1 summarises the achievements analysed by the technical expert group, the Taskforce partners and secretariat, since our last report in 2024.

¹ UNFCCC, [2025 NDC Synthesis report](#) (submissions to 30 September 2025). The 64 new NDCs covering approximately 30% of global emissions indicate a 17% (11–24%) reduction in projected emissions below 2019 levels. While this represents progress, it remains well short of the roughly 60% global reduction required by 2035 to keep 1.5°C within reach, suggesting that the overall shortfall could be even greater once all emissions are accounted for.

² Climate Analytics, Potsdam Institute for Climate Impact Research (2025) [Rescuing 1.5°C: new evidence on the highest possible ambition to deliver the Paris Agreement](#). See also: Climate Analytics (2025) [Latest science on the 1.5°C limit of the Paris Agreement](#).

³ Background on economic rationale of enhanced climate ambition: OECD/UNEP (2025) [Investing in Climate for Growth and Development: The Case for Enhanced NDCs](#). Policy insights and recommendations from 15 policy papers in the Net Zero+ series: OECD (2025). [Fast-tracking Net Zero by Building Climate and Economic Resilience](#).

Figure 1: Overview of key policy developments since COP29 against the HLEG recommendations

UN HLEG Recommendation	Progress assessment and key highlights
1 Announcing a Net Zero Pledge	NSAs have continued to pledge to transition to net zero – with now two-thirds of the Forbes Global 2000 committing to it –and policy efforts to strengthen the integrity of these pledges have also advanced. ■ Rules for regulating claims have been adopted by competition and consumer protection authorities in Canada (Final guidelines issued Jun 2025, operationalising 2024 Competition Act), entered into force or advanced in UK, Australia⁴ ■ EU Empowering Consumers for the Green Transition Directive (2024); EU Green Claims Directive (upcoming, 2026).
2 Setting Net Zero Targets	27 policy instruments in 15 G20 countries now require the disclosure of emission reduction targets or other transition plan elements. This is mostly driven by adoption of ISSB Standards, enacted or planned in over 35 jurisdictions worldwide. ■ Foundational corporate and listed-company sustainability disclosure principles established in China, underpinned by a double materiality approach. ■ Mandatory disclosure by listed companies in Mexico, excluding financial institutions, against ISSB Standards with first reports due in 2026, and first company disclosures going live in Brazil under early adopter voluntary regime. ■ African Union: Ghana, Kenya, Nigeria, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe are at various stages of their progress towards adoption of ISSB Standards.
3 Using Voluntary Credits	Disclosure of offsetting purchases is recommended or required across 14 G20 jurisdictions. Governments are increasingly addressing integrity issues in regulation, with over 58 policies identified across the G20 (two-thirds of which have been adopted since 2020), although these differ in rigour and stringency. Important milestones have been reached in UN-backed carbon markets and governments are starting to align domestic policy with these frameworks, with opportunities to further support ambition, transparency and integrity. ■ The EU regulates offset-related claims through the EU Empowering Consumers for the Green Transition Directive. The forthcoming Green Claims Directive will provide further clarity. ■ In Indonesia, the FSA classifies carbon credits as securities, subjecting them to capital markets rules on listing, trading, and retirement. ■ 'The Oxford Principles for Art 6 Integrity' provide clarity for how jurisdictions can implement Article 6 as a baseline to support higher integrity. ■ Benefit sharing with affected communities is addressed in 5 G20 jurisdictions.
4 Creating a Transition Plan	G20 countries are increasingly formulating transition plan and transition planning expectations and guidance for companies and FIs, in addition to requiring the disclosure of material information on elements of transition plans as part of ISSB Standards adoption. In parallel, prudential supervisors are increasingly recognising the importance of transition planning within their supervisory frameworks – for example, the EU's new prudential transition plan requirements under the Capital Requirements Directive (CRD VI) formalise the integration of climate and environmental risks into prudential review processes. ■ EU: the only jurisdiction with a mandatory requirement to adopt and put into effect a climate transition plan compatible with 1.5°C.⁵ ■ UK: moving towards implementing its commitment to mandate UK-regulated FIs and FTSE 100 companies to develop and implement credible transition plans that align with the 1.5°C goal of the Paris Agreement. ■ Australia: publication of draft guidance to support organisations in undertaking transition planning in alignment with international standards.

⁴ Australian Competition and Consumer Commission (ACCC) is an independent authority whose role is to enforce competition and consumer protection laws, promoting fair trading. Greenwashing is part of the 2025/26 [Compliance and enforcement priorities](#). UK: [Digital Markets, Competition and Consumers Act](#) (DMCCA) is a UK law (enacted in 2024) gives regulators new powers to address unfair practices, including misleading environmental claims, in force since April 2025 for Competition and Markets Authority (CMA), the UK's principal competition and consumer protection authority

⁵ The existing European Directive, which currently requires companies not only to adopt but also to implement a climate transition plan for mitigation, is being revised as part of the European Commission's OMNIBUS package currently under negotiation. In the latest version, this requirement has been softened, now calling on companies "to adopt a transition plan for climate change mitigation, including implementing actions which aim to ensure, through best efforts, compatibility of the business model and of the strategy of the company with the transition to a sustainable economy and with the limiting of global warming to 1,5 oC in line with the Paris Agreement.

5 Phasing Out of Fossil Fuels and Scaling Up Renewable Energy	Capex-related disclosures – whether requiring the reporting of investment plans as part of corporate transition plans, exposure to fossil fuels, or alignment with taxonomies – are essential to identifying and mitigating the risks of carbon lock-in. Taxonomies are now in place or under development in 13 G20 countries, and international discussions on their interoperability are taking shape. Sectoral transition plans are also gaining ground in policy discourse and development, providing clarity on how fossil fuels and renewable energy technologies are projected to evolve per sector. These instruments also allow to understand and address risks of carbon lock-in: ■ EU: Disclosure of taxonomy-aligned capex and associated capex plans, qualitative assessment of GHG lock-in risks from key assets and products, and reporting of significant investments in coal, oil and gas activities. ■ Sectoral transition plans in Australia, Brazil, China, EU, Japan and UK. ■ Principles on taxonomy interoperability published by the Taxonomy Roadmap Initiative.
6 Aligning Lobbying and Advocacy	Limited policy progress: increasing understanding of policy dependencies for the implementation of transition plans (e.g. ISSB Standards), but limited evidence of direct provisions that address lobbying and advocacy. ■ EU: the CSRD requires the disclosure of policy engagement activities. ■ Australia: draft transition planning guidance accounts for domestic policy and regulatory considerations.
7 People and Nature in the Just Transition	Limited policy progress: the integration of resilience-focused elements into mitigation policies is not systematic. Key common elements across jurisdictions are starting to appear, with possible improvements in terms of interoperability and minimising implementation costs. ■ Indonesia and Mexico adopted ISSB Standards, standardising physical climate risk disclosures. ■ Brazil's taxonomy integrates resilience-focused elements, including social objectives. ■ Hong Kong is consulting on a dedicated adaptation taxonomy. ■ UK transition plan guidance includes just transition elements. ■ UN FIT underwriting transition plan guidance includes just transition and nature
8 Increasing Transparency and Accountability	The global accountability landscape is evolving rapidly, with a clear shift toward mandatory, standardised, and enforceable climate disclosure and governance frameworks. Emissions reporting is becoming more harmonised, while transparency for risk assessments and transition plans is advancing more slowly. In parallel, corporate governance reforms are embedding board oversight, executive accountability, and climate-linked remuneration – tightening the link between disclosure and delivery. The rise in climate litigation is reinforcing the need for stronger legal and regulatory frameworks to ensure that disclosed commitments are implemented with clarity and credibility. ■ California's 'Climate Accountability Laws' require entities to assure their GHG emissions inventories and builds capacity for assurance providers. ■ Australia's climate disclosure rules require entities to disclose key information about the scenario analysis, and audit requirements starting in 2030. ■ South Africa's King IV Corporate Governance Code updates, revised in 2024 and with a new version under development, apply to all listed entities, and sets clear expectations for board engagement on climate and nature-related issues.
9 Investing in Just Transitions	A systematic assessment of policy levers to address barriers to investing in the clean energy transition in developing countries was not undertaken. However, actions by Emerging Market and Developing Economies country governments to accelerate carbon finance and adaptation finance were highlighted: ■ Ghana, Kenya, Nigeria were some of the African Union countries where national strategies or policies for carbon markets were adopted. ■ In G20 countries, only nine out of 58 policies require benefit-sharing with affected communities. ■ Brazil's whole-of-government Ecological Transformation Plan was underpinned by an investment platform and complemented by 'Eco-Invest Brazil', a tool aimed at accelerating foreign investment. ■ South Africa has advanced its policy and regulatory framework to accelerate the Just Energy Transition Partnership (JETP) country platform.

Source: Taskforce on Net Zero Policy (2025)

FOUR AREAS FOR HIGH-INTEGRITY AND RESILIENCE-FOCUSED NET ZERO POLICIES

The UN HLEG was tasked with defining a global integrity standard for net zero commitments, and called for the development of policy frameworks that enable non-state actors to achieve net zero. Since 2022, we have seen a lot of regulatory and policy activity – and an increasing focus on integrity of transition planning. Credible transition plans are an opportunity – helping scale up climate-aligned finance and avoid carbon lock-in. But crucially, they depend on the enabling policy environment.

In this 2025 assessment, we look at policies that help unlock credible action.⁶ We focus on key elements of transition planning (targets, trajectories, transition plans), on enabling regulations (carbon markets, capex, lobbying), on resilience (as a key feature to empower a positive socio-economic transition), and accountability requirements – to demonstrate NSAs' engagement in the transition process.

On integrity transition planning, we find that:

We have seen a marked increase in policy instruments requiring disclosure of emission reduction targets and transition plans in recent years, with over 35 jurisdictions having adopted or otherwise used the ISSB Standards, or in the process of finalising steps towards introducing them into their regulatory frameworks. G20 countries are also advancing guidance and expectations for transition planning and the mandatory adoption of transition plans. However, policy signals are often mixed, and significant gaps remain – with many companies still lacking credible transition plans.

On resilience, we find that:

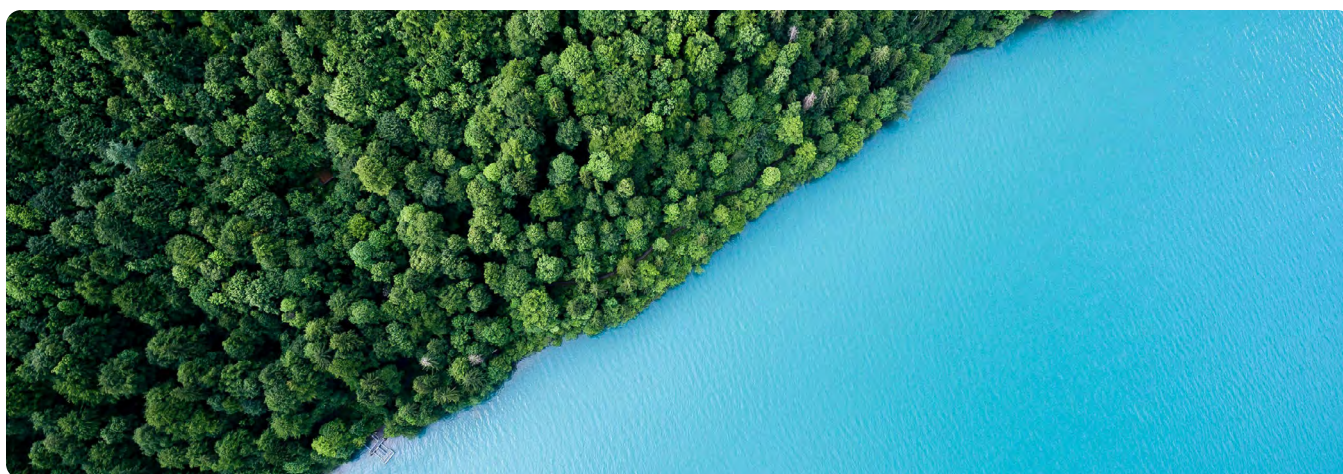
With encouraging progress across jurisdictions on disclosures and taxonomies, common elements emerge across jurisdictions, supporting interoperability and cross-border capital allocation. Good practice exists in policy action to accelerate climate-resilient finance, but progress is still needed to align the risk management of private sector actors with national and regional resilience targets.

On carbon credit markets, we find that:

Policy frameworks for carbon credits are rapidly evolving but policies remains fragmented. Frameworks are progressing on claims and on carbon removals in some markets and there are opportunities to increasingly enhance integrity through the application of standards developed under Article 6 international carbon markets. Social integrity policies are uneven and can be strengthened.

On accountability, we find that:

Climate disclosure rules are becoming more mandatory and standardised, though transparency in risk assessments and transition plans still lags. Corporate governance is emerging as the bridge between ambition and action – driven by executive accountability, board oversight, and climate-linked pay. Rising climate litigation highlights the need for stronger legal and policy preparedness.



⁶ Data has been provided, in part, by the [Oxford Climate Policy Monitor](#), which is an annually updated dataset published by the Oxford Climate Policy Hub. In 2025, the Monitor [tracked and assessed](#) climate policies across 37 jurisdictions and in six issue areas: carbon crediting, climate-related disclosures, methane abatement, public procurement, prudential rules, and transition planning. The survey is answered by a global legal expert network powered by local law firms in each of the identified jurisdictions. The data collection process begins with a scoping stage where climate domains are defined and law firms are asked to identify relevant policies within these domains in their respective jurisdictions. The Hub then determines whether these policies are consistent with domain definition and sends out detailed survey questionnaires for each in-scope policy, comprising 60-65 data points per policy. Once completed surveys are received from the legal expert network (typically two law firms per jurisdiction), the Hub team then compares responses and arrives at a final 'harmonised' version which forms part of the annual dataset.

1 - TRANSITION PLANNING INTEGRITY

The UN HLEG [Integrity Matters](#) report recommends that entities make net zero pledges, set ambitious goals, and develop credible transition plans. In recent years, policy and regulatory instruments – often linked to ISSB Standards – have increasingly required disclosure of (information on) emission reduction targets and transition plans. G20 countries are also advancing guidance and expectations for transition planning and the mandatory adoption of transition plans.

This section of the report analyses the state of policy adoption regarding net zero targets and transition planning. The research reveals that provisions in G20 countries are still wide-ranging in their approaches and lack conformity. Companies and financial institutions need clarity and certainty for setting and implementing climate targets and transition plans – mixed signals are slowing progress.

What is needed are clear economy-wide targets and sector-specific, granular guidance for companies and FIs. These include stronger regulation to ensure corporate policy engagement aligns with climate goals, sectoral roadmaps that guide industry-specific decarbonisation, and robust disclosure frameworks and sustainable taxonomies that avoid carbon lock-in from high-emission investments.

TRANSITION PLANS AND TRANSITION PLANNING

Policy makers have various levers to enable the integrity of transition planning by companies and FIs, ensuring they transform net zero commitments into credible, actionable strategies that support the UN HLEG recommendations.

This chapter provides a snapshot of policy progress, distinguishing between policies that include provisions to disclose or adopt a transition plan from those that encourage transition planning.

Box 2: What is the difference between ‘transition plans’ and ‘transition planning’?

The [Net Zero Policy Matters](#) report distinguishes between policies that include provisions to disclose or adopt a **transition plan** from those that encourage **transition planning**. From a market practice perspective, these two terms can be defined as follows:

- **Transition planning:** A dynamic, iterative process through which an entity develops an organisation-wide approach to the transition to net zero, including by defining how they will adapt or transform operations, strategies, and business models to align with their stated goals, and integrating these goals across the organisation, through investment or capital allocation decisions, stewardship and stakeholder engagement, business operations, governance and more. This is not a standalone, compliance exercise. It is an ongoing process, which includes monitoring progress over time and necessarily requires an active approach to updating and reevaluating approaches over time.
- **Transition plans:** The formal output – often a published disclosure – which details how the entity plans to achieve its stated goals (e.g. net zero by 2050). There are numerous frameworks for the disclosure of transition plans, which include formalised pillars including metrics and targets, engagement strategy and governance processes.

Building on these definitions, the section that follows focuses on three policy dimensions that are critical to strengthening the integrity and effectiveness of transition planning: sectoral roadmaps, measures to prevent carbon lock-in, and corporate lobbying and policy engagement. Together, these policy levers will support policymakers to align private sector transition efforts with national and international climate goals.

The analysis draws on new data from [Oxford Climate Policy Monitor](#) to build on and complement the findings of last year's [Net Zero Policy Matters](#) report. At COP29, all G20 countries had already some form of corporate and financial policies that support the transition to net zero – and the total number of policy instruments had tripled since 2020.

PROGRESS ON TRANSITION PLANNING POLICIES

Disclosures of targets and transition plans⁷

Recent policy developments across G20 jurisdictions show continued momentum in adopting measures that require the disclosure of GHG emission reduction targets and transition plans, despite the policy reversal at the US federal level and a period of recalibration in the EU.

27 policy instruments in 15 G20 countries require corporate actors to disclose emission reduction targets or other elements of a transition plan. However, these policies differ in the required attributes of ambitious transition planning. With regards to target-setting, for instance, only 11 policy instruments require the disclosure of an interim target; and 7 policy instruments specify that targets on Scope 3 or non-carbon GHG should be set. With regards to elements of transition planning, 15 policy instruments require entities to disclose capital expenditures and progress in implementing a transition plan, but most policies do not specify requirement to identify locked-in emissions or policy engagement.⁸

The Climate-related Disclosures Standard (IFRS S2) created by the International Sustainability Standards Board (ISSB), the independent sustainability disclosure standard-setting body of the IFRS Foundation, has been a key driver for the continued rise in climate disclosure provisions. Globally, over 35 jurisdictions have or are in the process of adopting the ISSB Standards into their regulatory frameworks.⁹

Although IFRS S2 does not require an entity to have a transition plan or to publish a formal transition plan document¹⁰, it does require an entity to provide material information about the sustainability-related risks and opportunities that could reasonably be expected to affect its prospects. This includes information about its climate-related transition because it relates to how the entity mitigates and adapts to climate-related transition and physical risks.

The ISSB has published further guidance on how the ISSB Standards can support the disclosure of information about entities' climate-related transition. This builds on the work of the Transition Plan Taskforce, whose disclosure framework has emerged as an important reference for the development of transition plans, alongside other frameworks and standards, such as the ones developed by the International Organization for Standardization (ISO).¹¹

IFRS S2 and the related transition planning guidance provides a starting point for a transition plan disclosure baseline. However, the question remains whether they provide sufficient clarity about companies' and financial institutions' strategic approach toward transition planning – and, by extension, to hold entities accountable for their plans. In that respect, it is worthwhile to note that:

- Frameworks (e.g. GRI) and policy approaches (e.g. EU and China) exist that require disclosure beyond a financial materiality lens. This notably includes the GRI 102 Climate Change Standards¹² that has already granted equivalence to IFRS S2 for disclosures of GHG emissions, thus enabling users to streamline their reporting.
- 9 G20 countries have policy in place to encourage or require the disclosure of transition plans as a separate output: the coverage, detail and stringency of these requirements vary between countries, with the EU (France, Germany, Italy) remaining the only jurisdiction that mandates the disclosure as part of the CSRD.¹³

⁷ This analysis builds on the 2025 [Oxford Climate Policy Hub](#)'s survey of policies in the domains of disclosure and transition planning. For the purpose of this report, findings in "Progress on transition planning policies" section focus on instruments in G20 countries that target corporate actors (publicly-listed companies, private companies, financial institutions, and state-owned entities). Refer to Oxford [Climate Policy Monitor 2025 Annual Review](#) for headline findings on transition planning policies across 37 jurisdictions (including 14 not in G20 or the EU) that target, in addition to corporate actors, also sectoral actors and government agencies, and present the assessment results of the bASIC framework developed by the OCPM team - which allows for a quantitative assessment of climate policies' ambition, stringency, implementation and comprehensiveness.

⁸ Mandatory policies for the disclosure of emission reduction targets and elements of transition plan (if developed), are highly convergent around the ISSB standards, but also can be contained in prudential tools, listing rules, or laws. Some policy instruments may require disclosure of other climate-related targets (such as targets to mitigate environmental or social risks or procure renewable energy)

⁹ Deloitte (2025) [Adoption of IFRS Sustainability Disclosure Standards by jurisdiction](#), Deloitte Accounting Research Tool (DART).

¹⁰ IFRS (2025), [Disclosing information about an entity's climate-related transition, including information about transition plans, in accordance with IFRS S2](#). Section 2.1 that outlines the purpose of this guidance document notes that IFRS S2 "includes several disclosure requirements related to transition planning" though it "does not require an entity to have a transition plan or to publish a formal transition plan document [...]"

¹¹ ISO, [Net Zero Aligned Organizations](#) (ISO 14060 series) and the ISO, [Transition planning for financial institutions standards](#) (ISO 31221).

¹² GRI (2025), ["New Climate Standards can unlock actionable and streamlined reporting on impacts"](#)

¹³ Policy instruments that require or directly encourage the development and disclosure of a transition plan as an output for publicly-listed companies or financial institutions include: regulated voluntary initiatives (e.g. Canada, Japan), guidelines for financial products (e.g. Japan, India), prudential tools (e.g. EU, Canada, Indonesia, South Africa, UK), or public procurement tools (e.g. UK, Canada)

Box 3: Good practice disclosure examples from 2024/2025

China advanced its sustainability disclosure framework over 2024.¹⁴ Under the auspices of the China Securities Regulatory Commission (CSRC), the Shanghai, Shenzhen and Beijing stock exchanges issued trial sustainability reporting guidelines across 21 sustainability-related topics. The guidelines require mandatory disclosure from over 400 companies – roughly half of listed market value. Complementary to the CSRC's efforts, the Ministry of Finance, together with other ministries, has finalised and released the basic sustainability disclosure guidelines and their application guides, and has issued the Climate-related Corporate Sustainability Disclosure Guideline (Trial) for public consultation. All these guidelines are underpinned by a double materiality approach, requiring the reporting of both the risks and impact of sustainability issues on enterprises, as well as enterprises' impacts on the environment and society itself.

Brazil was the first country to adopt the ISSB Standards in 2023 under CVM resolution 193.¹⁵ The voluntary application of these standards has been in place since 2024 for publicly held companies and FIs, resulting in disclosures by early adopters (e.g. Vale and Lojas Renner SA) over the course of 2025. The standards will become mandatory for major FIs and publicly held companies from 2026.

Mexico has mandated disclosure by listed companies, excluding FIs, against IFRS S1 and S2 from 2025, with first reports due in 2026.¹⁶ The reporting will be subject to limited assurance, moving to reasonable assurance by 2027.

The **African** Union has also seen positive momentum in the adoption¹⁷ of ISSB Standards by its members – including Ghana, Kenya, Nigeria, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe – which are at various stages in their progress towards adoption.

Guidelines and requirements for transition planning

Disclosure requirements that implement or extend beyond ISSB Standards are important to create transparency and accountability with regards to the actions that companies and FIs take on climate but remain focused on those actors that have chosen to opt-in to climate action. G20 countries are also adopting more directive approaches that aim to spur action from companies and FIs that

have not yet acted. This includes the formulation of additional transition planning expectations and guidance for companies and FIs. The EU (France, Germany, Italy) remains the only jurisdiction with a mandatory requirement to adopt a transition plan compatible with 1.5°C, including implementing actions.¹⁸

Box 4: Good practice transition planning examples from 2025

The **UK** government has committed upon taking office to mandate UK-regulated FIs and FTSE 100 companies to develop and implement credible transition plans that align with the 1.5°C goal of the Paris Agreement. A detailed consultation was issued in 2025 to give shape to this commitment.¹⁹ This consultation was published alongside other consultations about the implementation of the ISSB Standards and assurance of sustainability reporting, showcasing the UK government's considered approach towards supporting transition planning and disclosure from companies and FIs.

Australia's Treasury department has recently issued draft climate-related transition planning guidance²⁰, building on a commitment in its Sustainable Finance Roadmap. This guidance is meant to support organisations in undertaking transition planning in alignment with international standards, while also accounting for domestic policy and regulatory considerations. It aims to combine ambition with flexibility, notably by positioning the guidance as complementary to the Australian transposition of IFRS S1 and S2 – which will become mandatory for the largest companies meeting specific criteria from 2025.

14 See UNEP FI (2025) "[China embarks on a journey of ESG disclosure: 2024 progress and focus for 2025](#)"

15 IFRS Foundation (2023) "[Brazil adopts ISSB global baseline, as IFRS Foundation Trustees meet in Latin America](#)"

16 IFRS Foundation (2025) IFRS Sustainability Disclosure Standards (ISSB Standards) – Application around the world. [Jurisdictional profile: Mexico](#).

17 IFRS Foundation (2025) [Use of IFRS Sustainability Disclosure Standards by jurisdiction](#)

18 This requirement is included in article 22 the EU's Corporate Sustainability Due Diligence Directive (CSDDD). At the time of writing, the CSDDD is undergoing review through dialogue discussions between the EU Commission, the EU Parliament and the EU Council as part of the omnibus package. This may result in the review of article 22. In addition, the thresholds (number of employees and turnover) for companies to be included in the CSDDD may be reviewed, ultimately reducing the number of companies in scope

19 UK Department for Energy Security and Net Zero (25 June 2025) [Climate-related transition plan requirements: consultation](#)

20 Australian Treasury (15 August 2025) [Climate-related transition planning guidance: consultation](#)

Broader transition planning frameworks

Beyond policy provisions that formulate direct transition planning expectations or guidance, there is a series of policy approaches that provide indirect incentives for companies and FIs to embark on a process of transition planning. These include, for instance:

- **Prudential frameworks** with supervisors increasingly recognising that credible transition planning is integral to financial stability, helping institutions identify, assess, and manage climate-related risks within prudential frameworks. Recent developments – such as the EU's new prudential transition plan requirements under CRD VI and the Bank of England's PRA CP10/25 consultation – illustrate a shift toward embedding climate and environmental risks into supervisory review processes and aligning prudential expectations with national transition planning commitments.
- **Sectoral transition planning policies** that define high-level targets to coordinate actors within a sector, leveraging market-based and regulatory mechanisms. In 2025, for instance, Mexico and Indonesia have advanced their energy transition roadmaps, enshrining in their laws and regulations the duties of companies to set and achieve emission reduction targets aligned with national goals. In Australia, the Net Zero Economy Authority Act provides for the duty to firms that close coal plants to implement a transition plan for its workforce, providing job retraining.
- **Instruments that put emission caps on sectors or companies.** These include jurisdictional (e.g. EU, China, Brazil, South Korea) and sub-national (e.g. California, Quebec) emission trading schemes, which diverge in the coverage, the price of carbon and offsetting rules. Additionally, some policies and regulations enable government entities to assign binding carbon budgets to highest emitting companies or state-owned enterprises (e.g. South Africa, Japan, China).
- **Public procurement rules** that require transition plans as an eligibility criterion for government contracts. For instance, to qualify for contracts above a certain threshold, suppliers in Canada are required to adopt a science-based target, while in the UK, they are required to develop and submit a carbon reduction plan which aligns with net zero objectives.

Companies and FIs have in many instances called for policy instruments that incentivise transition planning. Landmark policy instruments such as the Inflation Reduction Act (IRA)²¹ in the USA – which provides large-scale fiscal incentives, tax credits, and subsidies to accelerate clean energy deployment, low-carbon manufacturing, and domestic supply chains – have spurred policy action across the world – but also given rise to questions about how to maintain a level-playing-field between countries.

²¹ The IRA has been subject to efforts for its repeal. The One Big Beautiful Bill and other legislative actions have led to a partial repeal and the modification or rollback of incentives. However, a full repeal of the Act has not yet been achieved: Bills to that end have been introduced but not yet passed.

Box 5: Aligning transition planning with prudential frameworks – Towards strategic supervision

Transition plans and climate targets are primarily strategic tools, but they also carry important risk implications. Prudential supervisors increasingly recognise that robust transition planning helps financial institutions identify, assess, and manage financial risks linked to climate change. While supervisors focus on maintaining financial stability rather than achieving climate goals directly, they can benefit from understanding how institutions set and pursue transition targets, as these decisions shape business models, risk profiles, and overall system resilience.²²

■ **In the European Union, the new prudential transition plan framework introduced under the Capital Requirements Directive (CRD VI) applicable from January 2026 – formalises the integration of climate and environmental risks into prudential supervision.** Banks will be required to develop and monitor forward-looking plans with quantitative targets to address financial risks arising from climate and environmental factors over the short, medium, and long term. These plans will be reviewed by competent authorities as part of the Supervisory Review and Evaluation Process (SREP), marking a shift toward more strategic, forward-looking supervision.²³

■ **The Bank of England's Prudential Regulation Authority (PRA) consultation paper CP10/25 sets out updated supervisory expectations for financial institutions to strengthen their management of climate-related financial risks.** Recognising that both physical impacts and the transition to a net zero economy can materially affect solvency, business models and financial stability, the PRA clarifies how existing prudential principles – sound risk management, proportionality, and forward-looking supervision – apply to climate risks.²⁴ Importantly, the PRA's proposed expectations are designed to operate in conjunction with the UK Government's transition plan consultation, led by the Department for Energy Security and Net Zero, which advances the national commitment to mandate credible, 1.5°C-aligned transition plans across UK-regulated financial institutions and listed companies.²⁵

Climate scenario analysis in transition planning and supervisory oversight. Climate scenario analysis serves complementary purposes for financial institutions and supervisors. Institutions use it for **strategic planning** – to explore plausible transition pathways and inform long-term business and investment strategies – while prudential authorities employ **risk-focused** scenarios to test resilience under adverse or extreme conditions over shorter time horizons. Together, these approaches strengthen the link between long-term transition strategy and financial stability. NGFS recommends that financial institutions: (i) develop integrated data systems that support both scenario analysis and transition planning, (ii) adopt institution-wide governance frameworks that embed climate objectives, (iii) apply a diverse range of scenarios suited to both strategic and risk-based use cases.²⁶

■ Regulators increasingly expect financial institutions to be clear about the specific objectives for which climate scenario analysis is used – whether for strategy development, assessing business model impacts, risk management, or valuation – and to select and tailor scenarios accordingly. Institutions are also expected to build sufficient in-house expertise to understand the design and limitations of the scenarios they apply, ensuring outputs meaningfully inform decision-making. Recent examples include the European Banking Authority (EBA) Guidelines on the Management of ESG Risks, which require financial institutions to use climate scenario analysis in two complementary ways: as a strategic tool to inform business models and transition planning, and as a risk management tool to test resilience to ESG- and climate-related shocks. This dual application strengthens the link between forward-looking transition strategies and sound prudential supervision.²⁷

As capabilities and methodologies continue to mature, enhanced data, tools and expertise will be needed to ensure that scenario analysis reliably informs decision-making. Over time, this progress could enable supervisors to use transition plan data and dynamic balance-sheet modelling to inform system-wide stress testing and macroprudential assessments – an area highlighted by the NGFS and the Financial Stability Board (FSB). However, as the FSB notes, several challenges must first be addressed: transition plans are primarily designed for business strategy rather than financial stability assessment; their coverage, format, and methodological assumptions vary widely across jurisdictions; and mechanisms to assure the reliability and comparability of disclosed information are still emerging. These limitations underscore the need for continued methodological development, standardisation and assurance to ensure transition plan data can effectively support macroprudential analysis in the future.²⁸

22 NGFS (2025) [Notes regarding transition plans on climate target setting and climate scenario analysis](#).

23 [Directive \(EU\) 2024/1619](#) of the European Parliament and of the Council of 31 May 2024 amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks.

24 Bank of England, Prudential Regulation Authority (2025) [CP10/25 – Enhancing banks' and insurers' approaches to managing climate-related risks – Update to SS3/19](#). 30 April 2025.

25 UK Government (2025) [Climate-related transition plan requirements: consultation](#). 25 June 2025.

26 NGFS (2025) [Notes regarding transition plans on climate target setting and climate scenario analysis](#).

27 European Banking Authority (2025): [Guidelines on the management of ESG risks](#). 9 January 2025.

28 NGFS (2025), “[Note on the interactions between Climate Scenario Analysis and Transition Plans](#),” pp. 18–20; FSB (2025), “[The Relevance of Transition Plans for Financial Stability](#).”

Bridging the gaps: the next critical steps in policymaking

The state of policy adoption as outlined above reveals that provisions in G20 countries vary considerably, targeting different actors and aspects of climate change through diverse policy channels. These mixed policy signals are not yet sufficiently enabling companies and FIs in setting and implementing climate targets and transition plans (see Box 6).

Box 6: State of net zero target setting and implementation by companies and FIs

The Transition Pathway Initiative's Global Climate Transition Centre (TPI Centre) report '[State of Corporate Transition 2025](#)' finds that corporate net zero commitments are widespread but uneven in quality and delivery:

- While 81% out of over 2000 publicly listed companies set quantitative emissions targets and 78% set long-term targets, advanced practices that support the credibility of these targets are rarer: only 46% embed climate risks and opportunities in strategy, 29% disclose an internal carbon price, 10% align policy engagement and trade-association membership with mitigation, 5% quantify an emissions-reduction strategy and 2% commit to phasing out capex in carbon-intensive assets.
- The TPI Centre's Management Quality framework shows that there is also room for improvement in the implementation of targets: most companies now integrate climate into operations yet fall short of strategic risk assessment and transition planning and implementation.
- The TPI Centre's Carbon Performance echoes this credibility and implementation gap. 43% of benchmarked companies are long-term aligned with below 2°C or 1.5°C pathways, but only 34% align in the near term – providing evidence of back-loading decarbonisation efforts.

The Net Zero Tracker's report '[Net Zero Stocktake 2025](#)' echoes the findings from the TPI Centre.

- 63% out of 1,987 public companies which are tracked (representing £36.6 trillion in revenue) now have net-zero targets, with continued growth in the US and across Asia (China, India, Japan, South Korea, Taiwan, Thailand). Yet, only 69% of those companies have established net zero targets with accompanying plans, and 31% have set targets without implementation roadmaps. The target integrity remains weak: only 7% meet all criteria aligned with the UN HLEG and related frameworks, with the least progress on clarity of offset use and coverage of all GHGs.
- Private firms perform significantly worse. While 69% of targets are accompanied by transition plans, 31% lack implementation roadmaps.

Policy makers have an opportunity to mainstream net zero targets in a coherent manner through a range of planning tools, ensuring that transition planning obligations more efficiently prompt companies and FIs to mitigate and respond to climate change. Policy frameworks can most notably provide further clarity and guidance at two levels:

■ Economy-wide goals and transition plans.

Transparent interim (i.e. nationally determined contributions) and long-term targets (i.e. net zero goals) are essential to translate national climate commitments into operational pathways. Clear sector goals and targets avoid the current patchwork of uneven measures and ensure consistent financial flows. Economy-wide target-setting is out of scope of the Taskforce's work, but in the section below we address how policy can enable responsible political engagement by companies and FIs.

- **Granular direction and guidance.** Localised policy approaches that are tailored to the most material sectors in an economy, will enable companies and FIs to make sound investment decisions. The section below zooms in on how sectoral roadmaps and policy measures to avoid carbon lock-in can create an enabling environment for transition finance.

PREREQUISITES FOR HIGH-INTEGRITY TRANSITION PLANNING

This section focuses on three policy dimensions that are critical to strengthening the integrity and effectiveness of transition planning:

1. Sectoral roadmaps that translate national climate goals into actionable pathways for industries, providing the necessary direction and predictability for private investment.
2. Measures to prevent carbon lock-in, ensuring that capital flows are redirected from high-emission assets toward low-carbon solutions.
3. Corporate policy engagement, which shapes the broader enabling environment by aligning corporate advocacy and influence with national and global climate objectives.

Together, these policy levers will support policymakers to align private sector transition efforts with national and international climate goals.

Sectoral roadmaps

The development of sectoral roadmaps by policy makers is an effective way of underpinning economy-wide decarbonisation targets. Such government-owned roadmaps can support companies and FIs understand and manage the dependencies they are facing in their transition planning by providing more detailed plans for sectoral decarbonisation.

A [recent report](#) by the International Transition Planning Network (ITPN) and the TPI Global Climate Transition Centre introduces the concept of Sector Transition Plans (STPs, see Box 7), highlighting how a range of approaches sits under the often-used term of sectoral roadmaps.²⁹ Technology scale-up roadmaps and finance plans are of particular interest to companies and financial institutions.

Box 7: Components of Sector Transition Plans (STPs) identified by ITPN & TPI Centre

STP sets out a sector's forward-looking ambition and strategy for its transition towards a lower-carbon and climate-resilient future, including interim and long-term targets, a range of technological and process-related transition levers, associated financing needs, and policy support. From existing examples and guidance, common components of a STP can be identified, some of which may be more challenging to develop than others. These include:

1. **Vision** of how the sector expects to evolve, including an emission reduction pathway and goals to build resilience to physical risks.
2. **Delivery plan** that outlines the main actions to deliver the vision, including a technology roadmap, a policy plan and risk management
3. **Finance plan** that identifies investment needed at each stage of technology development, available capital types, and the policy interventions that will support commercial viability as net zero as well as intermediate milestones. These pathways may be provided as absolute emissions or emissions intensities and may serve as the basis for emissions benchmarks for assessing companies.

Decision-makers can build on existing good practice (see Box 8) for the development of science-based emission reduction. These can inform sectoral technology scale-up roadmaps, finance plans and policy plans. Fully-fledged STPs should also take in account interconnections between sectors.

Box 8: Developing sectoral emissions pathways based on science modelling

At a global level, the IPCC regularly provides global carbon budgets that quantify the emissions that can still be released to limit global warming in accordance with the Paris Agreement goals. Companies and FIs also often refer to scenarios by the International Energy Agency (IEA).

Global carbon budgets can be downscaled to the regional and country level. The International Investors Group on Climate Change (IIGCC) has [determined](#) two methods for producing country decarbonisation pathways: through fair-share carbon budget split (e.g. TPI's ASCOR tool, Climate Equity Reference Calculator), and through Integrated Assessment Models (e.g. Climate Action Tracker, Climate Analytics, IEA, NGFS, OECM/NZAOA). Service providers have also developed methodologies to downscale scenarios to the company-level for corporate-related assessments, the most prominent examples of which are the Science-Based Targets initiative (SBTi) and TPI.

The extent and pace of GHG emission reductions required from countries can vary substantially depending on the methodology that is used. It is therefore important that policy makers demand transparency from methodology providers about the assumptions that underlie scenarios, as well as be transparent themselves about the methodology that was used for the development of national sectoral roadmaps.

Many countries have made progress in the development of sectoral roadmaps. While these still vary in scope, ambition and detail, they also show how such roadmaps can be integrated into broader sector transition plans – nested into broader policy frameworks:

- **Australia's 2024 Sector Pathways Review**³⁰, led by the Climate Change Authority, establishes detailed decarbonisation roadmaps across six major sectors – covering over 70 sub-sector activities – framed within two emissions scenarios aligned with either a 2050 or 2040 net zero target. These pathways distinguish between mature and emerging technologies and identify sector-specific and economy-wide barriers such as green premiums, planning delays and workforce shortages. Importantly, the roadmaps are integrated with Australia's taxonomy framework, using performance criteria to differentiate between individual decarbonisation measures and broader transition criteria, the latter of which include emissions-intensity thresholds and energy sourcing standards with a sunset date of July 2031.
- **Brazil's transition strategy**³¹ is anchored in the forthcoming 'New Climate Plan', which will include seven sectoral mitigation plans and sixteen sectoral adaptation plans, forming the backbone of its 2050 net zero commitment as outlined in the 2035 NDC. These sectoral strategies are complemented by the Brazil Ecological Transformation Investment Platform (BIP), a country platform coordinated by the Ministry of Finance to mobilise technical assistance and finance across three priority sectors – nature-based solutions and bioeconomy, industry and mobility and energy. The BIP, grounded in the Ecological Transformation Plan (PTE), has already approved projects with a potential investment of US\$215 billion, targeting sub-sectors such as sustainable fuels, low-carbon hydrogen and regenerative agriculture. Implementation is further tailored through regional climate action plans, including the 'Energy of the Amazon Program,' a sector-specific roadmap designed to address the unique needs of the Amazon region.
- **China**³² – To support in the operationalisation of its 'dual carbon' goals – carbon peaking before 2030 and neutrality before 2060 – China has developed a comprehensive carbon neutrality technology roadmap through contributions from over 100 experts across energy, industry, transport and construction sectors. This roadmap sets phased technology pathways and has led to the establishment of national key laboratories to drive innovation. It complements the broader 1+N policy framework²⁴, which outlines sector-specific transition targets and pathways, providing structured implementation guidance. These efforts are reinforced by regulatory measures requiring state-owned enterprises to integrate carbon goals into strategic planning and by disclosure mandates for listed companies to publish climate transition plans and sustainability reports, thereby aligning technological development with policy and market transparency.
- **EU's Clean Industrial Deal**³³ (CID) proposal, launched in February 2025, sets out a framework for structured engagement with industries (including SMEs) to develop sectoral transition pathways. This is complemented by a suite of sectoral strategies, including the Action Plan for Affordable Energy, the Automotive Industrial Action Plan, and the European Steel and Metals Action Plan, with further initiatives underway for chemicals, sustainable transport and bioeconomy. However, it is currently unclear how much these sector strategies are underpinned by sectoral carbon budgets and decarbonisation roadmaps. The CID could build on the previous work of the European Commission (DG GROW) in doing so, which has facilitated sector-specific stakeholder dialogues across European industrial ecosystems.

³⁰ See Australia Climate Change Authority (2025) [Sector Pathways Review project](#)

³¹ See [Brazil's NDC](#) (2025), Brazil Ministry of Finance (2025) [Brazil Climate and Ecological Transformation Investment Platform](#) (BIP), (2024) [Ecological Transformation Plan](#)

³² See The State's Council of the People's Republic of China (2025) [Full text: Carbon Peaking and Carbon Neutrality China's Plans and Solutions](#), (2021) [Full Text: Working Guidance For Carbon Dioxide Peaking And Carbon Neutrality In Full And Faithful Implementation Of The New Development Philosophy](#), Institute of Climate Change and Sustainable Development of Tsinghua University et al. (2022) [China's Long-Term Low-Carbon Development Strategies and Pathways](#)

³³ See European Commission (2025) [Clean Industrial Deal](#), Directorate-General for Internal Market, Industry, Entrepreneurship and SME (DG Grow) [Transition pathways for European industrial ecosystems](#)

■ **Japan's Green Transformation (GX) strategy**³⁴ is underpinned by a series of sector-specific technology roadmaps developed by the Ministry of Economy, Trade and Industry since 2021, initially targeting seven hard-to-abate sectors including power, steel and petroleum. These roadmaps outline how emerging technologies can drive decarbonisation while phasing out legacy systems, and they serve as a foundation for transition planning, capital allocation and disclosure practices. By March 2023, they had already facilitated over ¥1 trillion in transition finance. Building on this, Japan launched a GX programme aimed at mobilising ¥150 trillion over the next decade, supported by ¥20 trillion in public investment and sector-specific investment strategies for sixteen target sectors. These efforts align with Japan's broader GX goals of reducing emissions by 46% by 2030 (with ambitions for 50%) and achieving carbon neutrality by 2050, while also informing corporate disclosures under the Sustainability Standards Board of Japan from 2025.

■ **UK's approach to net zero**³⁵ is increasingly shaped by sector-specific roadmaps, which are seen as essential tools for guiding decarbonisation and attracting transition finance. The Transition Finance Market Review (TFMR) underscored the importance of robust sectoral pathways to clarify the pace, trade-offs and implications of emissions reductions. This call has been taken up by the Transition Finance Council, whose draft 'Transition Finance Guidelines' aims to assess existing roadmaps and define what credible transition investment planning must deliver. These efforts can build on the Climate Change Committee's 2023 Net Zero pathway, which integrates detailed sectoral analysis and real-world constraints; and the Clean Power 2030 Action Plan that provides clarity around current and anticipated government policies, articulates total investment needs, and information on measures to de-risk and crowd in private capital.

As countries advance avenues for how sectoral roadmaps can be integrated into holistic sector transition plans, it becomes increasingly important to situate sectoral roadmaps within a broader ecosystem of policy instruments that guide investment and disclosure practices. Box 9 illustrates how other sustainability classification instruments – that act at the level of the economy, economic activities or financial products – complement sectoral roadmaps by providing complementary definitions, criteria, and signals needed to translate sectoral ambitions into credible financial and corporate action. Taken together, these instruments form a coherent policy toolkit for leveraging finance for the transition to net zero, as well as avoiding carbon lock-in (see section below).



Box 9: Sustainability classification instruments

Sectoral roadmaps are one of several policy instruments that can support companies and FIs in understanding investment risks and opportunities in the economy. While they act at the level of economic sectors, other instruments will do so at the level of:

- **The economy.** Most notably climate scenarios, which offer plausible representations of future climate conditions, based on assumptions and key driving forces.
- **Economic activities.** For example, sustainable taxonomies define which economic activities can be considered environmentally or socially sustainable.
- **Financial products.** Labelling schemes, for instance, define categories and set criteria for investment products or instruments such as use-of-proceeds with a sustainability objective.

Sustainability classification instruments can bring robustness and granularity to transition planning expectations and guidance for companies and financial institution; while decision-makers can use the combination of instruments that most closely meet the needs of their jurisdictional markets.

³⁴ See Japan Ministry of Economy, Trade and Industry (2024) [Revision of Sector-Specific Investment Strategies as Effort for Specifying Investment Promotion Measures for the Realization of GX](#), Principles for Responsible Investment (2023) [Delivering Net Zero in Japan: Policy Imperatives and Investor Priorities](#).

³⁵ See UK Department of Energy Security and Net Zero and HM Treasury (2023) [Transition Finance Market Review](#), UK Department of Energy Security and Net Zero (2025) [Clean Power 2030 Action Plan](#)

Carbon lock-in

Avoiding carbon lock-in: key to credible transition planning

Effective transition planning demands progressive alignment of investments and assets with Paris-consistent pathways. Any new investment in high emissions infrastructure risks carbon lock-in – the persistence of fossil fuel assets even when low-carbon alternatives exist. Climate policy makers warn that continued expansion of coal, oil or gas jeopardises climate goals. For example, the IEA has stressed that there is no room for new long-lead upstream conventional oil

and gas are needed for development in a 1.5°C scenario³⁶. Similarly, the IPCC concludes that existing and planned fossil assets already commit more CO₂ emissions than the remaining budget for 1.5°C. In short, building or extending carbon-intensive infrastructure risks locking in high future emissions for decades (perpetuating vested interests in fossil fuels), making the temperature target of the Paris Agreement much more difficult to achieve.

Box 10: Carbon lock-in or stranded assets?

It is important to distinguish carbon lock-in from stranded assets, as they entail different risks.

Carbon lock-in means that high-emitting infrastructure or activities continue operating despite available cleaner alternatives. It reflects an asset being used (and generating emissions) beyond what is compatible with climate goals.

Stranded assets, by contrast, refer to assets that lose value prematurely because of the climate transition (for example, an early closure of a coal plant, mandated by regulation). A stranded asset incurs financial loss to its owner but may help achieve emissions reductions. By themselves, stranded assets are a risk to investors; but carbon lock in is a risk to achieving climate mitigation goals.

As the EU Platform on Sustainable Finance [notes](#), investments structured to avoid stranding (for example, through guaranteed contracts) can exacerbate lock-in by prolonging high-carbon operations. In practice, companies must manage both: they should mitigate climate risk (avoiding lock-in of emissions) while minimising transition risk (avoiding losses due to stranded assets). A credible transition should phase out fossil activities, even if that means accelerating stranding of some assets under controlled conditions.

Policy levers to avoid carbon lock-in

Disclosures – connected to the above-mentioned sectoral roadmaps and other sustainability classification instruments – can shed light on risks of carbon lock-in. Key elements of disclosures include:

■ **Capital expenditure breakdown.** Splitting out investments in fossil fuel activities versus low-carbon alternatives, allows stakeholders to assess whether a company is investing into the net zero transition. A company demonstrating lock-in avoidance will show, for instance, that it has no new coal, fossil gas or oil projects in its capital budget, that its remaining fossil assets are set to be retired or retrofitted on schedule, and that most of its investment is going into low-carbon activities.

■ **Asset phase-out, conversion and repurposing plans.** A credible transition plan should provide a company with a roadmap for the future retirement, conversion (to low-carbon fuels), or repurposing of existing high-carbon assets. The UN HLEG offers key recommendations for fossil fuel companies in the OECD up to 2030 and 2040. Firms can incorporate benchmarks into their disclosures, showing how and when they will exit high-carbon activities, thereby reducing risk of lock-in. Efforts to enable this at the country level, for instance in South Africa³⁷, have been undertaken through the Just Energy Transition Partnerships – reflecting the need to ensure these transitions take in account potential job losses and other impact on stakeholders.

■ **Scenario and target alignment.** A company's operational transition plan should be linked to recognised climate mitigation scenarios. This includes specifying the sector, technology and timeline assumptions behind any targets. Clear disclosure of scope-specific reduction targets and how planned assets fit within those trajectories helps demonstrate that companies are not merely promising a net zero date in the future but materially avoiding lock-in today. For example, a utility might disclose how much planned generation remains coal-fired after 2030, and how that compares with the share in a Paris-aligned pathway.

■ **Assessment of locked-in emissions.** Using frameworks such as the EU's European Sustainability Reporting Standards (ESRS), companies can qualitatively assess the locked-in GHG emissions from their key assets to explain how these might jeopardise their reduction targets. This involves estimating the future emissions output over the remaining life of each asset and the cost or feasibility of abatement. Such disclosure reveals where risks lie (for example, a long-established gas plant in a region without clear fuel-switch options)³⁸. Critically, companies can report this asset-level information (location, capacity, emissions intensity, lifetimes) to allow investors and regulators to judge whether high-carbon assets are being managed for early retirement or will remain on the books.

³⁶ The IEA adds that to ensure a smooth balance between supply and demand, declines in demand in the NZE Scenario would lead to the early closure of several higher cost projects before they reach the end of their technical lifetimes. See IEA (2025) [The Implications of Oil and Gas Field Decline Rates](#)

³⁷ South Africa Presidential Climate Commission (PCC) [South Africa's Just Energy Transition Investment Plan \(JET-IP\)](#)

³⁸ EU Platform on Sustainable Finance (2025) [Building trust in transition: core elements for assessing corporate transition plans](#)

Box 11: The role of sustainable taxonomies in credible carbon lock-in disclosures

Sustainable taxonomies can provide granularity and credibility of carbon lock-in disclosures. For example, expenditures in taxonomy-aligned activities can be labelled 'transition credible' because they meet strict environmental criteria. The EU Platform stresses that transparency on taxonomy-aligned Capex shows whether sufficient financial resources are being directed at climate targets.

Recent [data](#) on taxonomy-aligned investment underscores why this matters: for example, in 2023, EU companies' Capex in taxonomy-aligned sectors grew significantly (from €191 bn to €249 bn), reflecting a 34% rise in green investment. Moreover, companies with higher shares of taxonomy-aligned Capex consistently outperform³⁹ their peers on financial markets.

In practice, investors and regulators can use taxonomy-aligned Capex disclosures to gauge transition quality: a company consistently directing Capex to activities meeting recognised climate criteria is more likely to be executing a credible shift than one whose budget skews towards high-emitting practices.

Green taxonomies also clarify what does not pass the test. By tracking Capex in conventional high-emitting activities, stakeholders can detect potential lock-in. The EU Platform notes that any investments in coal, oil or gas expansion are likely to "lead to lock-in" and increased stranded asset risk. Therefore, mandatory disclosure of all fossil-fuel Capex, by fuel type and category (exploration, production, processing, infrastructure), is important.

Beyond disclosures, transition planning provisions and sustainable taxonomies, enabling policy frameworks play a vital role in reducing carbon lock-in. Many OECD countries have introduced 'phase-out mandates' supported by 'managed exit programmes' for retiring high-emission assets such as coal mines, oil refineries or conventional power plants. There are also government-backed fuel-switch programmes to support sectors in transitioning to low or no-carbon fuels (e.g. a gas plant transitioning to clean hydrogen).

Even where national-level policy is lacking, companies and FIs can adhere to Do No Significant Harm (DNSH) rules. EU regulations (e.g. under the Recovery and Resilience Facility) already bar new fossil projects from public funding unless strict conditions are met.⁴⁰ Such DNSH principles could be extended more broadly: any permit for energy or transport infrastructure could be screened for significant harm to climate goals.

³⁹ European Commission (2025) [The EU Taxonomy's update on the ground](#)

⁴⁰ These DNSH rules are additive to the DNSH principle being enshrined in the EU taxonomy and further Sustainable Finance and Green Deal regulations. See DNSH definitions: ESMA (2023) ['Do No Significant Harm' definitions and criteria across the EU Sustainable Finance framework](#)

Corporate policy engagement

How corporate policy engagement influences climate policy

Policy engagement is a standard tool that companies use to influence regulatory changes and advocate for market conditions that protect or allow for their business's competitiveness and growth. In many regions, business has a significant influence on the shape and direction of policymaking, due to the political importance of the jobs, development and investment that they represent. This has been detrimental in many instances, although some best practice standards and guidelines on lobbying governance are emerging for the private sector – for instance from the asset owner community.⁴¹

Corporate policy engagement is often institutionalised through statutory forms of social dialogue and social partnerships, where government is required by law to consult organised business and organised labour on policy. Generally, most governments have done little to regulate corporate climate policy engagement, with many G20 countries not having specific legislation pertaining to it – and broader lobbying transparency requirements are also limited.

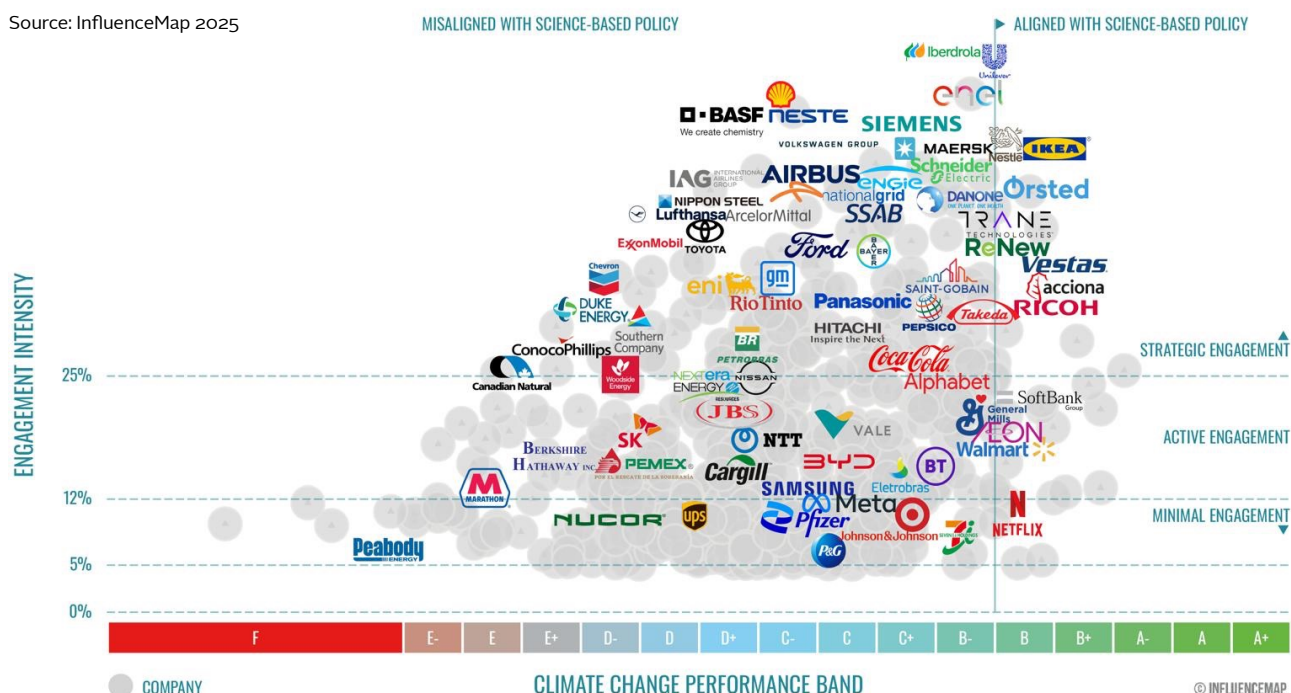
According to the 2013 UN Guide for Responsible Corporate Engagement in Climate Policy⁴², policy engagement includes a broad range of corporate activities aimed at influencing government policy and the public discourse through which such policy is formed. These include what is often referred to as 'lobbying' (i.e., contact with regulators and elected officials), as well as other activities, such as strategic communications and public relations, sponsored research and participation in expert policy advisory committees. The UN Environment Programme Finance Initiative's (UNEP FI) more recent Guidance on Responsible Policy Engagement further builds on this work by capturing best practice and offering recommendations for developing and implementing effective policy engagement strategies.⁴³

Academic research indicates that a company's likelihood to engage with climate policy is influenced by factors such as firm size, profitability, regulatory exposure, carbon intensity and the scale of its green portfolio. On a case-by-case basis, companies may support or oppose specific climate policies depending on perceived costs – whether direct (e.g. taxes) or indirect (e.g. compliance with technology standards) – as well as their competitive positioning. Firms with substantial investments in clean technologies often seek predictable policy frameworks to secure returns, while those with climate-aligned products may advocate for market-expanding regulations. Conversely, companies often and successfully resist policies that threaten their core markets or legacy assets, and oppose broader political shifts that pose systemic risks to their business models.

InfluenceMap research finds that companies can be broadly categorised into three groups based on their climate policy engagement. Corporate Climate Policy Leaders actively support science-aligned climate policies, engage constructively with policymakers, and work to align both direct and indirect influence, often emerging from sectors like utilities, industrials, IT, and consumer staples, with many headquartered in Europe. Corporate Climate Policy Laggards, typically found in fossil fuels, utilities, and heavy industry, consistently advocate to delay or weaken policies aligned with the Paris Agreement. Meanwhile, Unengaged Companies – despite having net zero commitments – largely abstain from policy engagement and often maintain ties with industry associations that oppose science-based climate action.

Figure 2: InfluenceMap company categorisation (indicative) on climate policy engagement

Source: InfluenceMap 2025



Company logos are selected at random to provide an illustration of the varied performance across the corporate sector. Use of logos in no way implies agreement and/or endorsement of the report's content by these entities.

Box 12: Addressing misalignment of industry associations' lobbying practices / the lowest common denominator effect

Serving as the collective voice of business, industry associations play a crucial role in shaping climate policy and carrying significant weight in global policymaking processes. InfluenceMap's analysis has repeatedly identified the "lowest common denominator effect", in which industry associations reflect the positions of their most oppositional members on climate change. This dynamic is most detrimental to climate policy progress as it pertains to significant, influential cross-sector industry associations such as the US Chamber of Commerce, the Federation of German Industries (BDI), or the Japan Business Federation (Keidanren).

The lowest common denominator effect often appears to be the result of a decisive effort by corporate climate policy laggards to capture the industry association's decision-making processes. Increasingly, however, other companies from across the economy are starting to engage with their industry associations to understand and address misalignments between their industry association's policy engagement related to climate and their own climate strategies.

Since 2020, InfluenceMap has observed an upward trend in major companies reporting to their investors on the issue of industry association alignment, with around 100 major companies publishing disclosures on this topic.⁴⁴ Many of these companies report annually and firms such as Unilever, IKEA, Enel, Nestlé, SSE, Holcim and Bayer are producing increasingly strong disclosures, including outlining the steps they are taking to address industry association misalignments and align with investor expectations. Relatedly, the proportion of industry associations that InfluenceMap rates as misaligned has dropped from 61% to 38% over the last five years, with 30% now assessed as aligned or partially aligned.

Corporate policy engagement is not limited to climate. But recent years have seen intensifying global policy advocacy battles between corporate climate policy leaders and laggards, particularly within the fossil fuels value chains: this politicisation of the net zero transition has resulted in science-aligned climate policy outcomes hanging in the balance. [LobbyMap's](#) near real-time tracking reveals strong correlations between corporate policy engagement and legislative developments across key regions.

- In Brazil, companies like Suzano and Eletrobras have supported landmark climate policies, while oil and gas interests continue to push for fossil fuel expansion.
- Japan's 7th Strategic Energy Plan reflects the influence of the electric power industry and other industries (including automobile, steel etc.) through the major business federation Keidanren, favouring fossil fuels and nuclear power, despite calls from the Japan Climate Leaders' Partnership for greater renewable adoption.
- In India, broad industry support has facilitated ambitious climate targets, though exemptions in fuel efficiency standards followed lobbying from automobile manufacturers.
- In the US, the current administration's deregulatory stance has advanced fossil fuel priorities, contrasting with the Biden era's Inflation Reduction Act, which was backed by climate-forward corporations.
- South Korea's 2050 carbon neutrality target gained business support, but negative advocacy from the steel sector has weakened its emissions trading scheme.
- In the EU, corporate backing enabled the EU Green Deal and Fit for 55 package⁴⁵. But recent efforts by industry have led to a 'regulatory simplification' agenda under the omnibus proposal (addressing CSRD, CSDDD and the EU taxonomy) as well the negotiations on the 2040 climate goals – threatening to dilute climate ambition.
- Australia has seen a shift, with growing corporate support for net-zero policies culminating in AU\$22 billion Future Made In Australia Plan, as well as widespread advocacy for an ambitious 2035 emissions reduction target.

These case studies underscore the pivotal role of corporate engagement – both supportive and oppositional – in shaping climate policy trajectories worldwide.

41 UNEP FI (2023) [Policy Engagement Guidelines](#)

42 UN Global Compact (2013) [The Guide for Responsible Corporate Engagement in Climate Policy](#)

43 UNEP FI (2025) [Guidance on Responsible Policy Engagement](#)

44 InfluenceMap, [Corporate Policy Engagement Disclosure Scorecards](#)

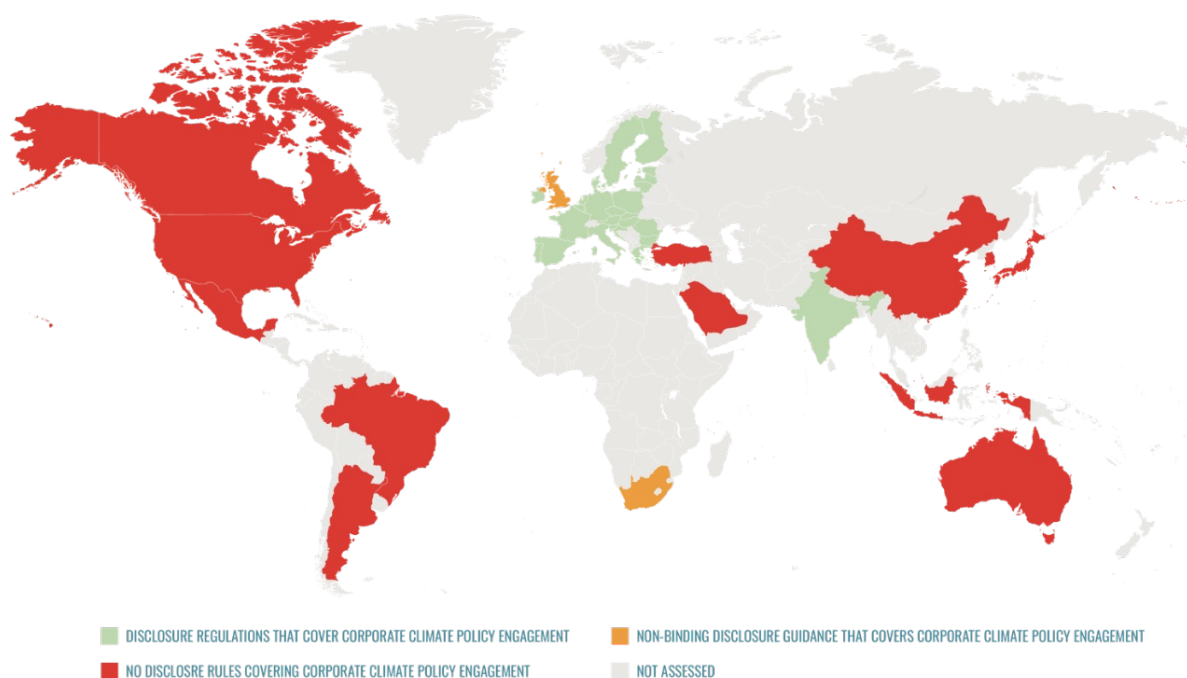
45 European Council / Council of the European Union, [Fit for 55 \(Explainer\)](#)

Policy levers for ensuring transparency on corporate policy engagement

Despite the significant influence that companies have on global climate policy, regulation to ensure this influence is adequately disclosed is uneven.

Figure 3 below assesses each G20 member country (including the European Union) to ascertain the coverage of corporate climate policy engagement under their regulated disclosure regimes. Only two economies (India and the European Union) have disclosure regulations that cover corporate climate policy engagement. A further two (South Africa and the United Kingdom) have published non-binding disclosure guidance that covers the topic.

Figure 3: Corporate climate policy engagement disclosure regulation in G20 member countries



Source: InfluenceMap 2025

Note: Assessment covers G20 members, with 27 European countries assessed as part of the European Union

More robust and enforceable rules on corporate disclosure, transition planning, and policy engagement are essential to provide an enabling environment for robust net zero policies. Policy instruments can:

- Include requirements and guidance on policy engagement disclosure (direct and indirect, including via industry associations) as part of robust and enforceable sustainability reporting requirements. Any guidance on lobbying disclosure can consider the investor-led Global Standard on Responsible Climate Lobbying⁴⁶, designed to enhance transparency in companies' climate lobbying governance, management and practices.
- Include the identification of policy dependencies in transition plan policies, as well as ongoing/planned steps to facilitate the optimal policy environment through constructive policy engagement. The inclusion of lobbying objectives and activities in transition planning will ensure companies align their operational net zero targets with the regulatory environment in practice, engaging the entire business model in the transition challenge.
- Enhance accountability and transparency in public policymaking, including through robust lobbying registers (which should encompass industry associations) and a clear regulatory footprint in public decision-making processes. Effective policy and public trust in the ability of governments and non-state-actors to deliver the transition to net zero both rely heavily on integrity and transparency in the policy process. The OECD Recommendation of the Council on Transparency and Integrity in Lobbying and Influence⁴⁷ provides a comprehensive set of recommendations.

⁴⁶ The [Global Standard on Responsible Climate Lobbying](#) is an investor-led disclosure standard, designed to improve transparency around companies' climate lobbying governance, management and practice.

⁴⁷ OECD (2025) [Recommendation of the Council on Transparency and Integrity in Lobbying and Influence](#), OECD/LEGAL/0379

POLICY RECOMMENDATIONS

To ensure high-integrity transition planning, policy makers can:

- Formulate transparent economy-wide interim (i.e. Nationally Determined Contributions) and long-term targets (i.e. net zero goals) to help companies and FIs translate national climate commitments into operational pathways that avoid going beyond 1.5°C. This needs to build on the net zero commitments made by 19 out of 20 G20 countries.
- Advance transition planning by companies and financial institutions by combining disclosure provisions with requirements or guidance that avoid going beyond 1.5°C, tailored to local market conditions. Instruments should focus on setting robust emission reduction targets, capital expenditure plans, and alignment with existing sustainable taxonomies – to avoid carbon lock-in.
- Develop and adopt interconnected sectoral emission, technology and investment pathways based on science-based carbon modelling, and build them out to sector transition plans by embedding them into policy frameworks.
- Ensure that corporate policy engagement and lobbying activity performed by industry groups is transparent and accountable so that misalignments are clear, most notably by including lobbying disclosure into sustainability reporting requirements and encouraging companies to identify and address policy dependencies as part of their transition planning efforts.

2 - RESILIENCE-FOCUSED POLICIES

The UN HLEG [Integrity Matters](#) report recommends the integration of adaptation, nature and just transition elements into mitigation policies and non-state actor activities. The 2024 [Net Zero Policy Matters](#) report identified a limited number of policies containing specific and identifiable recommendations or requirements for companies and FIs to disclose or set targets in relation to national environmental or social goals in the context of their mitigation targets.

This section of the report identifies key elements currently implemented globally, across disclosure regimes, taxonomies and transition planning requirements. It also provides case studies of resilience-focused, real economy policy implementation.

While key common elements of integration are appearing across corporate and financial policies in G20 jurisdictions, coupled with needed real economy policy reform, more needs to be done. By requiring a focus on material interlinkages between sustainability issues, through a risk analysis based on a double materiality approach and focusing on key common elements that help ensure interoperability, targeted policies can help efficiently unlock private finance for resilience.

OVERVIEW

The urgency of climate action – amid evidence that seven of nine planetary boundaries have been breached – demands a shift from fragmented efforts to integrated, resilience-centred strategies.⁴⁸ Building resilience means strengthening the links between mitigation, adaptation, nature, and social (just transition) priorities, recognising the interdependence of environmental and social systems.⁴⁹ This integrated approach improves effectiveness and reduces costs by enhancing resource efficiency, avoiding maladaptation, and aligning decarbonisation with wellbeing, ecosystem integrity, and equity. Strong action on mitigation still remains key, as it offers greater certainty over future damages and investment needs. Yet even in this scenario, climate risks will persist, making it vital to embed resilience in policy and practice to advance decarbonisation while protecting social equity, biodiversity, and long-term value.⁵⁰

The research undertaken for this section sought to focus on the following questions:

1. How do G20 corporate and financial policy tools (disclosure, taxonomy, transition plan) integrate adaptation, nature, and just transition goals?
2. What are the key common elements supporting the integration of resilience in corporate/financial policy, and what gaps are still persistent?
3. What is the role of enabling policy environment to ensure effective resilience outcomes?

The research in the first part of the chapter explores key common elements in existing policies that policy makers should consider integrating to ensure corporate and financial net zero transitions contribute to the resilience of social and environmental systems, allowing for interoperability across different impact areas and jurisdictions. They are presented here, together with suggestions for implementation of resilience-focused policies and informative case studies.

As explored in the second half of the chapter, achieving resilience outcomes also requires an integrated approach that connects corporate, financial, and real economy policies within an enabling environment. National resilience strategies can link financial commitments to real-economy action but must be supported by financing plans, capacity building, data and coherent regulation. Private sector

engagement in National Action Plan (NAP) design can uncover opportunities and lower costs, while inclusive implementation ensures resilience is embedded across policy frameworks.

While key resilience elements are being implemented globally, material risks differ widely across countries and contexts. Corporates and financial institutions should be required to regularly assess physical risks to identify their most critical vulnerabilities and impacts. A materiality-based approach focusing on risks and impacts allows companies to prioritise actions, target transition plans, and apply focused resilience measures, reducing costs and managing trade-offs more effectively. Aligning common resilience elements across mitigation policies can also enhance interoperability and lower compliance costs across jurisdictions.

⁴⁸ Potsdam Institute for Climate Impact Research (2025). [Seven of nine planetary boundaries now breached – ocean acidification joins the danger zone](#).

⁴⁹ Climate risks, nature loss, and social outcomes are interrelated through reinforcing feedback: ecosystem degradation amplifies physical climate risks; poorly designed mitigation can drive nature harm and unequal burdens; and social fragility, in turn, undermines both adaptation capacity and emissions reductions.

⁵⁰ For this 2025 edition of the Taskforce on Net Zero Policy annual report, our research focuses on the implementation of HLEG Recommendation 7 “People and Nature in the Just Transition”, and Recommendation 9 “Investing in Just Transitions”, linking back to the paper on [“Interconnected Justice: Understanding the cross-border implications of climate transition policies”](#) published by the Taskforce in 2024.

PROGRESS ON RESILIENCE-FOCUSED ELEMENTS IN CORPORATE AND FINANCIAL POLICY

Towards a holistic approach of climate mitigation, adaptation, nature and just transition

The 2024 Taskforce showed how corporate and financial climate mitigation policies were increasingly incorporating adaptation, nature and just transition objectives, helping maximise co-benefits and reduce trade-offs.⁵¹ This creates opportunities to align implementation.

Box 13: From Rio to Belém: Uniting the Rio Conventions

The convergence of climate, biodiversity and desertification challenges requires policies that simultaneously address the goals of all three Rio Conventions, the treaties agreed at the 1992 Earth Summit in Rio de Janeiro – the Convention on Biological Diversity ([CBD](#)), the United Nations Framework Convention on Climate Change ([UNFCCC](#)), and the United Nations Convention to Combat Desertification ([UNCCD](#)) – while incorporating principles of justice and equity.⁵²

The Paris Agreement's recognition of “just transition” imperatives, the Convention on Biological Diversity's emphasis on justice and equity, as well as the clear references to the interrelationships of desertification with social problems such as poverty, poor health, nutrition and lack of food security in the Convention to Combat Desertification provide the normative foundation for this integration.

In July, the COP30 Presidency hosted a special event in Bonn on the theme of how to bring the legacy of Rio '92 to Belém, in November 2025, and “to move beyond siloed approaches and foster integrated governance frameworks that align climate, biodiversity and land degradation goals.” The Rio Conventions will underpin the six pillars of the Action Agenda at COP30.

In 2025, several jurisdictions are taking steps towards a more holistic approach to policymaking. The EU, Brazil and South Africa lead with disclosure and compliance systems spanning multiple dimensions. Meanwhile, the rise of frameworks such as the Taskforce on Nature-Related Financial Disclosure (TNFD) and the Taskforce on Inequality and Social-Related Financial Disclosure (TISFD) reflected growing institutional momentum. Together, these trends signalled an evolution toward more sophisticated policy instruments. However, most jurisdictions still address sustainability issues in silos. With most transition planning policies focusing on climate mitigation, few have requirements for corporate and FIs to address climate adaptation, ecosystem/nature protection/restoration and just transition. More action is needed to address the gaps to systemic integration.

The analysis underpinning this briefing reviews over 60 policy instruments across G20 countries. It identifies recurring elements across three different regulatory tools and highlights where resilience approaches are beginning to feature. While not claiming to represent an exhaustive list, this exercise in regulatory mapping can serve as a guide for policy makers. As new instruments are developed, they can design in resilience from the outset, avoiding the costs of retrofitting later.

⁵¹ Despite a growing recognition of the role of adaptation, existing climate-related frameworks remain less comprehensive and consistent in addressing adaptation and resilience when compared to mitigation.

⁵² Muller, S. and Robins, N. (2022) [Just Nature: How finance can support a just transition at the interface of action on climate and biodiversity](#). Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

Gaps: the next critical steps in policymaking

Across G20 jurisdictions, incorporation of adaptation, nature and just transition is advancing but uneven. Disclosure regimes are converging on climate risk baselines (IFRS S1 and S2), with increasing recognition of nature, and developments on social impact reporting in some jurisdictions. Taxonomies increasingly define eligible activities for investment in adaptation and biodiversity, and include environmental/social safeguards, though many still require more specific criteria. In transition plan guidance we see growing references to resilience/adaptation, ecosystem dependencies and fair outcomes, but limited mandatory scope and implementation evidence.

Aligning corporate and financial policy with resilience can be based on the common elements supporting the integration of sustainability issues. While the primary focus of regulators is on sound risk management, this process shares common elements with contributing to climate, nature, water, land policy goals such as resilience. These elements, identified in the research, are present across regulations in G20 countries, but are not yet robust and consistent enough to thoroughly contribute to resilience.

Box 14: State of embedding resilience in corporate and financial policy across G20

What key elements enable climate-resilient finance⁵³

- **Risk & resilience assessments:** Identify hazards, exposure, and vulnerability at the asset and value-chain-level. Quantify financial effects. Aggregate to entity level. Disclose resilience measures, targets and progress.
- **DNSH & eligibility criteria:** Apply social and environmental DNSH and minimum safeguards (MSS) to ensure activities don't undermine ecosystems, people or mitigation. Use defined eligible activity lists and metrics to assess outcomes.
- **Alignment with national resilience strategies:** Reference national or regional action plans on adaptation, nature and just transition, as well as NDCs and sector strategies. Demonstrate benefits beyond the project lifecycle.

Where progress has been made

- **Disclosures:** More jurisdictions require physical risk assessment, resilience measures and some financial effects; references to nature and social impacts are increasing, including via double materiality in the EU and stock-exchange rules in China.
- **Taxonomies:** Adaptation appears more often (including through Do No Significant Harm criteria to avoid maladaptation), nature and biodiversity is referenced widely (but fewer instruments define operational criteria), and social safeguards are more visible (mostly referencing United Nations Guiding Principles/ILO conventions and some recognition of Indigenous rights). Some (e.g. Brazil and Mexico) include specific social objectives.
- **Transition plans:** Guidance increasingly mentions adaptation, nature and just transition alongside governance and financing, with pilots in financial supervision and investor stewardship.

Where gaps persist

- **Disclosures:** Financial-effect quantification, short-horizon scenarios and location-based data remain patchy; nature dependencies (including land and water) and geospatial triggers are limited; social coverage is narrow and outcome-light.
- **Taxonomies:** Many lack populated adaptation activity lists, measurable outcomes and explicit nature-related guardrails; social safeguards are inconsistently codified; cross-border interoperability is nascent.
- **Transition plans:** Few binding requirements for corporate and financial target setting beyond climate mitigation; challenges in financeable opportunities for adaptation/nature-based solutions; just transition provisions often remain aspirational and not explicitly defining stakeholder processes.

The following tables detail commonalities and key gaps on resilience (grouped by 'disclosure frameworks', 'taxonomies' and 'transition plans') in the 60 policy instruments reviewed across G20 and selected non-G20 countries.

⁵³ Adapted from OECD (2024) [Towards assessing the alignment of finance with climate resilience goals: Exploring options, methodologies, data and metrics and metrics](#), and OECD (2022) [Climate-resilient finance and investment: Framing paper](#).

Figure 4: Common elements and key gaps on resilience across disclosure frameworks

COMMON ELEMENTS	KEY GAPS
Physical climate risk	
- ISSB Standards (IFRS S1 and S2) set a global baseline requiring firms to disclose current/anticipated adaptation measures, acute/chronic risks, resilience assessments and financial impacts. - In G20, 13+ jurisdictions have endorsed ISSB Standards, with mandatory rules upcoming, most commonly targeting publicly listed companies. - Some financial authorities (e.g. Brazil) explicitly include social and environmental risk disclosures in prudential supervision of climate-related physical risk management.⁵⁴	- Out of 55 G20 policies that require/recommend disclosure if there is a physical climate risk, only 23 specify associated financial impacts; and only 17 specify that climate scenario methodologies should be disclosed. - Uneven development of national climate risk assessments and climate hazard monitoring infrastructure, as well as fragmentation in risk assessment practices, hinders vulnerability assessments at the asset level. - Short-term scenarios, crucial to reducing uncertainty, are nascent, while localised approaches are necessary for more accurate assessments of both acute and chronic risks.
Nature-related impacts, dependencies and risks	
- 33 policies in G20 include nature-reporting, with 24 mandating reporting on impacts (e.g., Mexico's NIS B-1). France was the first jurisdiction to set biodiversity risk disclosure requirements for FIs, followed by increased attention of financial authorities.⁵⁵ - The ISSB's IFRS S1 covers all sustainability-related risks and opportunities, including those related to nature if financially material. The ISSB is currently undertaking a research project on biodiversity, ecosystems and ecosystem services (BEES), exploring the necessity and feasibility of standard-setting specially on nature. - Integration of nature-related impacts and dependencies can be supported through dedicated standards such as those developed by the International Organisation for Standardization, and is gaining traction also through TNFD guidance, which presents a framework that is aligned with double materiality and compatible with other sustainability disclosure regimes (e.g. India).^{56 57}	- Most policy frameworks remain compliance-oriented, lacking forward-looking assessments of ecosystem dependencies or biodiversity thresholds. - Data requirements are limited – few policies mandate geolocation or location-specific triggers (e.g., key biodiversity areas, critical habitats, water stress). - Alignment with the Global Biodiversity Framework (Target 15 is on disclosures) is rare.
Impacts on workers, suppliers, communities and consumers	
- Emerging but concentrated in a few jurisdictions, the EU's CSRD/ESRS and China's stock exchange rules require disclosure of transition impacts on workers, communities, supply chains and consumers. - The EU embeds ILO principles (risk minimisation, opportunity maximization, social dialogue) and the UN Principles for Business and Human Rights, having aligned the definition of materiality with that of salient risk. - Existing metrics can be used to disclose on voluntary just transition commitments and efforts.⁵⁸ New ISSB and GRI climate plan guidance integrates some just transition factors.	- Coverage remains very limited – most jurisdictions lack requirements on impacts for workers, communities, or suppliers. - Where present, disclosures are still narrow in scope, focusing on high-level impact materiality with little detail on implementation or outcomes. - Systematic integration of social indicators into mainstream regimes is still lacking. A future baseline could emerge, resulting from the ISSB's Human Capital research project, as well as the work of the TISFD.

⁵⁴ Brazilian Central Bank [Resolution No. 139](#), National Monetary Council [Resolution No. 4945](#), Central Bank Normative [Instruction No. 153](#), National Monetary Council Resolution No. 4943 amending [Resolution No. 4.557](#).

⁵⁵ France: Article 29 of the Energy–Climate Law no.2019-1147; implementing [Decree no.2021-663](#). Evidence of other financial authorities considering nature-related financial risks referenced in: FSB (2024) [Stocktake on Nature-related Risks: Supervisory and regulatory approaches and perspectives on financial risk](#)

⁵⁶ Environmental Finance (3 September 2025) "[India confirms nature reporting aligns with TNFD](#)".

⁵⁷ TNFD, IBBI, CII-ITC (2025). [Integrating Nature-related Aspects in Business Responsibility & Sustainability Reporting \(BRSR\) Disclosures using the Taskforce on Nature-related Financial Disclosures \(TNFD\) Recommendations](#)

⁵⁸ Just Transition Finance Lab (2024) [A compendium of just transition metrics](#), accompanying the TPT Just Transition Working Group (2024) [Putting People at the Heart of Transition Plans: key steps and metrics for issuers](#)

Figure 5: Common elements and key gaps on resilience across taxonomies

COMMON ELEMENTS	KEY GAPS
Adaptation ⁵⁹	
- Adaptation criteria are embedded in many financial taxonomies, with most frameworks distinguishing adapted vs. enabling activities, requiring robust physical risk assessments and applying DNSH to prevent maladaptation. - Nearly all jurisdictional taxonomies demand resilience outcomes beyond project lifecycles and alignment with NAPs or national targets. - Sectoral prioritisation typically covers agrifood, forestry, water, health and infrastructure, reflecting alignment with national sustainability goals and strategies.	- Scoping and technical depth varies: some adaptation taxonomies list 100+ adaptation activities, others very few; missing thresholds and criteria impede usability and interoperability. - Enabling activities lack consistency: in some taxonomies, they are principles or activity-based, while in others, process-based (i.e. risk triggered, including insurance activities in EU). - Consolidation of 100 indicators applicable to the Global Goal on Adaptation (Sept 2025) presents an opportunity to harmonise reporting on the outputs and outcomes of adaptation, if followed on with further technical guidance on methodologies and data standards.
Nature and biodiversity	
- Biodiversity commonly appears as an environmental objective, operationalised mainly via DNSH safeguards (e.g., South Africa, Mexico) to prevent climate actions from undermining ecosystems. - Several jurisdictions (e.g., EU, China) have developed specific operational activity lists, while Australia, Brazil reference Global Biodiversity Framework (GBF) goals. - Emerging practice recognises resilience and ecosystems as standalone priorities, with the CBI Resilience taxonomy highlighting “Resilient Natural Systems” across terrestrial, freshwater, and marine domains.⁶⁰	- Not all taxonomies include technical screening criteria on nature/biodiversity yet even if it is listed as an objective – lacking operational guardrails and thresholds. - Beyond explicit DNSH such as in the EU, mechanisms like RMT exist,⁶¹ yet biodiversity guardrails remain uneven, principle-based, conditional, and weakly enforced, with thresholds unclear. - Explicit alignment with Convention on Biological Diversity principles (CBD) is patchy, with some taxonomies omitting references to global or national biodiversity goals even following the adoption of the GBF.
Just transition	
- Social safeguards are generally embedded through DNSH and MSS, several G20 taxonomies make explicit reference to UNGPs at the MSS level, and some countries such as Australia, also refer to Indigenous People and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). - Increasingly jurisdictions are also defining social objectives (Mexico on gender, Brazil on decent job creation, inequality and life quality promotion,). Clarity on indicators emerging.⁶² - The World Bank’s “Just Transition Taxonomy” identifies 57 activities across governance arrangements, people and communities, and repurposing land/assets. Anchors just transition as a recognised taxonomy dimension. Focuses on coal and could be applied to other sectors.	- Just transition now integrated within the OECD MNE Guidelines, but further work needed to make operational in routine corporate decision-making. - Social safeguards are inconsistently applied – some frameworks (EU, Australia, Brazil) codify minimum safeguards explicitly, while others fold social issues loosely into DNSH. - Practical guidance linking climate action with human rights due diligence is needed to mainstream just transition. - Provisions for stakeholder engagement are limited, often not extending beyond baseline MSS requirements.

⁵⁹ This analysis is informed by: University of Oxford, Environmental Change Institute (2024). [Taxonomies Database](#)

⁶⁰ Climate Bonds Resilience Taxonomy includes seven Resilience Themes: agri-food systems, health, infrastructure, cities, communities, industry & commerce, and nature & biodiversity. The Resilience Taxonomy White Paper was launched in 2023 and the first version of CBRT was launched in September 2024. CBRT complements the [Climate Bonds Taxonomy](#), including recent and upcoming updates on focused on methane abatement (Agriculture, Waste, Water).

⁶¹ A specific development in the [ASEAN taxonomy](#) is the introduction of “Remedial measures to transition” (RMT). These aim to reduce the need to exclude certain economic activities outright by requiring FIs to encourage, facilitate and take into account the remedial efforts and improvement programmes undertaken by businesses to align their operations with a low-carbon and climate resilient economy. Among others, these include issues of pollution and climate resilience.

⁶² IEA Global Commission on People-Centred Clean Energy Transitions (2025). [Indicators Handbook for Just and Inclusive Energy Transitions](#). Published as an official G20 presidency document.

Figure 6: Common elements and key gaps on resilience across transition plans⁶³

KEY BENEFITS TO NON-STATE ACTORS	KEY CHALLENGES IN TRANSITION PLANNING
Adaptation	
- Provide forward-looking tools to manage physical risk exposure, identify location-specific vulnerabilities, material topics and guide resilience investments –supporting valuation, risk pricing and capital allocation. - Transition plans that embed resilience enable proactive long-term strategies, yielding more credible approaches to physical risk and better-informed operational, supply-chain and investment decisions. - Where enabling environment facilitates risk sharing, integration of adaptation helps align capital allocation with resilience goals.	- Difficulty assessing and prioritising physical climate risks and in developing robust roadmaps, especially under the high uncertainty associated with natural hazards and extreme weather events. - Lack of quantitative outcome metrics limits progress, necessitates entities take step-wise approach towards a meaningful set of metrics and targets. - Navigating trade-offs and synergies between adaptation and mitigation, ensuring decarbonisation is operationalised without undermining resilience.
Nature and biodiversity	
- Assist in integrating management of ecosystem dependencies and biodiversity loss into transition planning, surfacing sectoral and location-specific risks while linking them to enterprise value. - Unlock credible opportunities for nature-based solutions (NbS), restoration, and circularity. - Strengthen stakeholder relations and align corporate actions with national biodiversity strategies and the GBF.	- Difficulty defining materiality across value chains, closing data and metric gaps, and addressing governance/accountability for ecosystem dependencies beyond owned assets. - Transition pathways for nature (e.g. restoration, no-deforestation, water-positive strategies) remain underdeveloped, slowing sectoral roadmaps and investment planning.
Just transition	
- Help avoid adverse impacts on workers, communities and supply chains, while safeguarding the environment. - Seeks to deliver social improvement for workers, communities (e.g. skill development, gender equality, access to energy). - Engagement with value chains, civil society and affected stakeholders enhances legitimacy, aligns with emerging policy frameworks (e.g. UK transition plans consultation), and anticipates investor expectations on fair and inclusive transition outcomes.	- Integration into corporate transition plans is largely aspirational, with limited evidence of meaningful implementation. - Important to unbundle high level just transition agenda into operational packages (such as a workforce plan, community plan) - Ensuring fairness requires stronger embedding of social dialogue, FPIC (Free, Prior and Informed Consent), human rights and worker protections, alongside responsible approaches to divestment and supply-chain decisions.

⁶³ Due to the low number of transition plans requirements currently existing, the analysis here has focused on the benefits and challenges that transition planning can encounter. This analysis references and builds on the [issue-specific resources](#) published by the TPT working groups.

Box 15: Drought resilience through corporate and financial policy

The Secretariat of the UN Convention to Combat Desertification (UNCCD) is advancing drought resilience via several initiatives related to corporate and financial policy. These include:

■ The [Drought Resilience Investment Facility \(DRIF\)](#)

DRIF is as complementarity financial mechanism of the Global Riyadh Drought Resilience Partnership (which is an initiative that is mobilising public funds to build drought resilience particularly in low income and lower middle-income countries). DRIF is a blended finance fund designed to mobilise private and institutional capital for drought resilience and sustainable land and water management. Targeting a capitalisation of US\$400 million, it will combine concessional and commercial finance to de-risk investments in sectors such as regenerative agriculture, water infrastructure, and nature-based solutions.

By providing first-loss guarantees and catalytic capital, DRIF will crowd in private investors who have traditionally viewed land and drought as high-risk asset classes.

The Facility focuses on private-sector implementation and return-generating drought solutions.

DRIF serves as a model for integrating climate risk management and resilience outcomes into financial policy, demonstrating how blended finance can turn drought risk into investable opportunity.

■ The [International Drought Resilience Observatory \(IDRO\)](#)

An initiative of the [International Drought Resilience Alliance](#), IDRO was created to address gaps in data accessibility, research and science on the three pillars of integrated drought management (monitoring and early warning systems, vulnerability and impact assessment and drought risk mitigation). It also aims to strengthen policy coordination by providing a centralised platform for drought-related knowledge, tools and best practices. It will provide:

- A centralised knowledge hub for real-time data, research and case studies on drought resilience.
- Advanced analytics and AI-based insights to help stakeholders in drought pattern monitoring and risk assessment.
- Interactive mapping and visualisation tools that transform complex drought data into user-friendly and actionable.
- A platform for policy innovations and collaborations that would connect governments, research institutions and local communities.

■ The [Business 4 Land \(B4L\)](#) initiative

The UNCCD's main initiative to engage the private sector in sustainable land and water management, B4L helps companies and FIs manage risks and seize opportunities tied to land degradation and drought. One of the initiative's key pillars focuses on advocating for policies that foster a business environment conducive to sustainable land and water management.

In addition, the UNCCD has published guidance documents for policy makers, including:

- The [Drought Resilience, Adaptation and Management Policy \(DRAMP\) Framework](#): a framework that integrates six goals for nations to reduce exposure and vulnerability to drought, increase resilience, transform their economies and political and cultural institutions, develop comprehensive drought management plans and share drought risks.
- Guidance on [Multiscale approaches for the assessment and monitoring of social and ecological resilience to drought](#). The report provides science-based evidence on approaches for assessing and monitoring ecological and social resilience to drought, especially for vulnerable populations and ecosystems, while considering the effect of climate change on drought risk.

Box 16: Integrating adaptation in the transition plans of FIs

Responding to the G20 Sustainable Finance Working Group's (SFWG) 2025 priority on scaling adaptation finance for a just climate transition, the Network for Greening the Financial System (NGFS) published a paper on [integrating adaptation and resilience in transition plans](#).

Focusing on the rationale for integrating adaptation and resilience into transition plans, the NGFS noted:

- The cost of climate change remains significant even in the net zero scenario (7.3% global GDP loss due to chronic physical risks), but the adaptation measures continue to be underfinanced, despite their benefits.
- Transition plans can serve as an important tool to facilitate a strategic approach to the assessment and management of physical risks – improving evaluation of exposures, risk pricing and the financial sector's ability, and the overall economy's capacity to align capital allocation and risk management with adaptation needs.

Additionally, the NGFS provides guidance on incorporating adaptation and resilience in transition plans – leveraging existing frameworks to ensure alignment with mitigation objectives.

	Incorporating adaptation and resilience (NGFS)	Supporting policy environment (specific observations by TNZP)
Governance	Effective governance structures are essential to oversee the integration of adaptation objectives into transition planning and sustainability targets reporting	1. Clear supervisory expectations on physical risk management
Foundations	1. Managing exposure and vulnerability to physical climate risk 2. Seizing adaptation-related opportunities where appropriate	1. Supporting data infrastructure (e.g. national climate risk assessments) 2. Advancing NAPs and sustainable taxonomies to help institutions anticipate opportunities and identify investment pipelines
Implementation strategy	Potential implementation strategies: 1. Avoiding risk 2. Accepting risk 3. Reducing risk 4. Transferring/sharing risk. 5. Investing in new opportunities	1. Developing local and regional APs and accompanying investment plans, to identify the needs and opportunities for private funding, targeting particularly risk hotspots or adaptation gaps 2. Advancing DNSH to social objectives and net zero
Engagement strategy	Engaging with a range of stakeholders, including 1. Government stakeholders 2. Institution's value chain 3. Industry peers and academia	1. Leveraging targeted public finance, public-private partnerships 2. Enable effective corporate disclosures of physical climate risk
Metrics & targets	1. Identify baseline metrics for the exposure of assets/portfolio to physical risks 2. Establish relevant targets, input/output metrics and targets	1. Advance availability, coverage and comparability of necessary data 2. Work towards quantitative metrics for outcome-based progress measurement

Key considerations for policy makers:

- Encourage FIs to bring greater attention to physical risk and integrate adaptation into risk management and strategy. Planning for adaptation should be anchored by target and supported by appropriate metrics.
- Support enabling environments through improved access to data and enhancing disclosure practices underpinned by clearer supervisory expectations. This includes advancing NAPs and taxonomies, while promoting international comparability and interoperability to ensure consistency across jurisdictions.
- Support capacity building and knowledge sharing to improve understanding and practical implementation of adaptation-related transition planning.

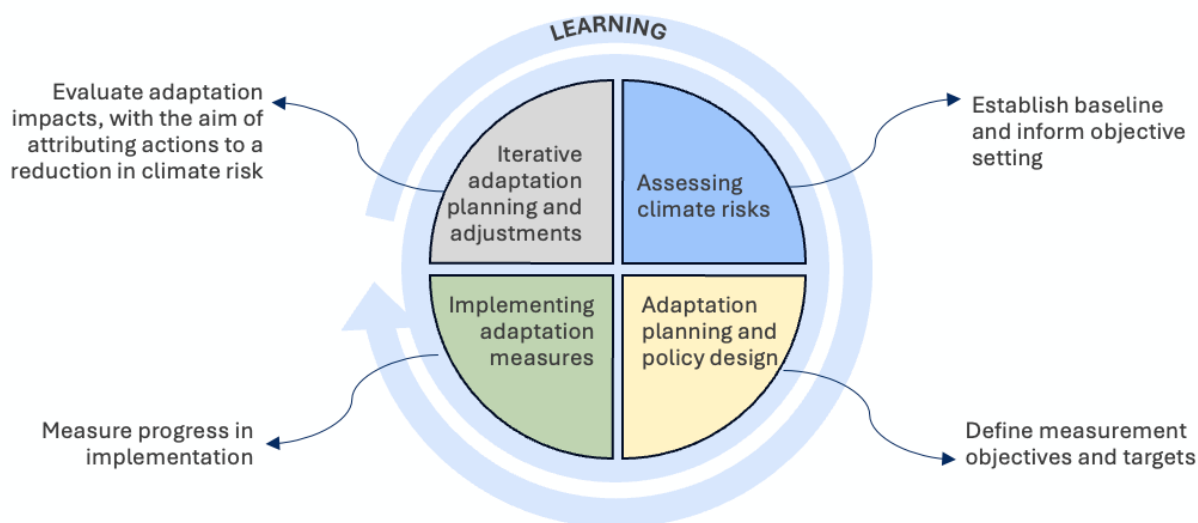
THE ROLE OF REAL ECONOMY POLICY FOR CLIMATE RESILIENCE

Research shows that closing the adaptation finance gap requires coordinated reform across corporate, financial and real economy policies. A well-designed enabling environment is essential to align business strategies with capital flows for adaptation, nature and just transition goals. Ensuring both transparency and effective management of climate-related risks and impacts rely on coherent regulatory frameworks, government-led development of climate data infrastructure, and capacity building for transition planning. Scaling up adaptation finance will require strategic actions across the themes of capacity and data, domestic policy, as well international support to mobilise investment. Policy options include integrated policy planning, regulatory alignment, insurance and risk transfer mechanisms, effective use of public finance, and incentives to attract private investment.⁶⁴ International standards and assurance facilitate trade of products and services.

National adaptation documents both help assess the climate resilience of firms and quantify the funding gap for adaptation. Integrated resilience strategies such as NAPs guide companies in assessing physical climate risks and building adaptive capacity and resilience. Since the majority of critical adaptation needs currently have low financial viability, clear and fair funding plans are necessary to increase the role of the private sector. Adaptation investment planning emerges as a tool to develop project pipelines and to systematically address funding and finance barriers, alongside taxonomy development and country platforms. Engaging with the private sector on the design and implementation of NAPs can help policymakers identify opportunities while reducing implementation costs.⁶⁵

However, effective implementation of national resilience strategies requires an iterative, adaptive approach to policymaking, as show in the figure below, developed by OECD. This approach links climate risk assessments with defining measurable time-bound objectives, mainstream implementation while using monitoring, evaluation and learning to update as conditions evolve.

Figure 7: The adaptation policy cycle



Source: Reproduced from [OECD \(2025\)](#)

Finally, inclusive implementation – meaningful participation by workers, local communities, Indigenous Peoples, small and medium-sized enterprises and local authorities, with safeguards for human rights, benefit-sharing and biodiversity, and accessible grievance mechanisms – is key to integrating resilience-focused elements into policy frameworks.⁶⁶

The case studies presented below show possible approaches to this integration, highlighting experiences in policy reform to support climate adaptation investment: strategic planning and policy coherence (EU), regulatory alignment (South Africa), insurance and risk transfer (Colorado, Alabama), public finance and investment (South Asia), support and incentives for private investment (Brazil), with a cross-cutting focus on the issue of land use (achieving drought resilience, halting desertification and land degradation, through the Great Green Wall Initiative).⁶⁷

⁶⁴ Policies that can enable public and private finance to flow to investments that support climate resilience are referenced in: OECD (2024) [Climate Adaptation Investment Framework](#). More research on the enabling environment for adaptation investments, as well as mobilising finance for developing countries, is provided in OECD (2025) [Scaling up finance and investment for climate change adaptation](#).

⁶⁵ Zurich Climate Resilience Alliance (2025). [Adaptation finance and the private sector: opportunities and challenges for developing countries](#).

⁶⁶ See OECD (2025) [Fast-tracking Net Zero by Building Climate and Economic Resilience](#).

⁶⁷ These case studies reference the six building blocks of the OECD (2024) [Climate Adaptation Investment Framework](#).

Box 17: South Africa's National Climate Change Response Policy (NCCRP)

South Africa's policy mix balances mitigation and adaptation in a strategic framework for a climate-resilient low-carbon economy. The 2019 National Climate Change Adaptation Strategy (NCCAS) and the Climate Change Act (2024) strengthen strategic planning and policy coherence by setting national adaptation objectives, requiring sector strategies (including for state-owned enterprises), providing capacity building, improving access to climate-risk data and linking priorities to finance through public and blended instruments.

Policy overview

- The NCCRP forms the foundation of South Africa's climate policy, addressing both mitigation and adaptation. It is complemented by coastal and sectoral plans and municipal toolkit that help integrate climate risks into local planning.
- It outlines key technical instruments, including, sector-specific adaptation frameworks, the deployment of ecosystem-based adaptation (EbA) interventions, and bespoke financial vehicles structured to de-risk investment in resilience-building activities. These mechanisms are designed to reduce systemic vulnerability to climate hazards and ensure an equitable and just transition for grassroots' communities.
- The Green Economy Strategy encourages investment in renewable energy and energy efficiency, supported by programs like the Renewable Energy Independent Power Producer Procurement Programme.
- The NCCAS translates national objectives into sectoral outcomes and targets, including in critical sectors to resilience such as agriculture and water. It also targets mainstreaming adaptation in business strategic adaptation plans.
- The Climate Change Act (2024) gives legal force to national adaptation objectives and requires national departments and specified state-owned companies to develop sector adaptation strategies and plans, clarifying responsibilities for risk management.
- The Just Transition Framework provides for a South Africa-specific definition of a 'just transition', advancing three principles as underpinning a just transition towards an environmentally sustainable economy and society in South Africa, namely those of distributive, restorative and procedural justice. Achieving a 'just energy transition' is a stated goal of the Presidential Climate Commission, established in 2020.

In operationalising these objectives, the South African government has allocated capital through both direct public expenditure and blended finance models. Trends indicate that public spending on climate finance has remained constant between 2017–2021 at an average of R18 billion (approximately US\$1 billion) per year⁶⁸. This includes the provision of performance-based grants and concessional subsidies to projects that demonstrate measurable resilience and adaptation outcomes. For example, the Green Fund, administered by the Development Bank of Southern Africa, has disbursed over ZAR 1.1 billion (± US\$75 million) to support programmes ranging from renewable energy grid integration to large-scale wetland rehabilitation and urban climate-proofing interventions⁶⁹. Specifically, the uMngeni Resilience Project is designed to enhance the resilience of communities and ecosystems with the uMngeni catchment area in KwaZulu Natal.⁷⁰ Climate finance from the private sector has increased threefold, from an annual average of R35 billion reported (approximately US\$2 billion) in 2017/18 to an annual average of R113 billion (approximately US\$6 billion) in 2020/21⁷¹. The Climate Change Act incentivises private sector participation in climate resilience initiatives, through enhanced tax deductions for corporates implementing verified sustainable practices, the introduction of green procurement requirements in public sector contracting, and the tightening of environmental compliance thresholds for high-impact sectors.

Examples of real-world impacts

South Africa's strategy puts a focus on EbA by promoting ecosystem restoration and the use of ecosystem services to build resilience to impacts of climate change. An example is community-based mangrove restoration, which has delivered concrete results in terms of both protecting coastal areas and enhancing local biodiversity. These initiatives aim to both safeguard coastal communities from the effects of climate change and create job opportunities. It is estimated that approximately 418,000 jobs have been created by biodiversity activities in South Africa. Approximately 15% of these jobs work to protect biodiversity and restore ecological infrastructure.⁷² Sustainable agriculture in drought-affected areas is another core strand of the strategy. This involves planting drought-resistant crops, adopting water-wise irrigation technologies and implementing soil preservation methods. Emphasis is placed on tracking results and effectiveness of resilience efforts, through practical tools like the Climate Information Portal, launched by the South African Weather Service, which delivers up-to-date climate data to inform policy and local action.

68 de Aragão Fernandes, P., Gwebu, L., Johansson, L., Meattle, C., Radmore, J.V., Solomon, C. (2023). [South African Climate Finance Landscape 2023](#). Presidential Climate Commission, South Africa.

69 Development Bank of Southern Africa (DBSA). [Green Fund](#).

70 South African National Biodiversity Institute (SANBI). [The uMngeni Resilience Project](#).

71 de Aragão et al. (2023). [South African Climate Finance Landscape 2023](#). Presidential Climate Commission, South Africa.

72 Department of Forestry, Fisheries and the Environment (DFFE). [Biodiversity Sector Investment Portal](#).

Box 18: Climate Resilient Europe

Europe is increasingly incurring significant losses from heatwaves, droughts and heavy rainfall. Even if global warming is limited to 1.5°C above pre-industrial levels, Europe – warming at twice the global rate – it faces far more frequent extreme weather events. This underscores the need to align regulations that govern land use, infrastructure, nature, health and finance. A new integrated framework aims to strengthen regulatory alignment – linking sectoral rules, economic regulation and sustainable finance requirements – to ensure resilience is designed in, implemented consistently and financed at scale.

Policy overview

The 2021 EU Adaptation Strategy sets four objectives: smarter adaptation (better data and tools), faster adaptation (solutions to reduce risks and enhance protection), more systemic adaptation (mainstreaming resilience across sectors, supporting local action and nature-based solutions), and stepping up international action (boosting global support, finance and cooperation).

The European Commission launched the Climate Resilience Dialogue in November 2021 to address the climate protection gap and strengthen EU climate resilience, focusing on adaptation. Bringing together public authorities, supervisors, consumer groups, and the insurance sector, the Dialogue aimed to improve climate risk awareness, assessment, and risk reduction. Its Final Report, released in July 2024, highlights the role of public-private partnerships and other insurance-based solutions in closing the climate protection gap.

The European Climate Risk Assessment, published by the European Environment Agency in March 2024, identified 36 key risks and highlighted how they interact to create system-wide challenges across infrastructure, food systems, health, the economy, ecosystems and water. It found Europe insufficiently prepared, with some risks already critical. Also in March 2024, the European Commission issued a Communication on managing climate risks. It concluded that while existing EU-level frameworks contain relevant processes, implementation is falling short. Progress is uneven and not keeping pace with accelerating climate change.

The Commission called for improved policy and regulatory frameworks to manage climate risks more consistently and effectively. Key regulatory instruments include: the European Climate Law, Governance of the Energy Union Regulation, Critical Entities Resilience Directive, Regulation on Serious Cross-border Health Threats, EU Economic Governance Framework, Nature Restoration Law, Birds and Habitats Directives, Water Framework Directive, Floods Directive, Marine Strategy Framework Directive, Union Civil Protection Mechanism Decision and its Disaster Resilience Goals, and sustainable finance legislation such as the EU Taxonomy Regulation, Corporate Sustainability Reporting Directive, Sustainable Finance Disclosure Regulation, Capital Requirements Directive and Regulation and Solvency II framework.

To ensure EU policy keeps pace with future climate realities, the Commission is developing a new integrated framework for climate resilience and risk management. Its aim is to establish a more ambitious, coherent and comprehensive approach to resilience and preparedness, covering both Member States and the EU collectively. A Consultation on Climate Adaptation and Resilience with an EU Climate Adaptation Plan is expected in Q3 2026, containing legislative and non-legislative measures.

Anticipated real-world impacts

- Expected to be adopted in late 2026, the initiative will include legislative and non-legislative measures. Policy options – from binding rules to economic instruments and information tools – will be transparently assessed during the impact evaluation.
- It will ensure that investments exposed to climate risks are designed to withstand them ('resilience by design'). It will promote good governance through common climate scenarios, harmonised risk assessments, improved planning and implementation, and more efficient monitoring and reporting. It will also aim to optimise finance use and simplify legal obligations.
- It will strengthen climate-proofing across sectors and promote commercial opportunities for SMEs and others, encouraging innovation and new markets for resilience products and services. It will also support the use of satellite and in-situ data, artificial intelligence, as well as digital tools for risk assessment, planning and evaluation.
- By enhancing climate resilience, it will boost Europe's competitiveness, security and prosperity, while protecting public health and well-being. It will make EU societies more informed and resilient, better prepared for climate risks and change, with reduced negative impacts for all stakeholders.
- It will promote a 'one health' approach and 'just resilience', upholding rights and equality, and recognising territorial differences in climate impacts across EU regions. It will also unlock new commercial opportunities, drive innovation and help create markets for resilience products such as water technologies, regenerative agriculture, heat-resistant crops, climate insurance, space data applications, risk modelling tools and resilient construction materials – positioning Europe as a global leader in climate resilience.
- It will contribute to Sustainable Development Goal (SDG) 13 on climate action and support several other SDGs by reinforcing prosperity and security across sector policies. An open public consultation on the framework will launch in November 2025.

Box 19: Brazil – Embedding resilience in economic policy and attracting FDI

Background

Brazil is consolidating resilience across the real economy through the Ecological Transformation Plan (ETP) and a whole-of-government pact (PET, 2024). The approach ties together finance and social policy for equitable land-use transitions – pairing restoration and climate-smart agriculture with de-risking tools for private capital and a growing legal basis for adaptation planning. Delivery capacity varies across regions, and systematic tracking of adaptation investment will be critical as sector plans roll out.

Policy overview

The ETP is Brazil's core green-transition framework. It pursues three objectives with direct relevance to resilience: (i.) higher productivity and green job creation, (ii.) balancing environmental protection with growth, and (iii.) a just transition that shares benefits and cushions losses. Six pillars anchor implementation – sustainable finance, technological development, bioeconomy, energy transition, circular economy, and infrastructure and adaptation – and the Pact for Ecological Transformation (PET) commits the executive, legislature and judiciary to coordinated action.

Two policy tracks operationalise resilience:

1. Enabling environment and finance. Brazil is building a pipeline-to-finance chain via the Ecological Transformation Investment Platform (a country platform aligned to the NDC) and Eco-Invest Brazil, which de-risks green infrastructure to crowd in FDI. A complementary policy suite includes a national ETS law (SBCE), Payment for Environmental Services and bioeconomy measures, and RenovaBio for sustainable fuels.
2. AFOLU and climate justice. The ABC+ Plan (2020-2030) targets climate-smart agriculture and rehabilitation of 30 million hectares of degraded pasture by 2030 through technical assistance, technology transfer and tailored finance/tax instruments. Broader Agriculture, Forestry, and other Land Use (AFOLU) policies advance desertification control and restoration. Law 14, 904/2024 establishes guidelines for adaptation plans with an explicit focus on vulnerable groups, embedding climate-justice considerations across future plans. Brazil's updated NDC (to 2035) and the emerging New Climate Plan will include a National Adaptation Strategy with sectoral plans, coordinated with regional action. Capacity initiatives such as AdaptaCidades support municipalities in translating climate data into local plans. Indigenous leadership is rising: the Indigenous NDC (APIB) proposes demarcation protections and direct access to climate finance and is being considered for integration with Brazil's official NDC.

Resilience is embedded via nature-based and land-use measures that also deliver mitigation: large-scale restoration, climate-smart agriculture (no-till, Integrated Crop-Livestock-Forestry (ILPF) systems) and bioeconomy value chains that keep forests standing). Finance and regulation reinforce delivery, while sector plans set objectives. De-risking and concessional instruments move projects to bankability and social programmes (e.g. Bolsa Verde, rural credit lines) support inclusion. The result is a policy architecture that pairs emissions reductions with risk reduction, productivity and equity.

Examples of real-world impact

- ABC/ABC+. Since 2010 the Low-Carbon Agriculture programme has boosted productivity while expanding sustainable practices and restoration; ABC+ scales ambition for the 2020s with stronger technical assistance and investment tools.
- Productive National Forestry Programme (PNFP). Launched in 2024 to align restoration with rural livelihoods and food security; it aims to support ~30,000 families and restore ~30,000 ha by 2030, with Amazon Fund resources already mobilised and a Caixa socio-environmental window planned to expand access to credit.
- URAD (Caatinga). Since 2016, Recovery Units of Degraded Areas have tackled drivers of land degradation and climate vulnerability in the semi-arid northeast, with the goal of strengthening local institutions and social licence for restoration while longer-term impact evaluations proceed.

Box 20: State-level insurance regulation in the US incorporating adaptation & resilience

Background

The 2024 Taskforce's [Interconnected Justice](#) report notes that: "Insurance can play an important role in enabling households and businesses to recover from climate-related losses. Insurers can encourage and support investments in adaptation and resilience by aligning insurance pricing and availability with proven mitigation and adaptation measures that reduce risk and loss."

Insurance is one of the few levers that can both price climate risk and shrink it. The International Association of Insurance Supervisors (IAIS) highlights three system roles for insurers:

- (i) reveal risk (pricing, modelling, disclosure);
- (ii) reward risk-reduction (premium credits, product terms, underwriting); and
- (iii) reach underserved groups (inclusive insurance).

The UNDP Sustainable Insurance Forum (SIF) highlights emerging approaches taken by the insurance supervisors to promote climate risk assessment and adaptation measures in their jurisdictions. European supervisors (EIOPA), for example, have explored how adaptation features – such as flood-resistant doors, fire-resistant materials and alert systems – can lower loss costs and support premium rebates, helping keep coverage available and affordable while narrowing protection gaps. Stress-testing (e.g. ACPR in France) has pushed firms to assess uninsurability risk and to identify adaptation measures that dampen physical-risk shocks over time. Supervisors like FINMA encourage regular materiality assessments and scenario analysis to bring both (physical and transition) climate risk into underwriting and pricing decisions.⁷³

In its [2024 report](#), SIF finds that although insurance supervisors increasingly view transition plans as core risk-management tools, they are still at an early stage of developing regulatory/supervisory guidance on transition planning. At the corporate level, the inclusion of transition plans in climate disclosures can help improve insurers' climate risk assessments, help close insurance protection gaps and inform supervisors. However, guidelines for the insurance companies on their own transition plans are only emerging recently. While there are existing supervisory frameworks for insurance transition planning on the investment side of the business, standardised frameworks are still emerging for the underwriting portfolios. The 2025 UNEP FI Forum for Insurance Transition to Net Zero (UN FIT) [transition plan guide](#) provides a credibility framework which explicitly focuses on the interconnected drivers of resilience across the underwriting value chain: integration of adaptation, nature and just transition considerations. Under this approach, verified risk reduction measures are reflected in pricing and coverage terms; claims processes support resilient rebuilding; and group-level plans can extend to subsidiaries in more vulnerable markets. Resilience is therefore reflected in risk models, pricing and product availability.

Policy overview

In 2025, the US National Association for Insurance Commissioners (NAIC) members [reaffirmed](#) catastrophe preparedness as a core initiative, advanced the National Resilience Strategy, and announced a Disaster Preparedness Guide to compile readiness and recovery practices. States are adopting measures on consumer support, mitigation incentives, advance payments, fraud prevention, data transparency and sector learning. Among selected examples of policy and regulation that directly supports adaptation and resilience:

- **Colorado** (HB 25-1182, 2025). Colorado now requires any wildfire risk or catastrophe model used for rating or underwriting to incorporate (or otherwise demonstrably reflect) both property-specific and community-level risk mitigation (e.g. defensible space, home hardening, fuel-reduction/forest treatment). If not integrated, carriers must offer discounts; they must also disclose risk scores and provide an appeal pathway.
- **California** (catastrophe-modelling & market-availability reforms, 2024–2025). California pairs Safer from Wildfires (discounts for specified hardening and community designations) with a new regulation requiring major insurers to write in wildfire-distressed areas a relative share of market commensurate with 85% of their overall market share as a condition of using forward-looking cat models that credit mitigation.
- **Alabama** (FORTIFIED discounts + grants). Alabama law requires premium discounts/rate reductions for homes built or retrofitted to IBHS FORTIFIED standards, reinforced by the Strengthen Alabama Homes grant program that helps fund resilient rooves. Evidence from claims analysis shows FORTIFIED homes experience fewer and less severe losses, with material savings for homeowners and insurers.

⁷³ Referenced from NGFS (2025) [Note on Integrating Adaptation and Resilience into Transition plans](#), drafted as an input to the G20 Sustainable Finance Working Group, UNDP Sustainable Insurance Forum (2024) [Supervisory thinking on insurance-related climate transition plans](#), IAIS (2021) [IAIS commitment to amplify response to climate change](#).

Box 21: Urban nature-based solutions for resilient cities in South Asia

South Asia's urban centres are experiencing rapid population growth, unplanned expansion as well as mounting climate risks. Major cities like Chennai, Dhaka, Kathmandu, and Mumbai face increasingly severe flooding, heatwaves, air and water pollution, and water scarcity. Key adaptation themes covered in policy in the region include: flood and heat risk reduction (e.g. the Bangladesh Climate Change Strategy and Action Plan); restoration of biodiversity and ecosystem services (e.g. the India Forest Conservation Act); social and economic benefits of adaptation action (e.g. The Indian National Action Plan on Climate Change); and monitoring and evaluation (e.g. the Nepal Climate Change Policy) to track progress made in terms of climate adaptation. All regional climate policies and plans emphasise the urgent need for integrating resilience, nature-based solutions, and just transition principles into city development.

India. The National Action Plan on Climate Change (NAPCC) established eight missions: Solar, Enhanced Energy Efficiency, Sustainable Habitat, Water Mission, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture, and Strategic Knowledge for Climate Change. These national missions have informed respective sectoral policy. India's Sovereign Green Bond (SGrB) Framework adds a concrete finance lever: eligible use-of-proceeds include sustainable water and waste systems, as well as climate-resilient infrastructure. This opens avenues for urban wetlands, lakes and drainage upgrades to be financed as green assets. India is now in the process of developing its first NAP.

Bangladesh. Policy framework has developed since the 2009 Climate Change Strategy and Action Plan (BCCSAP) to the long-horizon Bangladesh Delta Plan 2100 and the National Adaptation Plan (2023-2050). The policies have a strong focus on urban resilience and NbS (wetlands, green corridors). Public finance mechanisms include: the Climate Fiscal Framework (2020) guiding budget tagging and prioritisation; capital market rules for debt securities (2021); and evolving sustainable bond guidance expand tools for municipalities, utilities and firms to crowd-in private capital for resilience.

Nepal. The National Climate Change Policy (2019) and the National Climate Action Plan (2021-2050) emphasise local implementation through municipal planning rules and include gender equality among the intended outcomes of climate initiatives.

Funding to operationalise these policy actions and plans, is raised through a blend of municipal budgets, international climate finance and private sector co-investment, including green bonds and public-private partnership models.

Examples of real-world Impact

In India, **the Urban Forest scheme**, launched in 2020 by the Ministry of Environment, Forest and Climate Change, aims to create urban forests and support the extension of the green cover in cities, such as, Chennai, Gurugram, Delhi, and Kochi. The scheme resulted in the sanctioning of 111 urban forests in its first 100 days and aims to establish 1000 urban forests by 2027.⁷⁴

In Bangladesh, **the Hatirjheel Area Development**, has restored 40 hectares of wetlands. The area serves as one of Dhaka's largest stormwater retention bodies. The project increased water retention capacity by removing sludge and incorporating slope protection measures, thus protecting the adjacent area from flash floods and reducing overall disaster risk in the area.⁷⁵

In Nepal, **the Green Lumbini Initiative**, designed by the WWF Nepal in partnership with Lumbini Development Trust, aims to improve the ecological integrity in Lumbini and enhance benefits to biodiversity and human wellbeing. The initiative has implemented initiatives aimed at building ecological integrity in partnership with local, national and international communities. These include: establishing and managing a peace garden; promoting environmental, cultural and religious values; conserving the sarus crane and other wildlife species and their habitats; promoting environmentally and socially responsible development; and raising conservation awareness among visitors and local people.⁷⁶

⁷⁴ India Ministry of Environment, Forest, and Climate Change. (2024). "[Ministry achieves 100-Day Target of 100 Nagar Vans with objective to Enhance Urban Greenery](#)"

⁷⁵ Climate and Development Knowledge Network. (2022). [Nature-based Solutions for urban climate resilience in South Asia: Cases from Bangladesh, India and Nepal](#).

⁷⁶ WWF (2010) [The Green Lumbini Initiative](#).

Box 22: Resilience in the Sahel Region: the regional 'Great Green Wall Initiative' to reverse land degradation

Background

The Sahel Region (comprising of Senegal, The Gambia, Mauritania, Guinea, Mali, Burkina Faso, Niger, Chad, Cameroon and Nigeria) is considered extremely vulnerable to climate change impacts. This vulnerability is compounded by ongoing conflict and increasing political and socio-economic instability in the region. Additionally, there is a growing number of internally displaced peoples across the region as a result of climate-induced migration. As the effects of climate change worsen, competition for natural resources has resulted in severe land degradation and deforestation.⁷⁷

Countries in the Sahel region are increasingly incorporating climate adaptation measures into national policy and plans. Key themes addressed in national policy (often through NAPs) include increased food security, sustainable agriculture, integrated water management, strengthening natural resource management, and fostering climate-resilience and peacebuilding efforts. There is an increasing recognition of the link between climate change and security and stability in the region. As a result, climate-resilience and adaptation measures are being increasingly integrated into broader socio-economic and social protection policy and programmes.

Policy overview

As countries in the region share natural resources across borders, such as water sources and forests, regional climate integration is necessary in the Sahel. The Economic Community of West African States (ECOWAS) has adopted a unified framework, the Regional Resilience Strategy (2024-2025), to build regional resilience to the climate change. Key aims include improving agricultural productivity, diversifying economies, strengthening social protection systems, and promoting the use of local knowledge and improved meteorological information systems. Regional bodies, such as the Climate Commission for the Sahel (CCS) and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS), play a crucial role integrated resource management and capacity building in the region. Policy outcomes are largely funded through development assistance made available through multi-lateral and bilateral financing.

The Great Green Wall Initiative (GGWI), launched by the African Union in 2007, aims to restore 100 million hectares of degraded land across the Sahel by 2030. The GGWI aims to combat biodiversity loss and reversing land degradation and desertification through the creation of an 8000km 'living wall' that spans across the region. The initiative contributes to the implementation of the Rio Conventions, while ensuring alignment with continental priorities (the African Union's 2063 Agenda), and international frameworks (the 2030 SDGs and the United Nations Decade on Ecosystem Restoration (2021-2030)).

Real world impacts

To date, the initiative has resulted in the restoration of 20 million hectares of land and the creation of 350,000 jobs through the diversification of economic activities. Revenues from income-generating activities have amounted to approximately US\$90 million across all 11 countries. These impacts are expected to increase, and by 2030, the initiative is anticipated to result in the sequestration of 250 million tonnes of carbon and the creation of 10 million green jobs.⁷⁸

The GGWI in the Sahel has inspired the development of the Southern Africa Great Green Wall (SADC GGWI) in 2015. The SADC GGWI focuses on restoring degraded land, combating climate change, and boosting economic opportunities for local communities by addressing the triple challenges of desertification, climate change and biodiversity loss. The SADC GGWI aims to restore 100 million hectares of land, sequestering 250 million tonnes of carbon, and creating 10 million green jobs by 2030. A joint SADC GGWI strategy, as well as specific GGWI national action plans, has been developed by SADC member states. The SADC GGWI builds on the Sahel GGWI concept of a living wall of trees and aims to create a 'mosaic' of holistic and integrated restoration and biodiversity projects in the SADC region. While many of these projects are still underway, tangible results can be seen in increased protection of wetlands for groundwater recharge and fish farming, training in sustainable practices like beekeeping and agroforestry, and improved awareness of drought-resistant crops.⁷⁹

The GGWI concept, in the Sahel and SADC regions, has evolved to form a political, technical, and financial partnership across various stakeholders. The Great Green Wall Accelerator, coordinated through the Pan-Africa Agency for the Great Green Wall (PAAWAG), with support from the UNCCD, aims to facilitate collaboration among donors and stakeholders involved in the GGWI and assist actors in coordinating and measuring actions. In 2021, the GGW Accelerator pledged US\$14.3 billion in new funding.⁸⁰

77 Alliance Sahel. (2025). [The Sahel and the Challenges of Climate Change](#).

78 African Development Bank (AfDB). [Great Green Wall Initiative](#).

79 IISD Earth Negotiations Bulletin – COP16 UN CCD. (2024) [Showcasing the contribution of local actors to the implementation of the Great Green Wall strategy at the community level in the SADC region and exploring synergies for expanding their reach](#).

80 United Nations Convention to Combat Diversification (UNCCD). [Great Green Wall Accelerator](#).

POLICY RECOMMENDATIONS

Policies should look at integration from multiple angles, while being clear about managing existing trade-offs. As such, adaptation measures should be designed to avoid maladaptation, while mitigation investment should be required to consider physical climate risks

Disclosure

- Corporate sustainability disclosure frameworks should integrate material impacts on people and nature, including land and water systems.
- Physical climate risk data should be decision-useful, location-specific and complemented by assessments of nature-related dependencies.
- Requirements and guidance for methodologies and scenarios should be coherent to support companies and FIs in accurately assessing their adaptation needs. They should be complemented by national climate data infrastructure.

Taxonomies

- Eligible activity lists for investment in climate adaptation and resilience, ecosystem and biodiversity protection, and conservation and social considerations regarding the just transition should be developed to determine credible resilience investments.
- Taxonomy interoperability (and streamlined DNSH criteria) should be promoted, including through a focus on key common elements, to support cross-border flows to resilience investments.

Transition plans

- Integrating adaptation, nature, land, water and just transition considerations in transition planning guidance and requirements is necessary to maximise synergies and avoid trade-offs.
- Transition plan disclosure can bring greater attention to physical risk management, incentivising target-setting and definition of metrics, for which development of national climate data infrastructure is essential.

Real economy policy

- National plans and strategies for adaptation, nature, land, water and just transition should be developed to bridge resilience between entities and society, scaling up private sector funding towards achieving national sustainability goals.
- Attracting private finance towards resilience investments requires iterative and dynamic policy development across a range of issues outside of sustainable finance policy, including strategic planning and policy coherence, regulatory alignment, insurance and risk transfer, public finance and investment.
- Inclusive and participatory policy processes, including capacity building and stakeholder engagement, should be implemented. This would help minimise cost of implementation and maximise resilience impact. Connecting expertise from climate action to existing policy delivery levers in national and international settings, such as national and international standards, measurement and accreditation bodies can help effectively connect best practices in climate governance to existing best practices and tools in policy development and delivery.

3 - CARBON CREDIT MARKETS

Integrity is a cornerstone of effective carbon credit markets. HLEG Recommendation 3 focused on integrity issues related to the voluntary use of carbon credits by non-state actors. Whilst highlighting the need to prioritise urgent and deep reduction of emissions across an NSA's value chain, it specified that credits should be used beyond value-chain-mitigation but not counted towards an NSA's interim emissions reduction required by its net zero pathway. It also detailed minimum elements of a high-quality credit and emphasised the role that high-integrity carbon credits could play in channelling financial support to developing countries and LDCs with strong environmental and social safeguards.⁸¹

This chapter focuses on the policy environment for integrity in relation to the generation, use and exchange of carbon credits across compliance and voluntary markets, as well as through international carbon markets under Article 6 of the Paris Agreement. The main obstacle to realising the full opportunities of carbon credit markets lies in potential integrity challenges in the carbon credit supply chain. Without integrity, the use of carbon credits can lead to greenwashing, preventing them from delivering meaningful climate change mitigation.

Overall, this section shows that policy frameworks for credits are rapidly evolving (two-thirds of policies have been adopted since 2020) and over half of G20 countries regulate the full spectrum of carbon credits. Despite efforts seeking to align carbon market policies, they remain fragmented across jurisdictions and internationally. Policy frameworks are increasingly incorporating more robust integrity measures, but governments can go further to support high-integrity carbon credits to reduce emissions and to scale removals. The chapter concludes with a series of recommendations on how policymakers can support integrity through policy and regulation.

OVERVIEW

While carbon credit markets have grown in recent years and contributed to climate action, HLEG identified that standards, frameworks and governance mechanisms were insufficient to ensure environmental integrity, transparency and market credibility, particularly in voluntary markets. There is now a window of opportunity for policy makers to address these issues to drive higher integrity, which could in turn support the development, exchange and use of credits by non-state actors.

This report focuses on one form of carbon trading – the exchange of carbon credits, with one credit representing one tonne of CO₂ equivalent emissions reduced or removed from the atmosphere.⁸² This type of trading is highly relevant to non-state actors, who can participate in the implementation of carbon projects, and/or in the purchase of carbon credits. NSAs – such as companies or financial institutions – can purchase carbon credits as part of their voluntary climate strategy to neutralise their residual emissions using carbon removal credits, make a wider contribution to climate action and/or comply with government carbon market regulation.

Carbon credits, when supplied, transacted and used with integrity, can provide a cost-efficient and impact-oriented instrument for non-state actors (NSAs) to deliver on climate mitigation. But if carbon credits are of low quality (see the Integrity Risks section below for mapping of quality/integrity issues), global mitigation progress will be delayed, and companies risk misleading stakeholders through greenwashing. Further, if NSAs are over-reliant on carbon credits to meet their organisational climate targets, this could risk deterring companies from internal decarbonisation efforts. Regulation can play a role in clearly defining the conditions for the corporate use of carbon credits and potentially provide incentives for high integrity use. Here, an important role for regulators is to improve transparency and integrity on the use of credits, including by clearly defining what uses of carbon credits would constitute greenwashing, and to take action against misleading claims.

Today, the landscape of carbon credit policy is dynamically evolving, with governments around the world beginning to develop and implement carbon crediting rules designed to embed integrity, transparency and certainty at the national, international and multilateral level. Regulatory developments regarding carbon credits are targeting and taking place across compliance and voluntary markets, and internationally through markets developed under Article 6 of the Paris Agreement⁸³, which have compliance and voluntary elements.

⁸¹ In the 2022 [Integrity Matters](#) report, the UN HLEG outlined in Recommendation 3: "A high-quality carbon credit should, at a minimum, fit the criteria of additionality and permanence". This recommendation also reinforced the importance of a rights-based approach, as well as necessary credit market transparency conditions. The expert group also specified that "active monitoring of the market and recalibration as needed to establish the credible credits market that will be needed over the long term to account for high-integrity removals". Additionally, Recommendation 1 specifies that to make a neutralisation claim, non-state actors should have its residual emissions neutralised by permanent GHG removals.

⁸² Carbon credits are distinct from emission permits (also known as allowances). A carbon credit represents 1 tonne of CO₂-equivalent (t CO₂-eq) of GHG emissions reduced or removed, whereas an emission permit represents the right to emit 1 t CO₂-eq of GHG emission, typically issued by regulators in alignment with an emissions cap

⁸³ [Article 6 of the Paris Agreement](#) enables voluntary cooperation so Parties can increase mitigation and adaptation ambition, while safeguarding sustainable development and environmental integrity. Article 6.2 covers transfers between Parties of internationally transferred mitigation outcomes (ITMOs) – i.e. carbon units used toward NDCs. Article 6.4 creates a centrally governed Paris Agreement Crediting Mechanism for activity-level transfers involving non-state actors. Article 6.8 provides for non-market approaches.

Box 23: Background on carbon credit markets

Carbon credit markets reward reduction, avoidance, or removal of greenhouse gases. Carbon credits are generated by comparing emissions and/or removals within the activity boundary of a project or programme with a counterfactual baseline of how large emissions would have been in the absence of the activity. Carbon credits can come from a wide range of mitigation activities, with the most common categories to date being renewable energy and carbon sequestration in forests.

There are two main types of carbon credits:

Carbon reduction: an action that reduces the amount of greenhouse gas emissions that enter the atmosphere.

Carbon removal: the process of anthropogenically removing carbon dioxide from the atmosphere and storing it for the long-term.

Carbon credits are used in both types of carbon markets:

Compliance carbon markets (CCMs) – credits are used to comply with a greenhouse gas obligation established by a regulatory body.⁸⁴

Voluntary carbon markets (VCMs) – credits are used voluntarily, for example to offset an entity's emissions.⁸⁵

For carbon credit markets to effectively support climate action, they must operate with environmental integrity. This means ensuring carbon credit transfers lead to more mitigation of greenhouse gas emissions than would otherwise have happened in their absence.

It is crucial to recognise that carbon credits should not be a substitute for direct emissions reductions in the short-to-medium term, while long-term carbon removals should serve as a catalytic tool to address residual emissions on the path to climate neutrality.

This section focuses on policies designed to enhance the integrity of carbon credits across the G20 in compliance and voluntary markets. Such policies are increasingly likely to be influenced by developments in newly operationalised international markets under Art. 6 of the Paris Agreement.

This section assesses the key integrity challenges and maps policy and regulatory developments across the G20 related to the governance of carbon credits. It then explores how policy can further support integrity by encouraging:

- The role of carbon removals in neutralisation claims and net zero targets;
- The responsible implementation/engagement with Art. 6 of the Paris Agreement which establishes rules for international cooperation and trading of carbon credits;
- The establishment of opportunities and safeguards for vulnerable countries engaging in carbon credit markets.

These areas were chosen as they are anchored in key elements of the HLEG recommendations on carbon credits. It concludes with key insights and recommendations for strengthening the policy and regulatory landscape for carbon credits to drive high integrity and align with the goals of the Paris Agreement.

INTEGRITY CHALLENGES AND DEVELOPMENTS

While a range of factors have hindered carbon credit markets in recent years – including differences between standards and market fragmentation – carbon credit integrity on the supply and demand side has been a key challenge. The section below outlines key integrity challenges and highlights a number of standards and principles developed in response.

⁸⁴ Compliance markets for carbon credits (also known as baseline-and-credit or offset systems) are small compared to compliance markets for emission permits (also known as cap-and-trade or allowance systems).

⁸⁵ In 2023, around 64% of carbon credits were issued by independent crediting mechanisms, and voluntary markets accounted for 90% of the primary demand for carbon credits. For more detail on the policy environment on carbon credit markets see OECD (2025) [Exploring governments' efforts to shape carbon credit markets: Possible actions to enhance integrity](#).

Integrity risks

The use of low-integrity (i.e. hot air) carbon credits to 'offset' emissions has led to exaggerated claims of 'carbon neutrality', increasing the risk of greenwashing by firms. Climate action has also been slowed where NSAs have offset emissions within their value chain by purchasing typically cheap credits, which they could have otherwise mitigated internally, instead of using high-integrity credits for beyond value chain mitigation. By contrast, HLEG recommends that NSAs use high-integrity credits for beyond value chain mitigation, to balance out their annual unabated emissions, or to neutralise remaining emissions at net zero, but without counting them towards the achievement of interim emission targets.

Evidence from academia and civil society reveals that project-based carbon credit mechanisms have faced systematic, wide-ranging deficiencies⁸⁶. On the supply side – or credit generation – integrity challenges persist across

both voluntary and compliance markets. These include lack of additionality and durability, sufficiently conservative baselines, robust monitoring, reporting, and verification (MRV), adequate addressing of leakage or reversal risks, and environmental and human rights safeguarding at a project site. Similarly, on the demand side – or credit use – integrity challenges affect both voluntary and compliance markets. These include double counting, transparency and traceability, complexity and market fragmentation.

These challenges have undermined confidence in the integrity of carbon credit markets. The result is a 'low integrity, low volume' equilibrium, which blocks governments, the private sector and impacted local communities from unlocking the benefits of carbon credit markets and constrains the potential of carbon credits to deliver additional emissions reductions and removals in a cost-efficient manner.

Figure 8: Dimensions of carbon credit integrity⁸⁷

Integrity dimension	Definition	Applies to
Additionality	Whether the credited activity would have occurred in the absence of carbon finance	Supply
Permanence/durability	Whether emissions reductions or removals last over time without risk of reversal, or when such risk of reversal occurs, it is duly accounted for	Supply
Leakage	Potential to increase emissions outside the project's boundaries that is measurable and attributable to the project activity	Supply
Baseline setting/over-crediting	How project emissions reductions or removals are measured against a without project scenario	Supply
Monitoring, reporting and verification (MRV)	The rigour and frequency of data collection, disclosure, and third-party checks	Supply
Social and environmental safeguards	Protections for human rights, including of Indigenous Peoples and impacted local communities, and environmental dimensions such as water and biodiversity	Supply
Market infrastructure	Rules and systems for secure issuance, transfer, and retirement of credits to support interoperability and coherence in integrity provisions.	Both supply and demand
Double counting	Risk that the same mitigation outcome is issued, claimed, or used more than once	Both supply and demand
Transparency	Clarity, traceability, and accessibility of project data, ownership and credit retirement	Both supply and demand
Paris alignment	Credit generation and use which contributes to net zero pathways, including the role of carbon removal, in an equitable manner.	Both supply and demand
Use and claims	Prioritizing urgent and deep value chain mitigation, use of high-integrity credits, accuracy of claims and substantiation with transparent reporting.	Demand

Source: Taskforce on Net Zero Policy (2025)

⁸⁶ Probst, B.S., Toetzke, M., Kontoleon, A., Díaz Anadón, L., Minx, J.C., Haya, B.K., Schneider, L., Trotter, P.A., West, T.A., Gill-Wiehl, A. and Hoffmann, V.H., 2024. [Systematic assessment of the achieved emission reductions of carbon crediting projects](#). Nature Communications, 15(1), p.9562.

⁸⁷ For more research on the key elements of integrity in carbon credit markets, refer to OECD (2024) [The interplay between voluntary and compliance carbon markets: Implications for environmental integrity](#). The [G7 Principles for High Integrity Carbon Markets](#), agreed in 2023, differentiate between supply-side integrity, demand-side integrity and market integrity. A universally agreed definition for what 'Paris alignment' means has not yet been agreed at a multilateral level, but key aspects have been explored in the [Oxford Principles for Responsible Engagement with Article 6](#) and in the [Roadmap to Net Zero Aligned Carbon Market Regulation](#) (2025)

Principles and standards for safeguarding integrity

The HLEG Integrity Matters report⁸⁸ acknowledged work underway to address persistent integrity concerns on the supply and demand side. Since the publication in 2022, the landscape has been evolving quickly, and a range of standards and principles have been developed. While differing in scope and ambition, they reflect significant efforts undertaken and propose ways forward:

- In 2023, the Integrity Council for the Voluntary Carbon Market (ICVCM) launched the Core Carbon Principles (CCP) and a detailed framework for assessing alignment at both program and methodology levels. The 10 principles across three categories – governance, emissions impact, and sustainable development – explicitly address additionality, permanence, and other supply-side carbon integrity risks. By the end of 2024, 38% of the carbon credit market was assessed for adherence to the principles, following transparent review processes. Throughout 2025, there have been regular methodology assessment updates, and the first CCP-labelled carbon credits have been issued.⁸⁹
- The establishment of Paris Agreement Crediting Mechanism (PACM) under Article 6.4 also has the potential to enhance supply-side integrity (discussed further in section below). In reference to carbon credit trading both by non-state actors under PACM and governments under Article 6.2, the “Oxford Principles for Responsible Engagement with Article 6” were published in June 2025, with guiding criteria that build on the COP25 San José Principles.⁹⁰ With the growing international carbon markets, guidance and capacity building are necessary for the development of high-integrity policy frameworks in seller countries, supported by instance by the UNDP High-Integrity Carbon Markets Initiative.⁹¹

- On the demand side, the Voluntary Carbon Markets Integrity Initiative (VCMI) Claims Code of Practice represents a widely referenced rulebook to guide accurate carbon credit-related claims which complement science-aligned emission reduction pathways, is underpinned by transparent disclosure of credit details and supported by third-party verification.⁹² Other principles and standards also provide guidance for credible carbon credit use and claims, including SBTi Corporate Net-Zero Standard and the Oxford Principles for Net Zero Aligned Carbon Offsetting (Revised 2024).⁹³
- In addition to market-focussed frameworks, governments are also engaging in this space. The UK recently launched a consultation on voluntary carbon and nature markets integrity, referencing ICVCM and VCMI⁹⁴, and with Kenya and Singapore formed the Coalition to Grow Carbon Markets⁹⁵. Nigeria finalised its Carbon Market Activation Policy⁹⁶ and the EU’s CRCE Certification Regulation has been adopted, facilitating private investment in sustainable carbon removals.⁹⁷

However, across the G20, most policies were largely developed in the absence of detailed multilateral guidance on the quality of credits during the decade between the adoption of the Paris Agreement in 2015 and adoption of standards on methodologies and removals under Art. 6.4 in 2024 at COP29. The result is that national frameworks coexist with an incomplete multilateral framework, in a quickly evolving policy environment.



88 UN HLEG (2022): [Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions](#).

89 ICVCM (2024) [Core Carbon Principles Assessment Framework and Procedure](#). Complementing the ICVCM binary assessment, the Carbon Credit Quality Initiative (CCQI) as well as carbon credit ratings agencies provide comparative assessments and ongoing surveillance, which can evidence credit quality among CCP-aligned options.

90 The [Oxford Principles for Responsible Engagement with Article 6](#) (2025).

91 UNDP (2023) [High-Integrity Carbon Markets Initiative](#). UNDP has also signed a memorandum of understanding with VCMI in 2024, and alongside Climate Focus, partnered on the VCMI's [Carbon Markets Access Toolkit](#) (2025).

92 VCMI (2025) [Claims Code of Practice](#)

93 The [Oxford Principles for Net Zero Aligned Carbon Offsetting \(Revised 2024\)](#).

94 UK DESNZ (2025) [Voluntary carbon and nature markets: raising integrity - consultation document](#). 17 April 2025.

95 [The Coalition to Grow Carbon Markets](#) is “a first-of-a-kind government led initiative to strengthen voluntary demand for carbon credits”, supported by a Secretariat hosted by VCMI

96 The first draft of the [Nigeria Carbon Markets Activation Plan](#) has been released in April 2025, due to be approved by Federal Executive Council as of November 11, 2025. The development of NCMAP [has been supported](#) by the Africa Climate Markets Initiative, launched at COP27, by Global Energy Alliance for People and Planet, Sustainable Energy for All, and the UN Economic Commission for Africa. [ACMI activities](#) include engagement with 6 other countries in development with CMAPs.

97 The EU CRCE “marks an exemplary step” in defining standardized quality criteria, rooted in science and robust MRV – Net Zero Asset Owner Alliance (2025) [How to Get to the Net? A discussion paper on carbon dioxide removal](#).

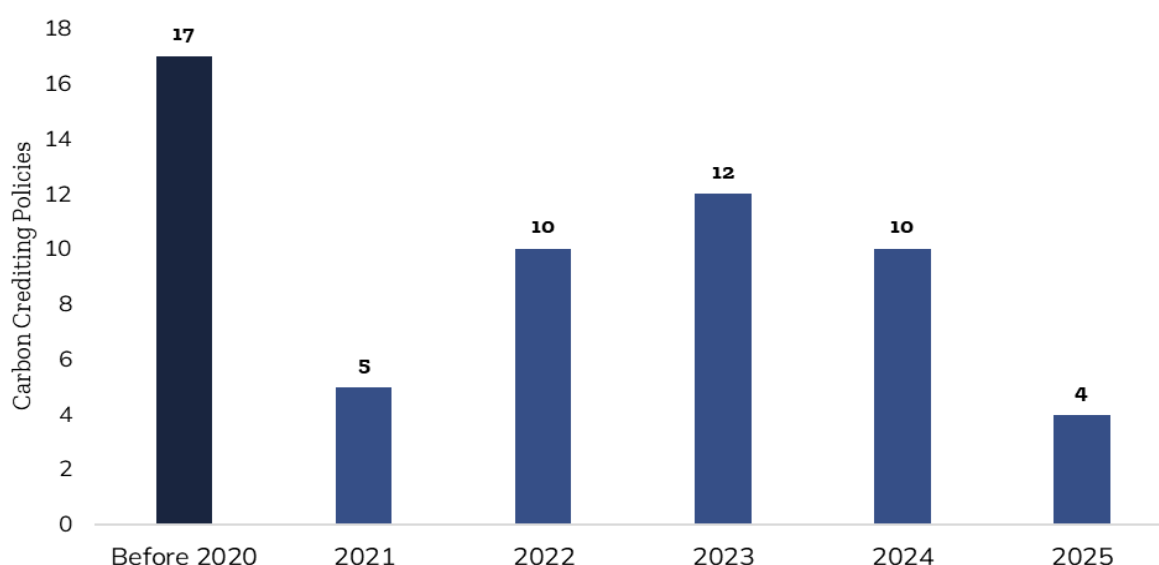
THE STATE OF CARBON CREDITS POLICY AND REGULATION

National policy has a key role to play in supporting high-integrity carbon credits – either by regulating or providing clear guidance on the supply, use, accounting and disclosure of compliance or voluntary credits.

The Oxford Climate Policy Monitor shows that among the G20 countries, 58 policies relevant to carbon crediting rules are in place.⁹⁸ The survey covered direct regulations around the generation, use and exchange

of carbon credits in both voluntary and compliance markets across the G20 members plus several other countries (37 jurisdictions), and one sub-national jurisdiction (California). Legal provisions on carbon credits which may be found in financial or other regulation may not be captured.⁹⁹ Reflecting the recent spate of development in this domain, two-thirds of regulations in the G20 have been implemented since 2020.

Figure 9: The uptake of carbon crediting policies across the G20



Source: Oxford Climate Policy Monitor, 2025

⁹⁸ The [Climate Policy Monitor](#) survey is an annually updated dataset published by the Oxford Climate Policy Hub. In 2025, the Monitor granularly [tracked and assessed](#) climate policies in six issue areas or domains across 37 jurisdictions, of which one domain covered rules around the generation, use and exchange of carbon credits, across both compliance and voluntary markets. The survey is answered by a global legal expert network powered by local law firms in each of the identified jurisdictions. The data collection process begins with a scoping stage where climate domains are defined and law firms are asked to identify relevant policies within these domains in their respective jurisdictions. The Hub then determines whether these policies are consistent with domain definition and sends out detailed survey questionnaires for each in-scope policy, comprising 60-65 data points per policy. Once completed surveys are received from the legal expert network (typically two law firms per jurisdictions), the Hub team then compares responses and arrives at a final 'harmonised' version which forms part of the annual dataset.

⁹⁹ This report draws on findings from the Oxford Climate Policy Monitor for carbon crediting rules in G20 jurisdictions. The scope of the survey was restricted to direct regulations which explicitly created rules or provided guidance for regulating carbon credits and was collected through legal experts in participating jurisdictions. This data does not include enabling or indirect regulations such as environmental and land management laws or financial regulations acts to which carbon credits may be indirectly subjected. The jurisdictions include Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, the European Union, California, Kenya and Nigeria (latter two being part of the African Union, which is a G20 member since 2023). Other than carbon crediting policies, the Oxford Climate Policy Monitor also tracks and surveys climate-related policies in five other domains: disclosure, transition planning, prudential tools, public procurement, and methane abatement.

Common elements between G20 carbon credit policies:

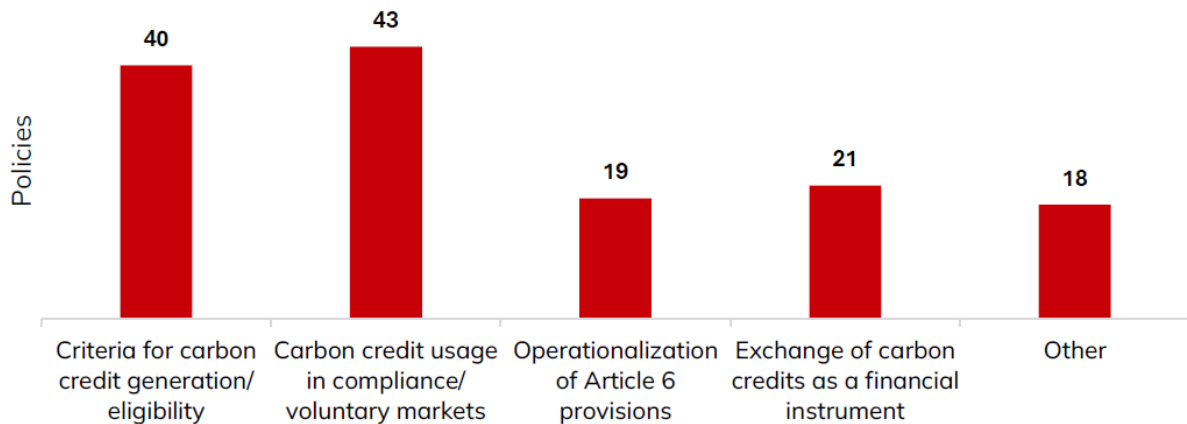
Most carbon crediting policies help to define criteria for carbon credit generation and their eligibility for use in either voluntary or compliance markets as ‘offset credits’. For instance: carbon credits can be used in some compliance market schemes to offset a portion of compliance costs imposed on entities under a carbon tax or emissions trading scheme (e.g. South Africa’s carbon tax law). In the voluntary market, policies set out guidelines or principles for responsible use of credits by non-state actors (for instance: the UK Principles for Voluntary Carbon and Nature Market Integrity).

A handful of policies regulate the exchange of carbon credits as a financial instrument. This is consequential insofar as defining the legal status of carbon credits (as a security or financial product) subjects it to an entire subset of financial regulations, including investor protection and anti-fraud rules.¹⁰⁰ For instance: Indonesia’s Financial Services Authority Regulation No. 14 of 2023 on Carbon

Trading through the Carbon Exchange explicitly classifies carbon credits as securities (efek), subjecting them to capital market rules on listing, trading and retirement. It further establishes a formal carbon exchange (Bursa Karbon) and lays out rules for organisers of the carbon exchange.

Most carbon crediting policies help to define criteria for carbon credit generation and their eligibility for use in either voluntary or compliance markets as ‘offset credits’. For instance: carbon credits can be used in some compliance market schemes to offset a portion of compliance costs imposed on entities under a carbon tax or emissions trading scheme (e.g. South Africa’s carbon tax law). In the voluntary market, policies set out guidelines or principles for responsible use of credits by non-state actors (for instance: the UK Principles for Voluntary Carbon and Nature Market Integrity).

Figure 10: Carbon crediting policies by objective



Source: Oxford Climate Policy Monitor, 2025
Note: A policy can have several overlapping objectives.

New regulations govern the entire life cycle of carbon credits, establishing criteria for generating high-integrity credits, often laying out widely accepted principles of additionality, permanence, quantification of emissions reductions and avoidance of double-counting.

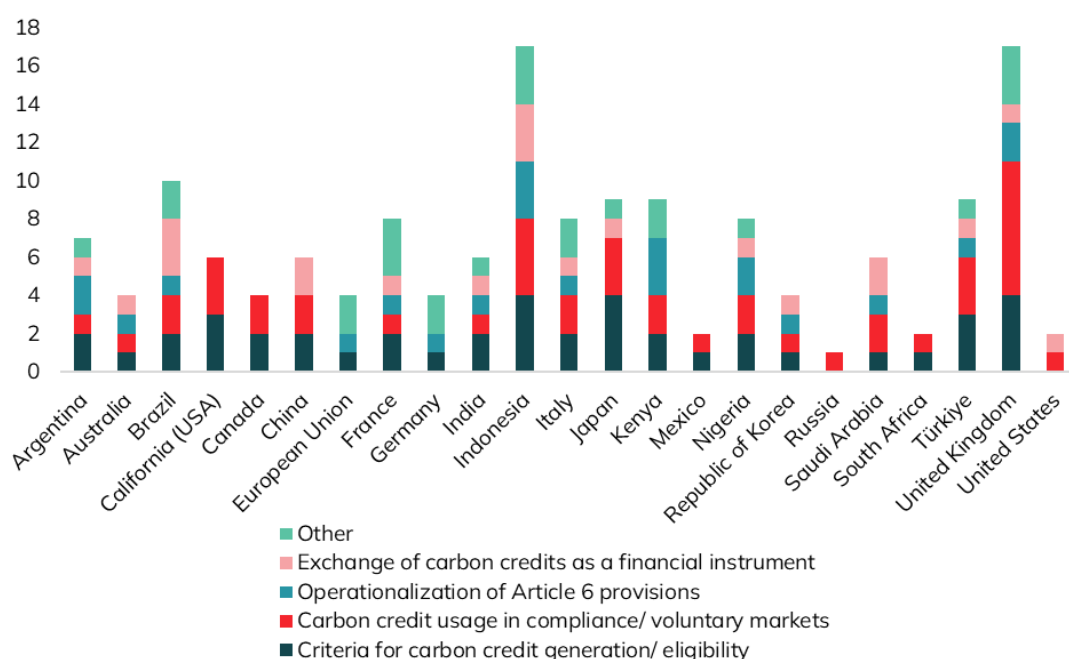
Some jurisdictions have established their own methodology for the generation of carbon credits (such as Australia’s Carbon Credits Unit (ACCU) Scheme under the Carbon Credits (Carbon Farming Initiative) Act of 2011, China’s Certified Emission Reduction (CCER) Programme, and Canada’s Greenhouse Gas Offset Crediting System.

Over half of the G20 countries and representative jurisdictions (Argentina, Australia, Brazil, France, India, Indonesia, Italy, Japan, Kenya, Nigeria, Republic of Korea, Saudi Arabia, Turkey and UK) covered the entire spectrum of regulations governing the generation, use and (international) exchange of carbon credits.¹⁰¹

¹⁰⁰ Legal treatment of carbon credits varies by jurisdiction and market segment. UNIDROIT, the independent intergovernmental organisation with a focus on private law, has established the [Project on the Legal Nature of Verified Carbon Credits](#), "to provide guidance on private law issues as to enhance confidence in VCC transactions [...]", in 2022. A Working Group is established, with six sessions having taken place. At the fifth session in July 2025, the Working Group published draft VCC Principles. The final proposal is scheduled to be submitted in 2026.

¹⁰¹ The spectrum of carbon credit regulation is addressed differently in different jurisdictions – within some jurisdictions a framework carbon market law governs the spectrum (e.g. Brazil, Australia, Indonesia) whereas in others they are addressed in different regulations.

Figure 11: Carbon crediting policies by jurisdiction



Source: Oxford Climate Policy Monitor, 2025

Reflecting the emerging nature of carbon crediting rules and their varying scope and functions, there are broad differences in the regulatory approaches within these policies, some of which are highlighted below.¹⁰²

Governance of credits

- Two-thirds of regulations in 20 (out of 23) jurisdictions have set up national public registries and require the issuance, trading and/or retirement of carbon credits to be tracked on these registries. However, less than one-fifth of regulations in 10 jurisdictions¹⁰³ incorporated explicit provisions to tackle the problem of double counting of credits, encompassing double claiming and double use.¹⁰⁴

Generation and use of credits: social integrity safeguards

- Provisions to safeguard the social integrity of carbon credits are either rather weak or non-existent in the surveyed regulations. Only nine (less than one-fifth) of all policies across seven jurisdictions (Australia, Brazil, China, India, Kenya, Nigeria, and the UK) require any social integrity criteria.

Third-party verification

- 32 of the 58 surveyed policies across 18 jurisdictions recommend or require criteria for the third-party certification of carbon credits, such as qualifications for validation and verification bodies (VVBs), standards, conflict of interest (in cases where the certifier is hired by the project developer) and so on.

Use of standards

- The use of private standards and methodologies for certifying credits (such as the Verified Carbon Standard (VCS) by Verra or Gold Standard) is not explicitly referenced in most regulations. However, alignment with international standards is more implicit and subject to approval by national accreditation agencies or the ministry implementing the regulation, in some cases.

International trading of carbon credits

- Almost half the surveyed regulations (27 out of 58) covering 14 jurisdictions allow for the international trading of carbon credits.¹⁰⁵ The use of corresponding adjustments (when transferring mitigation outcomes under Article 6 of the Paris Agreement) is explicitly addressed in half of these (14 out of 27) across 10 jurisdictions.

Policies and regulations governing the generation and use of carbon credits are still relatively nascent but evolving rapidly in response to persistent integrity challenges. There is also development around market infrastructure and data standardisation (see G20 example below). Key questions remain, however, about the role of carbon claims and carbon removals, international trading and social safeguards – these are explored in the sections that follow. A final under-represented integrity feature in crediting policies relates to credit pricing. While guidance on prices is not explicitly covered in regulation, this is crucial as low prices originating from lower investments in the credit's construction (MRV, quality) can create perverse incentives to use unmonitored or low-quality carbon credits over mitigation and can deter the supply of high-quality credits – pricing measures should therefore be actively sustained.

¹⁰² World Bank (2021) [A Guide to Developing Domestic Carbon Crediting Mechanisms](#) explores different jurisdictional approaches to developing a carbon crediting mechanism, including the reliance on existing crediting mechanisms or outsourcing or replicating their features.

¹⁰³ Australia, Brazil, China, Indonesia, India, Italy, Japan, UK, California (US), South Africa.

¹⁰⁴ Preventing double use of carbon credits includes provisions that prevent transfer, retirement, or cancellation of a carbon credit once it has been cancelled or retired once. Preventing double claiming of carbon credits encompasses procedures to keep or cancel the carbon credit when the emission reduction activity is claimed by more than one entity.

¹⁰⁵ The relevant survey question asks does the policy tool allow for the international trading of carbon credits.

Box 24: G20 SFWG's common carbon credit data model

The G20 Sustainable Finance Working Group brings together member countries, international organisations and technical experts to align global financial systems with climate and sustainability goals. It focuses on improving transparency, mobilising private capital and building frameworks that enable sustainable investments. In 2025, the South African G20 Presidency identified “Unlocking the Financing Potential of Carbon Markets” as a priority for discussion in the SFWG. In particular, the focus was on data standardisation and the market infrastructure required to scale carbon markets and reduce frictions in cross-border trade. The Climate Data Steering Committee (CDSC) Secretariat developed the Common Carbon Credit Data Model (CCCDM) as an input to the SFWG.

The CCCDM is designed as a voluntary common foundation for data standardisation, intended to support a broad set of stakeholders across the public and private sectors as they evolve approaches to recording, sharing and disclosing carbon credit data. It covers the entire carbon credit life cycle end-to-end and is structured accordingly – from project design and development to credit issuance, transactions and ultimately retirement. The distinctive contribution of the data model is the proposed introduction of a system of ecosystem-wide carbon credit identifiers or projects and credit batches, which is critical for enhancing traceability of credits and reducing the risk of double counting.

If widely deployed, the CCCDM could have significant benefits including enabling interoperability, strengthening emissions accounting and reducing the risk of double counting, supporting policy makers to set up registries and reduce transaction costs.

Policy trends around disclosure of credit use and claims

National policies also have a role to play in ensuring non-state actors properly disclose their use of offsets and neutralisation claims to curb greenwashing and improve transparency. Under IFRS S2, entities that set a net GHG reduction target must disclose their planned use of carbon credits (extent, verification scheme, type and any integrity factors).

The survey of national policies shows that 16 jurisdictions recommend or require entities to disclose their offsetting purchases: Australia, Brazil, Canada, China, EU, France, Germany, Italy, Indonesia, Japan, Kenya, Mexico, Turkey, UK, California, South Africa. This includes offsetting done using the purchase of either reduction or removal credits, as most policies do not preclude the use of one of the two. However, fewer policy instruments across 12 jurisdictions recommend or require offsets purchased on the voluntary carbon market to be certified (Australia, Brazil, EU, France, Germany, Italy, Indonesia, Japan, Kenya, Mexico, Turkey, California), and fewer still (in 10 jurisdictions) recommend or require the disclosure of specific certifications and/or standards for the use of GHG offsetting or removals (Australia, Brazil, EU, France, Germany, Italy, Indonesia, Mexico, Turkey, California). Disclosure requirements are highly convergent around the IFRS S2 for instance in Japan and Turkey.¹⁰⁶

Box 25: Tightening frameworks for claims

California's Voluntary Carbon Market Disclosures Act (AB 1305) goes a long way in preventing greenwashing by requiring any entity operating in California and involved in the generation, use or exchange of carbon credits, or for making any associated claims thereof about being ‘net zero’ or ‘carbon-neutral’ to disclose extensive information on their website about the specific protocol used to estimate emissions reductions or removal benefits, the use of third-party validation or verification of the project attributes, project location and durability, and so on. Non-compliance results in daily monetary penalties for each violation.

In the EU, the Corporate Sustainability Reporting Directive (CSRD) and its associated European Sustainability Reporting Standards (ESRS) require detailed disclosures on carbon credits which go beyond IFRS S2, while the EU Empowering Consumers for the Green Transition Directive provides clear guardrails for climate-related claims, supported by the forthcoming Green Claims Directive. If adopted, this tool will restrict or ban vague offset-based claims such as ‘carbon-neutral’ unless these can be substantiated with high-integrity removal credits. The Green Claims Directive also differentiates between removal and reduction in its reporting obligations.

Overall, developments point toward tightening frameworks nationally and globally in which carbon offsetting claims must increasingly be transparent, verifiable and secondary to real emissions reductions. Minimum quality requirements (both on supply and demand) can guarantee that cost-efficiency in the choice of offsets is also rooted in actual, monitorable mitigation or neutralisation outcomes and co-benefits, and not on price competitiveness only.

¹⁰⁶ IFRS S2 requires an entity that has a GHG emissions target to disclose material information on it, including whether the target is a gross or a net GHG emissions target. If an entity has a net GHG emissions target, the entity is also required to separately disclose its associated gross GHG emissions target. Net GHG emissions targets are the entity's targeted gross GHG emissions minus any planned offsetting efforts, and disclosures of these should include additional information, such as planned use and type of carbon credits to offset GHG emissions. An example is Japan's Sustainability Disclosure Standards, which require companies using carbon credits to disclose the method and extent of reliance on the credits in achieving net greenhouse gas emissions targets. This includes the name of the third-party scheme under which the carbon credits have been certified or verified, and the type of carbon credits, including information on: Whether the offsets are nature-based or technological, and whether the offset is achieved through carbon reduction or removal. Similarly, Turkey's Determination of Turkish Sustainability Reporting Standards specifies that entities must disclose their reliance of carbon credits for achieving net GHG emissions reduction targets, including the type of carbon credits used and their verification by third-party programs (TSRS 2).

CARBON DIOXIDE REMOVALS

Carbon removal – the net in net zero – will need to play an essential role in avoiding catastrophic climate outcomes.¹⁰⁷ Alongside deep, rapid and sustained emissions reduction, reducing the end-of century warming will require a significant scaling of permanent carbon removals to counterbalance residual emissions, while removals via afforestation play a critical near-term role in mitigation pathways consistent with limiting warming to 1.5°C.¹⁰⁸ This is relevant to HLEG Integrity Matters report – rooted in science-based emissions pathways – which had a focus on the use of permanent removals to counterbalance residual emissions or unabated annual emissions beyond NSA's net zero pathways, emphasising durability and additionality. Other emerging guidance on offsetting also suggests a shift towards increasingly durable carbon removals to 'offset' residual emissions i.e. emissions that NSAs cannot internally abate. High-integrity carbon credit frameworks therefore need to consider the distinction between credits with different levels of durability, including between reductions and removals, but also how to enhance durability of removals for neutralising residual emissions.

Importantly, only Carbon Dioxide Removal which anthropogenically capture carbon from the atmosphere and durably it can be used to offset residual emissions (e.g. qualify for neutralisation). Reduction and avoidance play an important role in both compliance and voluntary markets to support decarbonisation. However, these activities are not carbon negative and therefore cannot counterbalance the carbon released into the atmosphere.¹⁰⁹

To meet the Paris Agreement goals, an additional 7-9 gigatonnes (Gt) of removals is needed annually by mid-century, growing from 2.1Gt currently¹¹⁰. A diverse mix of solutions is required, but current global capacity remains limited, raising equity concerns related to who has the capacity and who has the responsibility to pay for the scale of CDR needed towards global net zero and a net-negative future beyond that. Crucially, CDR must complement, not replace, deep emissions reductions.

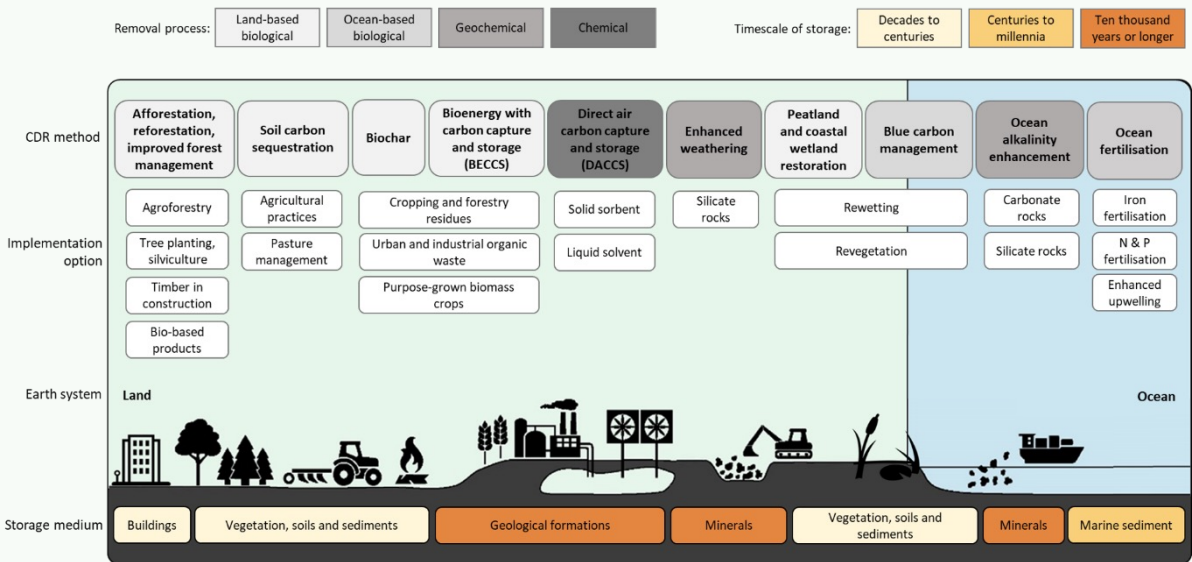
CDR methods fall into two principal categories: conventional and novel – described below.

Box 26: Types of carbon removals and potential integrity issues

Conventional CDR includes nature-based approaches and activities to enhance carbon sinks such as reforestation, sustainable agriculture and soil restoration, and wetland restoration, currently accounting for nearly all of the 2Gt of CO₂ removed annually¹¹⁰. These methods are cost-effective, offer near-term mitigation and ecological co-benefits but are harder to monitor and the risk of carbon reversal¹¹¹ is higher.

Novel CDR typically involves more engineered solutions such as direct air carbon capture and storage (DACCS) or biochar. These methods are more durable (often called 'permanent') and easier to monitor but are expensive, energy-intensive, and not yet scalable. They currently contribute just 0.0013Gt of CO₂ annually – less than 0.1% of total CDR¹¹⁰. There is concern that overreliance on the presumed future availability of these technologies could delay urgent emissions cuts.

Types of carbon dioxide removals



Source: IPCC Sixth Assessment Report¹¹²

¹⁰⁷ Carbon dioxide removal (CDR) is human activity that captures carbon dioxide from the atmosphere and stores it long term (decades to millennia). According to the IPCC, CDR must follow three key principles: (1) the carbon dioxide captured must come from the atmosphere, not from fossil sources, (2) the subsequent storage must be durable, such that carbon dioxide is not soon reintroduced to the atmosphere, (3) the removal must be a result of human intervention, additional to the Earth's natural processes. [State of Carbon Dioxide Removal](#) (2024)

¹⁰⁸ IPCC (2018), [Special report on global warming of 1.5°C](#). See Climate Analytics (2025) [Why stronger 2030 targets along with 1.5°C-aligned 2035 targets are essential](#), and Climate Analytics (2024) Ganri, G., Gasser, T., Bui, M. et al. [Evaluating the near and long-term role of carbon dioxide removal in meeting global climate objectives](#)

¹⁰⁹ NZAOA (2025), [How to get to the Net? A discussion paper on carbon dioxide removal](#)

¹¹⁰ State of CDR Report: Fuss, S., Johnstone, I., Höglund, R., Walsh, N (2024). [The State of Carbon Dioxide Removal 2024 – 2nd Edition](#) (eds. Smith, S. M. et al.).

¹¹¹ Reversals occur when stored carbon is released back into the atmosphere through unintentional factors such as wildfire or through intentional factors such as logging. Often standards require project developers to set aside a portion of credits in a buffer pool as insurance against reversals.

¹¹² IPCC (2018), [Sixth Assessment Report](#).

CDR in carbon credit markets - the state of policy development

Investments in different types of carbon dioxide removal applications, from nature-based solutions to novel methods, are present in the global market for carbon credits and several companies have demonstrated interest in investing in high-quality CDR credits. On the other hand, a growing number of jurisdictions are currently in the process of integrating CDR credits in their national climate policy toolbox.

Global policy trends:

- **Japan:** The first compliance phase of its GX-ETS (starting 2026) permits up to 10% offset via carbon credits.
- **China:** Relaunched its voluntary carbon market (CCER market) in 2024, including CDR credits in carbon pricing instruments.
- **Brazil:** CDR credits included in ETS legislation and national voluntary carbon market; regulated by a national authority.
- **New Zealand:** Under the ETS, landowners can opt to receive ETS units for eligible post-1989 afforestation and face a mandatory unit liability for deforestation of pre-1990 forest. No ETS units are issued for management of pre-1990 forest.¹¹⁵
- **California:** accepts carbon credits for compliance use under its cap-and-trade ETS.¹¹⁶
- **EU:** The European Commission is setting up a VCM for European removals and public purchase programme for durable CDR tech (DACCS, BECCS).
- **UK:** Strategy in development will integrate CDR into national ETS. While maintaining its gross emissions cap, it will allow removals that have taken place in the UK and are 'highly permanent'.

While forest-based CDR applications have been long included in countries' climate plans and reporting, novel CDR approaches are still considered niche, and despite some pilot experiments, there is little evidence of jurisdictions currently including novel CDR approaches in their UN-level climate plans (NDCs and Long-Term Strategies under the Paris Agreement). However, evidence from policy development and implementation in major markets around the world – including China, Japan, the EU and Brazil – suggests growing interest in integrating conventional or novel CDR credits in national compliance carbon market mechanisms.

Key insight: CDR is increasingly integrated in some form in carbon credit markets and CDR credits have already catalysed some finance for durable credits with a low risk of reversal. This is significant considering that these types of removals cost on average 100-times more than emissions reduction credits (while conventional carbon removal on average costs three times more than traditional emission avoidance and reduction carbon credits)¹¹⁷. However, these investments are small in volume compared to CDR investments needed to meet Paris goals and, for the most part, the price signal for CDR in credit frameworks is too low for novel or more durable CDR applications. To date, voluntary investment in CDR has been catalytic in driving the development of more durable CDR and, while government policy has developed, more action is needed to support the necessary scaling.

Overall, there is a need for more globally recognised standards for CDR integration, underlining the role of the UN and IPCC in enhancing confidence through guidance on benchmark methodologies. National governments also have key opportunities to address integrity issues related to all types of CDR approaches in the development of national regulations around carbon credits and more broadly in their incentive frameworks for CDR, including attention to the equitable scaling of high-integrity nature-based solutions.

Neutralisation claims, CDR and article 6

While offsetting refers to compensation for greenhouse gas emissions through funding of removals or reductions elsewhere, neutralisation refers to removing and storing emissions to counterbalance the residual emissions which cannot be eliminated. This must be done on a durable basis with low risks of reversal. As neutralisation of residual emissions is essential for achieving net zero, governments and companies alike have a responsibility to ensure it occurs, by supporting investment in high quality CDR removal projects (those proved to be removing GHGs based on solid methodologies), whilst respecting the mitigation hierarchy.

A 'neutralisation outcome' is a specific type of mitigation outcome that directly addresses the source of ongoing emissions (whether fossil or biogenic in origin). Standards and initiatives aimed at corporate behaviour in this field are increasingly oriented towards neutralisation claims that could (and should) come on top of existing reductions (often in

the region of 90-95% of existing emissions, depending on economic activity). Reduction projects are vital to tackle emissions, whilst early investment in CDR remains urgent to support the development of removals at scale needed as we approach net zero. As interest and urgency grow, it's important to establish clear rules and safeguards so that organisations neutralising their emissions through investments in CDR-based credits can make credible claims about their progress to net zero, giving them confidence to invest.

Article 6 (discussed below) creates new opportunities and risks for governments and corporates on neutralisation outcomes. Against this backdrop, Oxford has developed new principles for how actors should conceptualise the relationship between Article 6 and neutralisation outcomes to forge a clear pathway to a durable net zero.¹¹⁸

¹¹⁵ Subject to restrictions on ETS entry for new exotic forests under "The Climate Change Response (Emissions Trading Scheme - Forestry Conversion) Amendment Act" which came into effect on 31 October 2025.

¹¹⁶ As of 2025, entities in California's cap-and-trade program can use offset credits to meet up to 4% of their compliance obligations. This limit will increase to 6% starting in 2026. Also starting in 2026, for every offset credit used, entities must retire an equivalent number of allowances from the following year's budget, effectively placing offsets "under the cap." This change is designed to ensure that offsets do not undermine the overall emissions cap. No more than half of the offsets used can come from projects outside California.

¹¹⁷ State of CDR Report: Fuss, S., Johnstone, I., Höglund, R., Walsh, N. Chapter 4: The voluntary carbon market in [The State of Carbon Dioxide Removal 2024 – 2nd Edition](#) (eds. Smith, S. M. et al.). (2024)

¹¹⁸ These principles including a focus on governance, quality standards (such as that developed under the EU's Carbon Removal Certification Framework), accountability of use, and frictionless international cooperation. See Johnstone, Thyblad, Brown (2025) [Neutralisation Claims in the Era of Article 6](#)

IMPLEMENTATION OF ARTICLE 6: INTERNATIONAL CARBON MARKETS

HLEG Recommendation 3 underlined the role non-state actors can play in delivering faster emissions reductions and the Sustainable Development Goals including by using carbon credits. However, at the time it was developed, HLEG noted that no system or standard was in place to define and ensure credit integrity, although it did note work on evolving standards.

Recent developments both at the jurisdictional and, importantly, at the UNFCCC level have created a more encouraging policy environment. Non-state actors are now looking at new methodological standards and rules on registries approved under Article 6 of the Paris Agreement as a possible benchmark for credit integrity, and for labelling their climate action as UN-aligned. However, part of the UNFCCC's work is still in the making, and we reflect on navigating the developments at COP 29 and subsequently.

Carbon markets under Article 6 of the Paris Agreement, if properly developed, can apply the lessons learned from past experience with carbon market mechanisms and deliver high-integrity outcomes. These frameworks, especially the Paris Agreement Crediting Mechanism (PACM), can represent a pivotal starting point for enabling international cooperation on climate mitigation supporting countries in increasing the ambition of their NDCs, and facilitating public and private entities to work together to mobilise critical finance towards mitigation and adaptation goals.¹¹⁹

The growing market and policy attention to Article 6¹²⁰ transactions relies on a multifaceted array of possible end uses of credits under UN frameworks which are expected to be more credible (and at least better traced and monitored) than others across different credit markets, based on existing and evolving UN-level methodologies. COP29 was a significant step forward for Article 6, with key developments giving investors, developers and governments greater confidence in progress towards a functioning international carbon credit market through agreement on common integrity baselines and mechanisms.

Box 27: Articles 6.2 & 6.4: A baseline for higher integrity

In the international arena, current rules established under Article 6.2 and 6.4 have created a baseline, leaving implementation pathways at the discretion of governments and users.

Article 6.2 specifically allows countries to trade emissions reductions and removals as 'internationally transferred mitigation outcomes' (ITMOs), provided robust accounting and 'corresponding adjustments'¹²¹ are applied to avoid double counting. **Article 6.4** establishes a centralised UN-supervised crediting mechanism (PACM), designed to generate verified emission reductions and removals from global projects for use by governments or companies.¹²²

Together, these provisions aim to mobilise finance for cost-effective mitigation, raise global ambition and safeguard high-integrity carbon markets. Additionally, Article 6 transactions can support voluntary corporate net zero goals, with different rules depending on authorisation status and credit type.

For key criteria, such as additionality, robust baseline setting and permanence, Article 6.2 rules only include generic principles that leave considerable discretion to participating Parties on how to enact them. However, Article 6.4 promises to deliver on more standardised and robust rules, modalities and procedures (RMPs) guiding carbon credit transactions.

Gaps and potential for loopholes: Despite the progress made by evolving PACM RMPs and emerging UN-level standards, there is still room for improvement in Article 6 frameworks themselves and their translation at a national level. Policy gaps that could undermine integrity and lower overall climate ambition exist under both Article 6.2 and the PACM. Specifically, there is a concern that buyer countries or NSAs could use Article 6 mechanisms (ITMOs or MCUs) to claim progress while continuing high-emissions activities, creating emissions reductions only 'on paper'. There's also a risk that seller countries reduce NDC ambition to sell Article 6 credits internationally. This would mean cooperation under Article 6 could risk locking in low-ambition mitigation pathways or crowding out climate finance – for example by claiming that delivering finance under Article 6 fulfils countries' obligations under the New Collective Quantified Goal (NCQG).

Therefore, it is important to ensure international carbon markets drive genuine climate action and provide real incentives for enhancing ambition. Strong safeguards, robust oversight and clear principles for responsible engagement can drive integrity and ambition in the implementation of Article 6.

The [Oxford Principles for Responsible Engagement with Article 6](#) aim to bolster existing rules and guidance on Art. 6.2 and 6.4, providing guidance to support actors in engaging responsibly and effectively in this international carbon market, with the goals of ensuring climate integrity, upholding high environmental and social integrity, and enhancing ambition, and building on the San José principles.¹²³ Specific criteria are identified for host countries, buyer countries, buying entities, activity developers, and intermediaries, to achieve three principles: Paris-aligned use of mitigation outcomes, Generation of high-quality mitigation outcomes, and Robust accounting and transparency in engaging with Article 6.

119 [Paris Agreement](#) (2015) Article 6.1: Parties may cooperate voluntarily to raise ambition in mitigation and adaptation, and to promote sustainable development and environmental integrity. Article 6.2 and 6.4 cover market-based approaches, while 6.8 covers non-market approaches.

120 In contrast to the Article 6.4 pathway, which creates a UN-based crediting mechanism, Article 6.2 allows for cooperative approaches in the trading of internationally transferred mitigation outcomes (ITMOs), which might not necessarily take the form of carbon credits.

121 Corresponding adjustments essentially require any country that has transferred a mitigation outcome to another country to 'uncount' it from its own NDC.

122 Options are available for crediting with or without corresponding adjustments; in the latter case, credited mitigation (Referred to as Mitigation Contribution Units, or MCUs) can be used domestically or for voluntary markets.

123 [San José Principles for High Ambition and Integrity in International Carbon Markets](#) (launched at COP25, endorsed by 30+ countries).

Policy Progress on Article 6.4

Key decisions on methodological standards and registries on the PACM were made during COP29 in Baku, marking a pivotal moment in its journey to full operation. Specifically, a set of standards adopted by the Article 6.4 Supervisory Body was endorsed on methodologies and activities involving CDR. They addressed key challenges including over-crediting, liability issues and potential CDR reversals, supporting the principle of enhancing ambition and providing investors and governments with better guarantees.

Since then, the Supervisory Body has been steadily elaborating detailed regulations, including on standards for additionality, measuring actual emission reduction impact, measuring leakage and suppressed demand. Recently, the SBM has considered standards addressing non-permanence and reversals, leaving determination of reversal risk and obligations on post-crediting monitoring to a case-by-case assessment. These were the subject of significant debate regarding the potential impacts on some types of projects, particularly on NBS projects. The Supervisory Body's October 2025 decision not to adopt a unique detailed standard for all types of projects left room for further methodological refinement. It is hoped that the coming year will see further development towards first issuances of credits under the PACM.

In addition to developments in the multilateral arena several countries are implementing policies aimed at operationalising Art. 6 mechanisms, such as by setting up Designated National Authorities (DNAs) to implement Art. 6 provisions, establishing rules for authorising corresponding adjustments under Art. 6.2 and PACM methodologies under Art. 6.4. Increasingly, countries are also developing bespoke frameworks on their engagement with Article 6 mechanisms.¹²⁵

Continued progress on Article 6 standards and the responsible use and governance of Article 6 transactions by participating Parties is vital to rebuild trust in this evolving international carbon market, ensuring that it addresses lessons learned from other such mechanisms.

Box 28: International Civil Aviation Organisation's (ICAO) CORSIA Scheme

ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) scheme¹²⁶ is another type of international carbon market, significant in its global sectoral focus. It will enter its mandatory Phase II in January 2027 and will cover most global flights – exceptions include Least Developed Countries and Small Island Developing States. CORSIA credits, called Eligible Emission Units (EEUs), must meet eligibility criteria, including the start date of the crediting project (2016 or later); moreover, units should also be accompanied by a Letter of Authorisation (LoA), the same host-country-level authorisation process envisaged under Article 6 of the Paris Agreement for the transfer of ITMOs. CORSIA has the potential to represent a significant source of demand for offset credits globally, but uncertainties on the number of key jurisdictions involved creates uncertainty for both project developers, and end buyers. It signals some increasing convergence between frameworks globally.

From an equity lens, the responsible use of Article 6 market-based frameworks can ensure that the burden of implementing ambitious mitigation activities as well as the benefits they generate are meaningfully shared with developing countries, typically the largest suppliers of international carbon credits.

Opportunities and safeguards for vulnerable countries and least developed countries

HLEG Recommendation 3 emphasised that high-integrity carbon credits are one mechanism to facilitate much-needed financial support towards decarbonising developing country economies and emphasised a rights-based approach and attention to positive social and environmental co-benefits in credit standards and frameworks.

As the global carbon market architecture evolves, it is increasingly clear that opportunities and risks are unevenly distributed. Least developed countries (LDCs) and other climate-vulnerable nations face unique challenges as carbon credit markets – without appropriate safeguards – risk reinforcing existing inequalities and exposing communities to additional social and environmental pressures.

¹²⁵ See [Ghana's framework on international carbon markets and non-market approaches](#) and [Zambia's Carbon Market Framework](#)

¹²⁶ International Civil Aviation Organization (ICAO) [Carbon Offsetting and Reduction Scheme for International Aviation \(CORSIA\)](#)

LDCs face deep structural barriers that limit their ability to fully benefit from participation in carbon credit markets. At present, financial flows remain modest, particularly toward upstream actors and local communities, and market activity is concentrated in a small number of countries, leaving many LDCs excluded due to weak institutional capacity, limited project development expertise, and the absence of robust monitoring and verification systems.¹²⁷

Carbon markets broadly hold the potential to mobilise the climate finance needed to narrow the funding gap for developing countries and help advance climate justice. Many LDCs already host mitigation projects, with LDC participation in carbon markets (including both voluntary and compliance markets) expanding rapidly. Participation in these markets could unlock financing for renewable energy, and particularly for reforestation and nature-based solutions – areas where LDCs hold vast potential for greenhouse gas mitigation. The Climate Vulnerable Forum and V20 Finance Ministers recognise carbon markets as one of the levers that, by 2030, could unlock an additional US\$20 billion annually for V20 countries.¹²⁸ This funding could support resilience, reduce economic losses and advance sustainable development.

However, the Secretary General of the CVF-V20 has emphasised the need for projects to be developed in a way that avoids unintended negative consequences for people and the environment.¹²⁹ One such approach is for schemes to be co-designed and implemented with the full engagement of local communities ensuring respect to the right for a free, prior and informed consent for Indigenous Peoples.

More generally, climate-vulnerable countries can be empowered to make informed and sovereign decisions about carbon market engagement and management. Nature-based projects can support economies, people and nature. This can happen at a project or landscape level particularly when the vital role of local communities and Indigenous Peoples in stewarding land and ecosystems globally is recognised and taken as a starting point.¹²⁹ It can also happen at a national level – for instance, through the development of Climate Prosperity Plans, which are multiphase national strategies for investment and access to technology designed to support climate-vulnerable countries to access bankable opportunities for tackling climate risk.¹²⁸ The CVF-V20 has partnered with the Voluntary Carbon markets Integrity Initiative (VCMI) to support vulnerable countries in navigating engagement with carbon markets, including both voluntary schemes and those established under Article 6. NDCs may also be an important opportunity for signalling the scale of opportunity and national strategy around carbon credits.

Policy trends

National governments play a critical role in ensuring social integrity through policy and regulation. However, fewer than 20%¹³⁰ of carbon market policies studied across eight jurisdictions include social safeguards. Only 15% of policies (nine out of 58) across seven jurisdictions¹³¹ require benefit-sharing with affected communities. Strengthening policies, regulations and grievance mechanisms are all essential factors for ensuring carbon markets deliver equitable and sustainable outcomes.

Box 29: Operationalisation of Article 6 through policy and projects

Ghana was a front-runner in Article 6 participation to advance mitigation and social outcomes. In December 2024, the Environmental Protection Act¹³² established a carbon registry, a carbon market committee, and a GHG mitigation fund – building on the 2022 framework for Article 6.2 cooperative approaches. Bilateral cooperation now spans 5 countries – Switzerland, Sweden, Singapore, South Korea and Liechtenstein. Three projects have been authorised for international transfer, amounting to 5.9 MtCO₂e (22% of the total carbon budget intended for authorisation under Article 6 – through its conditional NDC target). The authorised projects include sustainable rice cultivation, waste-to-compost and clean cookstoves. Ghana Carbon Markets Office received 70 project applications – of which 45 are intended for bilateral cooperation, and 25 are VCM projects. Twelve Swiss-backed projects have reached investment decisions, expected to mobilise ~US\$300mn in carbon revenues by 2030, generate 8 MtCO₂e of carbon credits, and create ~5,000 green jobs.¹³³

127 UNCTAD (2024). The Least Developed Countries Report 2024 – Chapter II. [Carbon market participation: Opportunities, challenges and pitfalls](#).

128 Al Jazeera (2025), Mohamed Nasheed: “[To close the climate finance gap, let vulnerable nations use carbon markets](#)”.

129 PRI (2024): [The Human Rights and Nature Nexus: Policy Reform Options to Address Synergies and Trade Offs](#)

130 In the policies studied, only Australia, Brazil, China, India, Kenya, Nigeria, UK, and California require any social integrity criteria (such as prior consultations with impacted communities, Free Prior and Informed Consent (FPIC) from indigenous and local communities in case of land-based projects, consideration of co-benefits to communities from projects generating carbon credits, or project alignment with SDGs) that carbon credits must fulfil either during generation or their eligibility for use in the compliance or voluntary market. Further, only 11 regulations across seven jurisdictions (Argentina, China, Indonesia, India, Kenya, Saudi Arabia, UK) have dispute resolution or grievance redressal mechanisms in place to enforce these criteria. [Oxford Climate Policy Monitor \(2025\)](#).

131 Argentina, Brazil, Kenya, Nigeria, Saudi Arabia, United Kingdom, Türkiye. [Oxford Climate Policy Monitor \(2025\)](#)

132 The Environment Protection Act 2025 (Act 1124). [Accessed via link](#).

133 Ghana Environmental Protection Agency (2025). [Ghana's progress report on engagements in international carbon markets, 2024](#)

POLICY RECOMMENDATIONS

The following recommendations aim to ensure that high-integrity carbon credits can effectively play their intended role, as part of wider carbon market and carbon pricing strategies.

Key Integrity Policies

- Carbon credit integrity and quality should improve across both voluntary and compliance carbon credit markets. High integrity carbon credits are real and quantifiable, additional, aligned with net zero pathways, independently verified, durable, transparent and traceable, and include robust safeguards for human rights and to deliver sustainable co-benefits.
- Governments should help create demand for high-integrity credits and regulate disclosures and claims to ensure transparency and to prevent greenwashing. Policy should support transparent disclosure, including the separate reporting of different types of credits (e.g. reductions and removals) and their respective uses.

Carbon dioxide removals

- Alongside continued investment in reducing emissions, governments should support high-integrity, high-durability carbon removal activities by derisking investment and scaling supply through the provision of targeted public finance (e.g. through public purchase programmes), tax incentives, or guarantees or other risk sharing mechanisms to help early-stage CDR technologies and projects reach commercial viability.
- Governments should embed CDR (both conventional and novel applications) into their NDCs and Long-Term Climate Strategies under the Paris Agreement and sectoral decarbonisation plans to send stable demand and policy signals to tackle residual emissions from hard to abate sectors and to deliver net negative emissions to address any overshoot of Paris Agreement temperature goals.
- Governments should resource and support the work of the IPCC and the UNFCCC Art. 6.4 Supervisory Body in shaping methodological guidance on CDR, including in market-based approaches.

Article 6 credits, and international frameworks:

- Governments should clearly define the role of internationally traded mitigation outcomes in relation to their NDCs, Long-Term Strategies, international climate finance and sectoral policies.
- Governments should take Article 6 requirements as a starting point to apply stringent integrity and quality standards to the use of credits. They should use Article 6 cooperation to enable higher ambition in their NDCs and adopt good practice on accounting, reporting and monitoring, interaction between national and international registries, and on avoiding double counting and mitigation deterrence.
- The use of Article 6 mechanisms across different jurisdictions should incentivise the development and progressive introduction of high-integrity, high-durability CDR, alongside deep emission reductions. This should be done with attention to scaling high-integrity nature-based solutions, in an equitable manner, that supports vulnerable and least developed countries to ambitiously meet their climate targets.

Safeguards and co-benefits:

- Governments should integrate social and environmental safeguards into carbon crediting policies, including human rights protection, community benefits and links to biodiversity conservation targets, recognising the vital role of local communities and Indigenous Peoples in stewarding nature.
- Protecting, recovering and restoring ecosystems requires urgent attention through complementary measures, beyond what nature-based credits alone can deliver. This can unlock significant co-benefits.
- Carbon markets can be a tool for channelling finance to vulnerable and least developed countries. However, credit finance should come on top of existing multilateral commitments under the UNFCCC and development aid more generally, and be paired with broader mobilisation of public, private and blended financial resources to support sustainable development, adaptation and resilience.

4 - ACCOUNTABILITY MECHANISMS

Accountability is central to the delivery of the net zero transition. To support HLEG Recommendation 8, which calls for annual, reliable disclosures on emissions, targets, plans and progress, this section examines how these accountability dimensions are being operationalised across G20 jurisdictions. It focuses first on mechanisms that secure data integrity (transparency, verification, standardisation), then on governance integrity (oversight, executive accountability), and finally on external enforcement (liability, litigation and regulatory action).

Together, these dimensions show how climate frameworks are evolving from voluntary transparency toward enforceable compliance – closing the implementation gap and strengthening trust in net zero commitments.

High-integrity transition planning requires not only credible targets and implementation pathways, but also robust governance mechanisms to ensure that non-state actors follow through on their commitments. Accountability mechanisms are the connective tissue between ambition and delivery – they translate pledges into measurable progress by reinforcing trust, transparency, and comparability across markets. They define how climate data is disclosed and verified, how governance responsibilities are exercised, and how inaction or misconduct is detected and corrected.

OVERVIEW

Accountability is supporting delivery of the net zero transition. Yet, accountability mechanisms are not stand-alone instruments – they operate as a mutually reinforcing system linking internal integrity with external oversight. High-integrity data, sound governance, and credible enforcement together determine whether net zero pledges translate into tangible outcomes – through the regulation of greenwashing, due diligence standards, transition plan disclosure and other levers.

Key takeaways from the Taskforce analysis in 2025 include:

- **Towards integrity of climate data:** The trend is toward more mandatory and standardised climate disclosures, with strong progress in requiring companies to explain how they calculate emissions, but slower uptake in rules ensuring transparency in risk assessments and the integrity of transition plans.
- **Governance as a bridge:** Corporate governance is emerging as the bridge between companies' climate commitments and the concrete actions needed to deliver them. The strongest uptake seen in areas such as executive accountability, board oversight, and climate-linked remuneration – embedding climate responsibility within institutional decision-making and leadership structures.
- **Litigation as a catalyst for policy action:** Climate litigation underscores the growing importance of legal and policy preparedness to anticipate and manage evolving accountability risks.

POLICY PROGRESS

The accountability landscape is becoming increasingly complex. The rapid expansion of policies mandating disclosure of GHG emissions, transition and physical risks, and transition plans – alongside the growth in corporate climate governance rules and climate litigation – offers an important counterpoint to recent debates around ‘ESG fatigue’ and net zero rollbacks in some jurisdictions. Together, these developments signal a broadening recognition that credible, comparable and enforceable accountability frameworks are essential to achieving the goals of the Paris Agreement.

- **Data integrity remains the foundation of accountability.** Most G20 jurisdictions have now adopted mandatory disclosure rules requiring companies to explain how they calculate emissions, with eight—Australia, Brazil, California (USA)¹³⁴, China, Japan, Mexico, Nigeria, and Turkey – introducing new requirements in the past year. Mandatory policies requiring transparency on risk assessment scenarios are in place in ten G20 members (Australia, Brazil, EU¹³⁵, Kenya, Nigeria, Turkey, and UK). Meanwhile, rules governing the data integrity of transition plans in Australia, Brazil, Nigeria, and Turkey are emerging as part of broader efforts to align with ISSB Standards, signalling progress toward more consistent and enforceable climate disclosure frameworks.
- **Governance as the bridge.** Robust governance structures are the critical link between declared ambition and effective climate action. Corporate climate governance has expanded rapidly, with over 30% of mandatory rules introduced in the past two years across seven G20 jurisdictions (Australia, Brazil, Canada, Indonesia, Japan, Nigeria, and Turkey). In nine G20 jurisdictions (Brazil, China, EU¹³⁶, Nigeria, Saudi Arabia, and UK), financial institutions are required to assign executive accountability for identifying and managing climate-related risks, with half of these jurisdictions also linking executive remuneration to climate performance. At the subnational level, California’s Climate Accountability Laws mandate disclosure of internal climate-risk governance, while at the national level, South Africa’s King IV Code – and its forthcoming King V update – continues to set a global benchmark for embedding climate responsibility within corporate leadership.

- **Climate litigation and enforcement is gathering momentum.** Climate litigation is accelerating – nearly 3,100 cases across 55 countries by mid-2025, a 250% increase since 2017, with about one-fifth targeting companies and financial institutions. The ICJ’s recent advisory opinion is expected to further catalyse this trend, by reinforcing the legal basis for holding states accountable for climate harms, including when they fail to regulate private-sector emissions. The growing body of cases presents an opportunity for policy makers to strengthen legal and regulatory frameworks, ensuring that climate commitments are implemented with greater clarity, consistency, and credibility. At the same time, anti-regulatory climate litigation is emerging, with some cases seeking to weaken environmental protections or deter civic participation – highlighting the importance of reinforcing trust, transparency and engagement across all actors in the climate transition.

¹³⁴ Note delays in this regard: ESG Today (15 October 2025) "[California Delays Rulemaking for New Climate Reporting Regulations](#)".

¹³⁵ Under EU, this analysis refers collectively to the European Union and its G20 member states—France, Germany, and Italy.

¹³⁶ Under EU, this analysis refers collectively to the European Union and its G20 member states—France, Germany, and Italy.

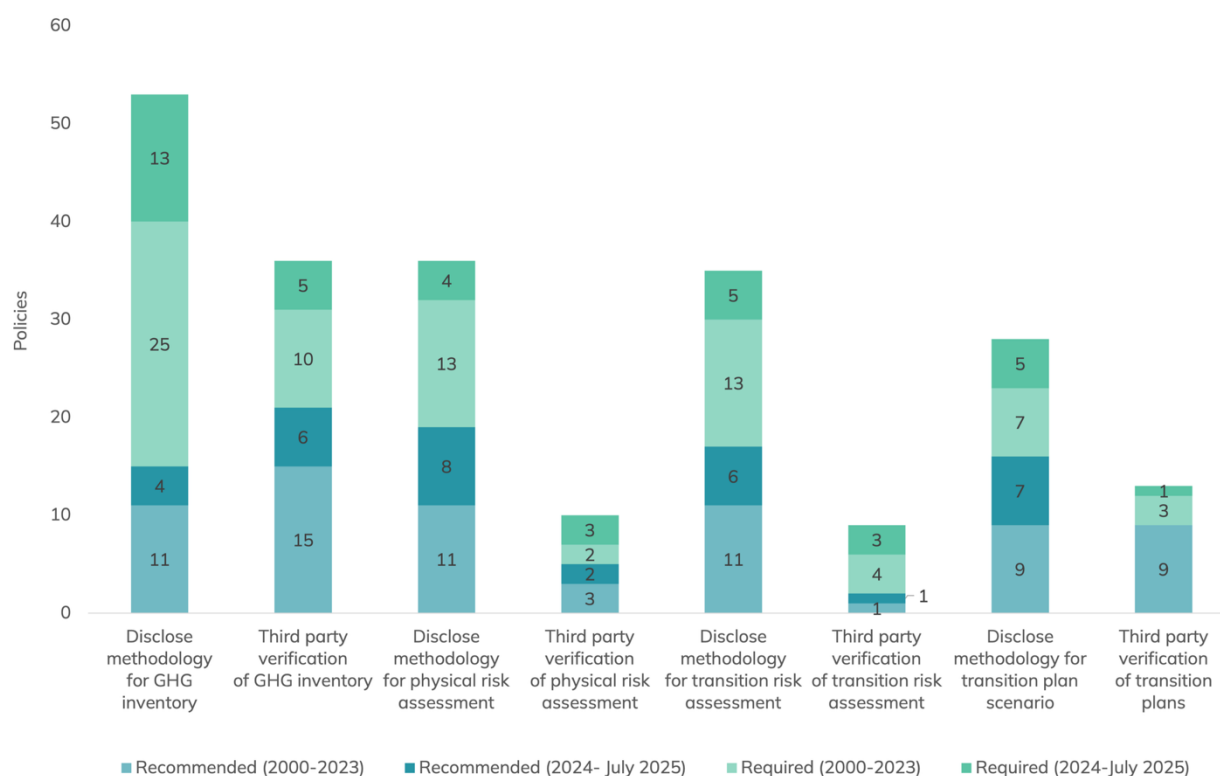
MAIN FINDINGS

Accountability mechanism I: Integrity of Climate data and Assurance

Across the G20 members, new climate regulations are increasingly focused on strengthening data integrity – a cornerstone of credible net-zero target setting (HLEG 1 & 2) and transition planning (HLEG 4). Robust, transparent data ensures accountability to climate goals (HLEG 8), as the methods used to generate data determine both the quality of

information and the obligations to act. Modern accountability mechanisms therefore go beyond basic data disclosure, requiring transparency about the methodologies, models, and assumptions used – and, in more advanced cases, third-party verification of reported data and transition plans.

Figure 12: Disclosures of methodologies and third-party verification across G20 jurisdictions



Source: Oxford Climate Policy Monitor, 2025

GHG emissions inventories

Data integrity measures are strongest in the area of GHG emissions inventories. Over 30% of disclosure rules for companies and financial institutions now require or recommend explaining how emissions are calculated – that is, disclosing the method used to generate emissions data.¹³⁷ Across the G20, 18 jurisdictions have made such disclosures mandatory, with eight – Australia, Brazil, California (USA), China, Japan, Mexico, Nigeria, and Turkey – introducing these requirements in the past year.

Third-party verification rules are also most common for GHG inventories. Ten G20 members now require third party verification of the GHG emissions data, with four – Australia, California (USA), Nigeria, and Turkey – adopting these provisions in the past two years. Notable examples include Turkey's new Climate Law¹³⁸ and California's Climate Accountability Laws.¹³⁹

¹³⁷ A notable development in this space is the [strategic collaboration](#) (announced 9 September 2025) between ISO and the GHG Protocol to unify emissions measurement and reporting frameworks, helping to harmonise standards and improve the reliability of disclosures.

¹³⁸ Türkiye Law 7552 – Climate Law (2 July 2025). [Accessed via link.](#)

¹³⁹ California Air Resources Board (CARB) [California Corporate Greenhouse Gas \(GHG\) Reporting and Climate Related Financial Risk Disclosure Programs.](#)

Box 30: California's Climate Accountability Laws

As a part of California's new 'Climate Accountability Laws' (SB219, 253, and 261), disclosing entities will be required to independently assure their GHG emissions inventories. Starting in 2026, companies will be required to provide limited assurance of Scope 1 and 2 emissions, with requirements for reasonable assurance of Scope 1 and 2 emissions by 2030. Scope 3 reporting and assurance are also covered under the laws, with Scope 3 reporting to begin in 2027 and limited assurance to be provided by 2030. A failure to comply carrying a potential fine of up to US\$500,000.

In addition to requiring independent verification of emissions data, the Climate Accountability Laws go a step further, detailing mandatory principles for assurance providers (independence and impartiality). Furthermore, the requirement that assurers are accredited is enshrined within existing assurance markets. Through both mandating third-party verification and taking into account the credibility of the assurance professionals implementing this rule, California is aiming to build trust in publicly reported climate data. California's laws create a national standard because they apply to all companies of a certain size doing business in California, regardless of whether they are incorporated in another state.

Physical and transition risk assessments

Disclosure rules concerning physical and transition risk assessments are less common. Only 15% of risk disclosure policies require entities to disclose the methodologies they use to conduct either physical or transition risk assessment, and these mandatory rules exist in ten G20 jurisdictions (Australia, Brazil, EU¹⁴⁰, Kenya, Nigeria¹⁴¹, Turkey, UK). Beyond the EU rules, France's Monetary and Financial Code¹⁴² requires entities to disclose the methodologies used for both physical and transition risk analyses. Moreover, the Bank of England is currently consulting on a new policy¹⁴³ to enhance the quality and transparency of disclosed risk data – this is to combat the potentially distorting effects of “judgement-based overlays”¹⁴⁴, which can introduce bias or skew the true nature of risk.

Only 5% of disclosure rules recommend or require third-party verification of either physical or transition risk assessments. Even within this small percentage of rules, however, there are few direct requirements to undertake independent verification. Instead, policies commonly require entities to disclose whether risk assessments have been third-party-verified, with Australia's new disclosure rules standing out as the exception.¹⁴⁵ Strengthening the uptake of disclosure rules that incorporate independent verification could play a critical role in enhancing the credibility and integrity of reported risk assessments.

Box 31: Australia's climate disclosure rules

Passed in September 2024, Australia's new ISSB-aligned disclosure rules are notable for their strong emphasis on data transparency and third-party verification across all areas of sustainability reporting. The Australian disclosure rules require entities to report key information about the scenario analyses employed in the production of their sustainability report, including justifying the choice of scenario used, notable assumptions and/or dependencies within the model, and whether the scenario is aligned with the latest climate science.

Moreover, starting in 2030, corporate sustainability reports will have to be audited in their entirety by external auditors to provide reasonable assurance. While the specific details of the auditing rules are still being developed, the application of limited assurance rules to the whole of the sustainability report highlights the national regulator's tough approach towards corporate greenwashing.

¹⁴⁰ Under EU, this analysis refers collectively to the European Union and its G20 member states—France, Germany, and Italy.

¹⁴¹ It refers to Nigeria's [Roadmap for the Adoption of IFRS Sustainability Disclosure Standards](#), adopted in 2024. Public interest entities will be required to apply ISSB Standards from 2028, while small and medium-sized entities will be required to do so from 2030.

¹⁴² France: Article 29 of the Energy–Climate Law no.2019-1147; implementing [Decree no.2021-663](#).

¹⁴³ Bank of England, Prudential Regulation Authority (2025). [CP10/25 – Enhancing banks' and insurers' approaches to managing climate-related risks – Update to SS3/19](#). 30 April 2025.

¹⁴⁴ Judgement-based overlays refers to manual adjustments or qualitative inputs that firms apply to their risk assessments or models, often to account for uncertainties or gaps in data. Judgement-based overlays may introduce bias or subjectivity, reduce comparability across firms, or obscure the underlying risk exposure if not clearly disclosed.

¹⁴⁵ Australian Accounting Standards Board (AASB) (8 October 2024) [Australian Sustainability Reporting Standards AASB S1 and AASB S2](#)

Transition plans

Rules regulating the data integrity of transition plans are limited. Only 17% of disclosure rules overall recommend or require entities to disclose the scenarios used in the development of their transition plans. These rules exist in Australia, Brazil, EU, Kenya, Nigeria, Turkey, and UK, and it is notable that in Australia, Brazil, Nigeria, and Turkey, these disclosure rules come as a part of their ISSB alignment efforts. Strengthening such disclosure frameworks is key to ensuring credible, science-based transition planning.¹⁴⁶

Only 10% of transition planning rules recommend or require third-party verification of plans, and only three jurisdictions, including India and Nigeria, have mandatory rules in place. Notably these mandatory rules can take different forms: in Nigeria and India, mandatory third-party verification requirements are set in the context of sectoral transition policies, and the requirements for independent verification are at the discretion of regulators.¹⁴⁷

The strength of rules regulating the data integrity of transition planning is limited by a general laxity of rules around transition planning. While 40 policies across 16 G20 jurisdictions mandate the development of transition plans, the rules are, in practice, 'soft' mandatory transition planning

duties. In some cases, the sector-specific nature of rules means that compliant plans are more akin to 'strategies' or roadmaps. This is the case with India's Green Tug Transition Plan initiative, which requires port authorities to develop strategies for decarbonising diesel tugboats. In many more cases, transition planning obligations are mandatory but under-specified, as in the case of Turkey's Climate Change Act, which, under Article 4(3), extends a general duty to all public institutions and private entities to develop and implement plans.

Despite the nascent nature of transition planning regulation, best practices are emerging. Australia's recent disclosure rules, for example, are notable for their strengthened focus on data integrity with regard to target setting and transition planning, even in the absence of mandatory transition planning policy. The EU's Corporate Sustainability Due Diligence Directive (CSDDD) likewise introduces a mandatory obligation for companies to develop climate transition plans, yet the directive is currently under review as part of the EU's Omnibus package.

Box 32: Enhancing integrity and interoperability through QI System

The Quality Infrastructure (QI) system is a system of standards and assurance that exists in some form in every country, underpins market trust and governance, and is delivered by a collaboration of public and private sector bodies. For climate transparency and credible net zero implementation, countries should strengthen their national quality infrastructure systems by investing in their national bodies to develop standards, assurance and measurement. According to UNIDO's Quality Infrastructure for Sustainable Development index, G20 countries score an average of 69/100 on 'planet'-related dimensions, revealing significant room for improvement.¹⁴⁸

QI provides the 'technical backbone' for policy implementation to emerging climate regulation.¹⁴⁹ At the policy design stage, both public and private standards can reinforce regulation by embedding recognised norms into mandatory rules. Fifteen G20 jurisdictions now reference or require the GHG Protocol Corporate Standard, while the forthcoming ISO net zero standard (ISO14060) on net zero offer regulators guidance on credible, Paris-aligned corporate strategies for 'Net Zero Aligned Organizations'.¹⁵⁰ Integrating such global standards into domestic regulation reduces policy fragmentation and improves the comparability and auditability of climate disclosures.

At the implementation stage, conformity assessment and accreditation mechanisms become critical to ensuring compliance and interoperability across jurisdictions. ISO and the International Electrotechnical Commission (IEC) have developed the CASCO Toolbox¹⁵¹ – a comprehensive suite of international standards for conformity assessment – which provides the foundation for mutual recognition of testing, certification, and verification across borders. QI bodies like National Accreditation Bodies are often facilitators of recognition of verification across borders, which enables trade, and also cooperate multilaterally such as through the International Accreditation Forum (IAF) using CASCO standards as the basis for mutual recognition agreements. Close collaboration between policy makers and national standards, measurement and accreditation bodies can help embed international best practice and independent verification across climate policy. In turn, this reinforces climate accountability, market trust and increasing interoperability.

¹⁴⁶ See UNEP FI (2022) Recommendations for Credible Net-Zero Commitments from Financial Institutions.

¹⁴⁷ Under Nigeria's [Guidelines for Management of Fugitive Methane and Greenhouse Gases Emissions in the Upstream Oil and Gas Operations](#) (10 November 2022), regulators are given a mandate to appoint third party verifiers to assure methane emissions reductions data; India's [Plastic Waste Management Rules](#) (6 July 2022) similarly provide for third party audits at the discretion of the regulator.

¹⁴⁸ UNIDO (2025) [Supporting Sustainable Development Goals with Quality Infrastructure: QI4SD Index Results Report 2024](#)

¹⁴⁹ OECD (2025) [Reinforcing Regulatory Frameworks through Standards, Measurements and Assurance](#)

¹⁵⁰ BSI (2024) [The Role of the Quality Infrastructure in Scaling Net Zero](#)

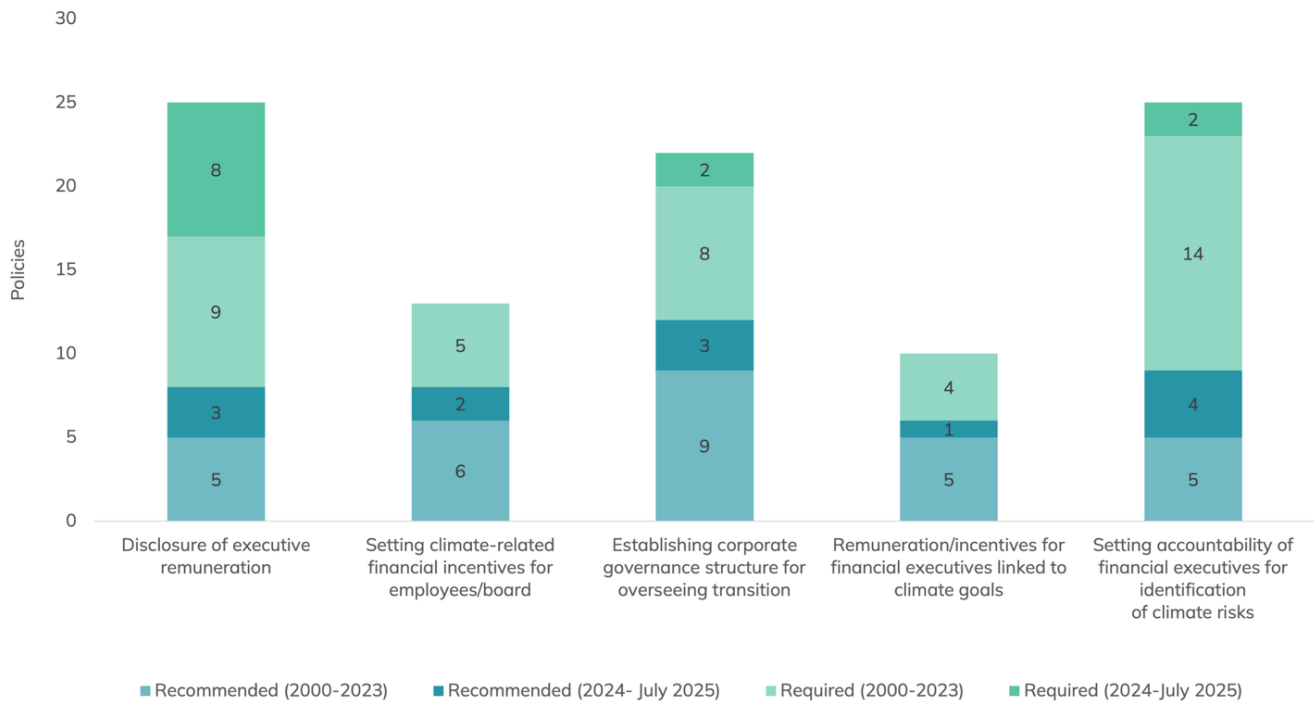
¹⁵¹ International Organization for Standardization (ISO) [CASCO, Conformity Assessment tools to support public policy](#)

Accountability mechanism II: Embedding climate into corporate governance

Transparent and credible climate data is a key mechanism for tackling greenwashing. But to move from assessing climate risk to undertaking climate action, quality data and high integrity targets, and transition plans should be embedded within robust corporate governance structures. This can provide clarity and enhance organisational accountability aligned to high-integrity climate goals

and stated ambitions. In particular, rules regarding disclosing or linking executive remuneration for climate performance, establishing corporate governance structures for overseeing climate transitions, and setting responsibility for climate risk management (summarised in Figure 13) are key mechanisms for enhancing corporate and financial actors' accountability to climate objectives.

Figure 13: Climate-related corporate governance elements across G20 jurisdictions



Source: Oxford Climate Policy Monitor, 2025

Existing regulations encourage strong corporate governance amongst both financial and corporate actors.

Prudential regulators across nine G20 jurisdictions (Brazil, China, EU¹⁵², Nigeria, Saudi Arabia, UK) have issued rules requiring financial institutions to make financial executives clearly accountable for the identification of climate-related risks. Six G20 jurisdictions (China, EU¹⁵³, UK) also require financial executives' remuneration or incentives be linked to climate objectives.

Rules encouraging strong corporate climate governance have surged: over 30% of mandatory rules related to corporate climate governance were passed in the last two years, across seven G20 jurisdictions (Australia, Brazil, Canada, Indonesia, Japan, Nigeria, Turkey). Under California's Climate Accountability Laws, companies will be required to disclose their internal governance and procedures for managing climate-related risks. Moreover, South Africa's King IV Code for Corporate Governance remains a leading example of corporate climate governance rules.¹⁵⁴

¹⁵² Under EU, this analysis refers collectively to the European Union and its G20 member states—France, Germany, and Italy.

¹⁵³ Under EU, this analysis refers collectively to the European Union and its G20 member states—France, Germany, and Italy.

¹⁵⁴ On 31 October 2025, the Institute of Directors in South Africa (IoDSA) and the King Committee of South Africa released the fifth iteration of the corporate governance code – [King V Code](#).

Box 33: South Africa's King V Corporate Governance Code

Applying from 2026, South Africa's King V Corporate Governance Code integrates sustainable development into corporate management and applies to all entities with a governing body, including all companies listed on the Johannesburg Stock Exchange. It comes as a review of the King IV code, released in 2016. The Code operates on an 'apply and explain' basis – which means application of the principles is assumed, and entities are required to demonstrate how they implement recommended principles. The King V code is now accompanied by a dedicated disclosure framework. King V is definitively supporting sustainability reporting aligned with the double materiality approach – which was implicit in the 2016 edition. The King code requires that organisations include in reports not only information about matters that significantly affects its finances and prospects, but also those that impact its ability to create sustainable value for stakeholders over time. The King code sets clear expectations for board engagement on climate and nature-related issues and encourages directors to be sufficiently informed and skilled to address these matters as part of their governance duties.

Accountability mechanism III: Liability, litigation and enforcement

Mechanisms for enforcing regulatory requirements and determining liability complement and reinforce the internal accountability tools focused on data integrity and corporate governance described in the previous sections. Courts in at least 55 jurisdictions and 24 international or regional bodies are shaping how climate obligations are interpreted and enforced, including through emerging human-rights-based rulings by the International Court of Justice and Inter-American Court of Human Rights (IACtHR).

With the rapid growth of climate litigation – from 884 cases in 2017 to nearly 3,100 by June 2025, including new cases in 12 additional countries – the field now spans corporate liability, financial disclosure and government accountability. Recent cases increasingly invoke human rights, intergenerational equity and biodiversity protection, as well as the role of financial institutions in financing high-emitting activities – reflecting a diversification of legal arguments and plaintiffs.¹⁵⁵ Sub-national governments are also using litigation to clarify and extend their powers over energy networks and to defend climate policies from legal challenges, notably in South Africa¹⁵⁶ and Europe.¹⁵⁷

Although climate litigation remains heavily concentrated in the Global North, with the Global South accounting for just under 10% of total cases, activity in developing country jurisdictions is steadily expanding, indicating a gradual broadening of the global climate accountability landscape. An emerging share of cases (about 20% in 2024) targets companies, indicating rising litigation-related climate risks for non-state actors.¹⁵⁸

This growing body of cases presents a strategic opportunity for policymakers to strengthen legal and regulatory frameworks – clarifying climate obligations, aligning domestic rules with international norms, and embedding enforcement mechanisms that ensure commitments are implemented with greater clarity, consistency and credibility.

Available mechanisms

Various supervisory mechanisms are available in legal systems to review the compliance of corporate and financial actors with high-integrity standards for net zero transition.¹⁵⁹

¹⁵⁵ UNEP (3 October 2025) "[Over 3,000 climate litigation cases are reshaping global climate policy today](#)"

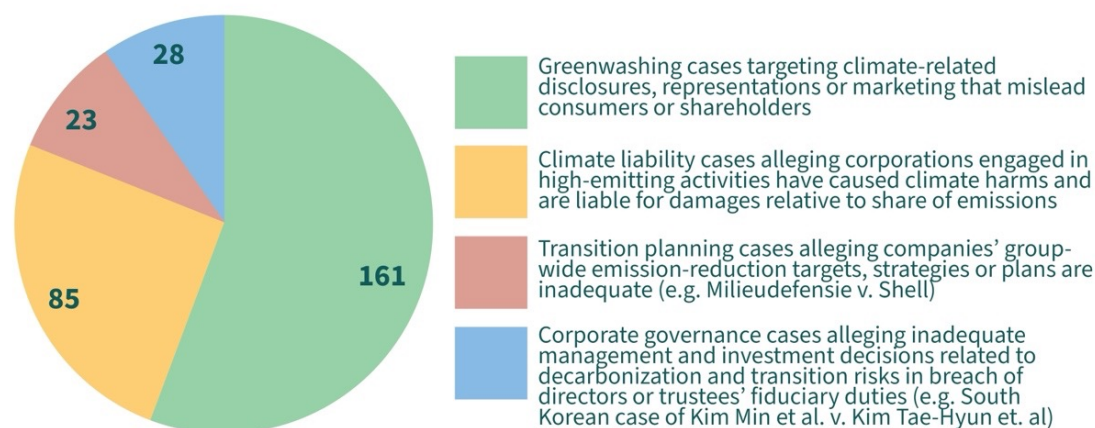
¹⁵⁶ The City of Cape Town v. National Energy Regulator of South Africa and Minister of Energy (2017). [Accessed via link.](#)

¹⁵⁷ Tati, E. (2019) "[Cities' legal actions in the EU: towards a stronger urban power?](#)", European Papers

¹⁵⁸ Setzer J and Higham C (2025) [Global Trends in Climate Change Litigation: 2025 Snapshot](#). Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

¹⁵⁹ British Institute of International and Comparative Law (BIICL): [Corporate Climate Litigation Toolbox](#).

Figure 14: Cases filed against corporations globally 2015-2024



Source: University of Melbourne, 2025

Greenwashing claims have become the fastest-growing area of climate litigation (over 100 filed globally since 2009), targeting misleading climate or 'carbon-neutral' marketing across sectors.¹⁶⁰⁻¹⁶¹ Regulators in some countries, such as Australia, the UK and the EU, have issued guidance on green claims and how to avoid greenwashing.¹⁶² In 2023, the EU proposed a new Green Claims Directive designed to protect consumers from greenwashing.¹⁶³ If legislated, this measure would extend to companies' climate claims, requiring them to prioritise, and show evidence of, steps within their own company to decarbonise over relying on

offsets. In parallel, non-judicial mechanisms such as the OECD's National Contact Points (NCPs) are increasingly used to address corporate climate responsibilities, following the 2023 update of the OECD Guidelines aligning them with the Paris Agreement and net zero goals.¹⁶⁴ Concerns have been raised that greenwashing litigation may risk prompting greenhushing, where firms under-report or avoid publicising legitimate climate actions to limit legal exposure.¹⁶⁵ Clear, consistent rules and credible assurance pathways can help preserve transparency while reducing this risk.

Box 34: Stakeholder claims targeting misleading disclosures and statements

Most greenwashing cases have been brought in North America and Europe, with Australia also emerging as a key jurisdiction. Australian examples include cases brought by civil society (e.g. Parents for Climate v EnergyAustralia)¹⁶⁶ and regulators (e.g. ASIC v Mercer).¹⁶⁷ Greenwashing cases targeting misleading corporate 'carbon neutrality' marketing claims are also seen in Brazil. Recently, the Supreme People's Procuratorate (Chinese federal prosecutors) designated greenwashing as an emerging focus area. Defendants in greenwashing cases are usually companies in high-emitting industries, e.g. fossil fuel extraction or energy production, such as TotalEnergies which a French court ruled in October 2025 had misled consumers by maintaining the company could reach net zero emissions by 2050 while still increasing oil and gas production.¹⁶⁸ In addition, there are emerging examples of cases targeting companies or financial services firms using inaccurate net zero/carbon neutrality marketing claims (e.g. US criminal proceedings over fraudulent carbon-credit schemes in United States v. Newcombe, 2024).¹⁶⁹

¹⁶⁰ UNEP (2025), [Global Climate Litigation Report: 2025 Status Review](#).

¹⁶¹ Setzer J and Higham C (2025) Global Trends in Climate Change Litigation: 2025 Snapshot. Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

¹⁶² ASIC (2022) [How to avoid greenwashing when offering or promoting sustainability-related products](#); ACCC (December 2023) [Making environmental claims: A guide for business](#); CMA (2021) [Green Claims Code](#).

¹⁶³ European Commission (22 March 2023), [Proposal for a Directive on the substantiation and communication of explicit environmental claims](#) (Green Claims Directive).

¹⁶⁴ UNEP (2025), [Global Climate Litigation Report: 2025 Status Review](#).

¹⁶⁵ Hilton, J. (2025). "An integrated analysis of greenhush." International Journal of Green Development

¹⁶⁶ [Parents for Climate v. EnergyAustralia](#) (filed 2023) UoM Climate Change Litigation Database. A settlement was reached by the parties, with an [apology](#) issued by EnergyAustralia on 19 May 2025.

¹⁶⁷ [ASIC v. Mercer \(Superannuation\) Australia Ltd](#) (filed 2023) UoM Climate Change Litigation Database. ASIC [secured](#) \$A11.3M in civil penalties against Mercer.

¹⁶⁸ [Greenpeace & Ors v TotalEnergies](#), Tribunal Judiciaire De Paris, 23 October 2025.

¹⁶⁹ [United States v. Newcombe](#) (filed 2024) The Climate Litigation Database, Columbia Law School

The accountability mechanisms illustrated in Figure 14 are complemented by other litigation avenues. For example, decisions have been issued by several courts in the G20 jurisdictions requiring the assessment of climate-related human rights and environmental impacts of certain projects and value chains of corporations and financial institutions, including their Scope 3 emissions.¹⁷⁰ In addition, recent advisory opinions issued by international courts and tribunals, such as the ICJ, have clarified and strengthened countries' international law obligations to regulate non-state actors' activities that directly and indirectly cause emissions resulting in adverse effects to the climate system, including through

effective enforcement and monitoring mechanisms. These developments carry dual implications: for governments, liability may arise from omission—failure to act or regulate adequately—while for non-state actors, growing regulatory and legal scrutiny may arise from commission—activities that cause or exacerbate climate damage. This increases the risk of litigation against governments that fail to put in place adequate policies to regulate the GHG-emitting activities of private actors, like companies and conglomerates (e.g. BHP and Vale associated with Mariana and Brumadinho dam disasters)¹⁷¹, operating in their jurisdictions.

Evolving climate-related legal risks

New cases continue to clarify the scope of corporate and financial-sector liability, with courts in several jurisdictions recognising an emerging duty of care for major emitters and financial institutions to align their activities with

climate-mitigation objectives. Investor-focused litigation is also accelerating, with courts increasingly asked to assess whether companies and financial institutions adequately disclose climate-related risks and fulfil fiduciary obligations.

Box 35: Climate-related legal risks and evolving attribution science

The ICJ's July 2025 Advisory Opinion on countries' climate obligations affirmed that legal liability for climate-related harms depends on advances in attribution science – specifically, whether an event can be linked to anthropogenic climate change and to what extent damages can be traced to particular actors.¹⁷² This principle was tested in *Lluyda v. RWE* (Hamm Regional Court, May 2025), where the Court recognised potential corporate liability for contributions to climate change but dismissed the claim for lack of concrete risk to the plaintiff's property.¹⁷³ Similar cases against companies such as *Holcim*¹⁷⁴ and *TotalEnergies*¹⁷⁵ remain pending, underscoring the evolving nature of attribution-based litigation. Building on this trend, Filipino plaintiffs who survived Typhoon Odette have recently threatened a lawsuit in UK courts against Shell, seeking compensation for past climate damages allegedly linked to the company's historical emissions.¹⁷⁶

Emerging liability

Beyond questions of attribution and causation, climate 'superfund' laws enacted in the US since 2024 have established strict (no fault) liability for corporate GHG emissions by requiring major polluters to contribute to the costs of climate damage. The emergence of such strict liability mechanisms – recognising the inherent harm of GHG

emissions without requiring establishment of a causal link to a particular company's activities – may signal future policy treatment of climate liability for companies as a consequence of pursuing a 'business-as-usual' approach with little or no regard to climate obligations.

Box 36: Emerging strict liability measures through climate superfund legislation

In May 2024, the US state of Vermont passed the Climate Superfund Act,¹⁷⁷ which allows recovery of financial damages from fossil fuel companies for the impacts of climate change to the state. Companies involved in fossil fuel extraction or crude oil refining will be held strictly liable for the contribution of GHG emissions of 1 billion metric tonnes or more between 1995 and 2024 based on the entity's share of the state's climate change costs over that period. In December 2024, New York state passed similar legislation,¹⁷⁸ covering the period 2000–2018. Funds collected under these laws will be used to pay for climate change adaptation projects within the respective states. Other US states have introduced but not yet passed similar legislation (e.g. California, Maryland, Massachusetts, New Jersey), or have indicated an intention to do so in the future (e.g. Connecticut, Hawaii, Minnesota, Oregon, Rhode Island, Virginia). The Vermont and New York laws are currently being implemented and face multiple legal challenges from industry, the US Federal Government and other US states.

170 E.g. *Green Connection NPC v. Minister of Forestry, Fisheries and the Environment* (filed 2024). On 13 August 2025, the High Court of South Africa (Western Cape Division) [set aside](#) the environmental authorization of offshore oil and gas exploration because the government had failed to adequately consider the downstream climate impacts.

171 Both companies have faced multiple lawsuits and compensation claims after tailings dam collapses killed hundreds and caused catastrophic pollution.

172 International Court of Justice (2025), *Obligations of States in respect of Climate Change*, Advisory Opinion of 23 July 2025.

173 *Luciano Lluyda v. RWE AG* (filed 2015) The Climate Litigation Database, Columbia Law School.

174 *Asmania et al. v. Holcim* (filed 2022). The Court is deciding whether the case is admissible and can move forward to be examined on its merits.

175 *Falys v. Total* (filed 2024). The case is scheduled for hearings in November 2025.

176 Hausfeld (2025), "*Shell hit with legal action over climate damages by Typhoon Odette survivors*," London, 23 October 2025.

177 Vermont, *Climate Superfund Act* (Act 122, 2024).

178 New York, "*Climate Change Superfund Act*" (Bill S02129).

Anti-regulatory/backlash litigation

A parallel trend of anti-regulatory climate litigation has emerged, with lawsuits seeking to roll back environmental regulations or challenge the use of ESG criteria in investment decisions. Some cases also target activists, journalists and civil organisations opposing high-emitting projects, threatening public spaces and participation.

Implications for climate governance

External accountability mechanisms can increase the effectiveness of high-integrity policies by ensuring there are legal consequences for a corporate or financial actor's non-compliance. Even the possibility of enforcement action or liability (referred to as litigation risk) can increase climate risk exposure and incentivise compliance.¹⁷⁹ Some new policies, such as the European Bank Authority's 2025 Guidelines for the Management of ESG Risks, call for assessing exposure to litigation risk, in addition to other areas of emerging risk such as physical climate impacts, transition risks and the availability of insurance.

Collectively, these trends show climate litigation evolving into a global accountability ecosystem.¹⁸⁰ The expanding sphere of climate litigation is also beginning to influence adjacent domains such as the chemicals and plastics industry and biodiversity law ('The Rights of Nature'), signalling that accountability mechanisms developed in climate cases are likely to shape broader environmental governance frameworks.¹⁸¹

¹⁷⁹ Wetzer, T., Stuart-Smith, R. and Dibley, A. (2024) '[Climate risk assessments must engage with the law](#)', Science

¹⁸⁰ UNEP (3 October 2025) '[Over 3,000 climate litigation cases are reshaping global climate policy today](#)'

¹⁸¹ UNEP (2025), [Global Climate Litigation Report: 2025 Status Review](#).

POLICY RECOMMENDATIONS

- **Ensuring climate data integrity and assurance.** High-quality, verifiable climate data underpins all credible net zero and transition commitments. Policymakers should strengthen disclosure rules to require transparent, science-aligned methodologies using recognised international standards (e.g. GHG Protocol, ISSB Standards, ISO, IPCC and IEA scenarios). Initiatives like the Net Zero Data Public Utility (NZDPU) can support a shared global data baseline. Expanding third-party verification and domestic assurance capacity – especially in emerging markets – will enhance reliability, comparability and investor confidence while reducing greenwashing. Disclosures should be supported by independent third-party verification and assurance, with efforts to expand domestic assurance capacity – particularly in emerging markets. All this with the aim of enhancing reliability, comparability and investor confidence, while reducing the risk of greenwashing.
- **Strengthening interoperability of global frameworks.** Policy makers and standard setters should strengthen interoperability across reporting frameworks by promoting convergence and compatibility, using ISSB Standards with the GHG Protocol as the common emissions-boundary baseline standard. At the same time, they should allow for adjustments to reflect local realities or to align with more ambitious standards, ensuring compatibility is preserved. Interoperability will reduce duplication, enhance comparability and enable consistent implementation across jurisdictions.
- **Embedding climate accountability into corporate governance frameworks.** Policy makers should ensure that corporate governance systems place climate objectives at the centre of organisational strategy and oversight. Regulations and codes of practice should require boards to integrate climate considerations into governance structures, risk management and executive remuneration, making boards directly accountable for the company's transition plan and climate performance. In line with the Corporate Sustainability Due Diligence Directive (CSDDD), climate-related due diligence should form part of broader corporate obligations, extending beyond human rights to include environmental and climate impacts.
- **Strengthening policy readiness for global climate litigation.** Climate litigation is emerging as a powerful force in shaping global climate policy with recent court rulings, like the 2025 ICJ advisory opinion, clarifying duties of care and setting precedents that extend beyond national jurisdictions. To stay ahead of these developments, governments should strengthen legal preparedness. Such measures include tightening disclosure and due-diligence requirements, ensuring policy coherence, and establishing clear avenues for redress, so that litigation outcomes reinforce the broader accountability framework.
- **Strategic implications.** Effective accountability frameworks should be progressive (phased over time), integrated (linking data, governance and enforcement), and globally informed (anchored in shared standards and principles), while aiming to support a more equitable implementation across jurisdictions. Embedding independent auditing and verification can help ensure measurable outcomes rather than procedural compliance. When designed and implemented effectively, frameworks convert transparency into enforceability and voluntary ambition into verified, durable climate impact.

ON THE ROAD TO COP 31

Nearly a decade of policy development – accelerating markedly over the past five years – has produced a multitude of policy measures targeting companies and financial institutions to support their transition efforts. This report underscores the fact that policy development in this area continues apace with a range of common instruments clearly emerging across the G20 and beyond, including transition plans or transition planning elements; taxonomies defining sustainable economic activities; disclosure requirements incorporating transition plan elements; and scenario analysis, particularly in the context of prudential regulation. These are accompanied by real economy measures such as carbon pricing or public procurement.

Despite all this progress, the report highlights that – with only 25 years remaining to reach net zero and global warming reaching unprecedented levels – a disconnect persists between these frameworks and broader policy domains. Climate mitigation and resilience objectives to limit global warming to 1.5°C, even if temporarily exceeded are still not systematically embedded into industrial and economic policies, limiting the overall effectiveness of the transition. Moreover, some of the above policies remain limited to guidance or encouragement and lack granularity. While many policy initiatives focus on strengthening climate and prudential risk management – a necessary step – they have yet to deliver meaningful reallocation of capital or prevent carbon lock-in in investment decisions.

Real accountability for delivery also remains weak, which is reflected in a lack of alignment of remuneration and incentive structures across corporate leadership and the financial value chain with climate objectives, as well as coherence between these and public policy advocacy practices – especially through trade associations.

This underlines that no single policy or instrument can suffice. Providing transparency and transition tools such as taxonomies and transition plans is essential but insufficient on its own. There is an urgent need to develop integrated and granular policy frameworks capable of driving systemic delivery through a whole-of-government approach – supporting sound economic growth alongside climate ambition. Corporate and sustainable finance policies must be complemented by effective real economy measures such as carbon pricing, sectoral policy pathways, and support for technological innovation and scale-up.

Sufficient experience is now emerging to begin assessing the effectiveness of implemented policies, generating actionable insights and creating virtuous cycles that strengthen policy design, investment decisions, and competitiveness. The diversity of policy approaches and nuances across jurisdictions offer a valuable opportunity and need for mutual learning, cross-country collaboration, and progress toward greater interoperability and coherence – ultimately leading to the establishment of a baseline global policy framework.

Finally, enhanced cross-jurisdictional coordination and governance arrangements should also facilitate corporate access to finance and financial flows – including high-integrity carbon credits – particularly to support the most vulnerable and least developed countries.

Consequently, the Taskforce has identified three areas for future focus:

- Assess the effectiveness of key policies and tools and draw initial lessons from their implementation.
- Foster learning, sharing and collaboration across jurisdictions to enhance interoperability and facilitate cross-border financial flows.
- Analyse coherence between corporate and sustainable finance policies and real economy measures from a systems perspective.

We see a need for improvement both within and between jurisdictions. This can be achieved by assessing policy effectiveness, strengthening implementation at national level, and enhancing cross-border coordination and interoperability. Emerging examples across G20 countries can guide this effort. The Taskforce will evaluate the impact of these practices, highlight effective approaches, foster exchange amongst policy makers, and advance tools that clarify how frameworks overlap and can converge.

Sustainable finance and economic policy are interdependent – they jointly shape the environment for sustainable investment. Instruments such as sectoral roadmaps and sustainable taxonomies form the webbing between sustainable financial instruments and economic measures (e.g. fiscal incentives, carbon pricing). They create a common language to identify which technologies and activities best support a 1.5°C-aligned transition.

Going forward, the Taskforce will strengthen these connective instruments to improve capital allocation to climate solutions and advance convergence on the core elements of transition plans and their implementation. The goal is to build sound policy frameworks that reallocate capital toward sustainable investments, finance the transition, and drive real decarbonisation across financial markets and the real economy.

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KEY TERMS AND ABBREVIATIONS¹⁴⁷

1.5°C Goal

Efforts to limit the increase in global average temperature to 1.5°C above pre-industrial levels, as set out in the Paris Agreement.

2°C Goal

A target to keep global temperature rise well below 2°C above pre-industrial levels.

Adaptation

Adjustments in human or natural systems in response to actual or expected climate impacts, aiming to moderate harm or exploit beneficial opportunities.

Accountability mechanisms

Systems, rules, and processes that ensure organisations, governments, and other actors follow through on their climate commitments and are held responsible for their actions or inactions.

African Union (AU)

A continental body of 55 African countries, launched in 2002 to promote unity and development across Africa.

Article 6 (Paris Agreement)

A section of the Paris Agreement that sets out rules for international cooperation on climate action, including the trading of carbon credits between countries to help meet climate targets.

Beyond Value Chain Mitigation

Actions taken outside a company's direct value chain to avoid, reduce, or remove greenhouse gas (GHG) emissions from the atmosphere.

Biodiversity

The variety of living organisms, including diversity within species, between species, and of ecosystems.

Capex

The funds that a company or organisation invests in acquiring, upgrading, or maintaining physical assets such as property, industrial buildings, infrastructure, or equipment. In the context of climate policy, Capex is a key indicator of where companies are directing their investments – whether towards high-carbon (fossil fuel) assets or towards low-carbon, sustainable solutions..

Carbon Budget

This refers to two concepts in the literature: (1) an assessment of carbon cycle sources and sinks on a global level, through the synthesis of evidence for fossil fuel and cement emissions, emissions and removals associated with land use and land-use change, ocean and natural land sources and sinks of carbon dioxide (CO₂), and the resulting change in atmospheric CO₂ concentration. This is referred to as the Global Carbon Budget; (2) the maximum amount of cumulative net global anthropogenic CO₂ emissions that would result in limiting global warming to a given level with a given probability, taking into account the effect of other anthropogenic climate forcers. This is referred to as the total carbon budget when expressed starting from the pre-industrial period, and as the remaining carbon budget when expressed from a recent specified date.

Carbon Dioxide Removals (CDR)

Processes that remove CO₂ from the atmosphere. The IPCC distinguishes between two main categories: Conventional CDR (approaches that use or enhance natural processes to remove CO₂ including afforestation and reforestation; Soil carbon sequestration; wetland restoration and sustainable agriculture); and Novel CDR (Technological or engineered approaches to remove CO₂) including Direct Air Carbon Capture and Storage (DACCS); Bioenergy with Carbon Capture and Storage (BECCS); Biochar; Enhanced weathering.

Carbon lock-in

The situation where investments in high-emission infrastructure (e.g., coal plants) commit future emissions, making it harder to transition to low-carbon alternatives.

Carbon markets

Markets involving trade in credits or allowances, each representing an amount of greenhouse gas emissions. Can refer to both carbon credit markets and allowance / permit markets such as emissions trading systems.

- Carbon credit markets: Markets involving the trade in carbon credits, which reward reductions or removals in emissions
- Allowance / permit markets: The predominant type of carbon market by emissions coverage and value, in which greenhouse gas emission allowances (permits) are traded in a market with a limit on total emissions.

¹⁵⁸ Sources for this section include: IPCC Climate Change 2023 Synthesis Report; UNFCCC; ISSB; HLEG; G20; OECD; African Union; EFRAG; GHG Protocol; PRI and SBTi.

Carbon neutrality

The state in which an entity's net greenhouse gas (GHG) emissions are zero over a specified period. This is achieved by balancing the amount of GHGs emitted with an equivalent amount of emissions removed from the atmosphere, either through direct reductions, carbon removals, or the purchase of high-integrity carbon credits (offsets).

Climate

In a narrow sense, climate is usually defined as the average weather, or more rigorously as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization (WMO). The relevant quantities are most often surface variables such as temperature, precipitation and wind. Climate in a wider sense is the state, including a statistical description, of the climate system.

Climate change

The UN Framework Convention on Climate Change (UNFCCC), in its Article 1, defines climate change as: a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability observed over comparable time periods. The UNFCCC thus makes a distinction between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes.

Climate justice

The principle that climate change and the policies to address it should be fair, equitable, and inclusive, recognising that those who are least responsible for greenhouse gas emissions are often the most affected by climate impacts. It calls for the protection of vulnerable groups, respect for human rights, and the fair distribution of the benefits and burdens of climate action.

Climate litigation

Legal actions brought before courts or tribunals to address issues related to climate change. These cases may target governments, companies, or financial institutions for failing to mitigate greenhouse gas emissions, failing to adapt to climate risks, or for making misleading climate-related claims (such as greenwashing).

Climate-resilient development

Refers to the process of implementing GHG mitigation and adaptation measures to support sustainable development for all.

COP (Conference of the Parties)

Annual meetings of countries that are signatories to the UN climate conventions, such as COP30 (Brazil, 2025) and COP31.

Decarbonisation

Decarbonisation is the process of reducing and ultimately eliminating carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions from economic activities, particularly those related to energy production, industry, transport, and agriculture. The goal is to transition from fossil fuel-based systems to low-carbon or zero-carbon alternatives. Decarbonisation is a central objective of climate policy and net zero strategies.

Disclosures

The public reporting of information by organisations such as companies, financial institutions, or governments about their climate-related risks, greenhouse gas (GHG) emissions, targets, transition plans, and progress. Disclosures are intended to provide transparency, enable accountability, and inform stakeholders about an entity's climate impact and actions.

Double Materiality

An assessment that measures both the impact of sustainability issues on a company and the company's impact on society and the environment. It often forms part of a Transition Plan disclosure.

Do No Significant Harm (DNSH)

A principle ensuring that activities do not cause significant harm to environmental or social objectives.

Emissions scenario

A plausible representation of the future development of emissions of substances that are radiatively active (e.g., greenhouse gases (GHGs) or aerosols), plus human-induced land-cover changes that can be radiatively active via albedo changes, based on a coherent and internally consistent set of assumptions about driving forces (such as demographic and socio-economic development, technological change, energy and land use) and their key relationships. Concentration scenarios, derived from emission scenarios, are often used as input to a climate model to compute climate projections..

Financial institutions

Organisations that provide financial services, including the management, investment, transfer, and lending of money. Examples include banks, insurance companies, asset managers, pension funds, investment firms, and other entities that play a central role in the financial system.

Fossil Fuels

Carbon-based fuels from underground deposits, including coal, oil and natural gas.

G20

The G20 (Group of 20) is a forum for global economic co-operation. It brings together leaders and policy makers issues. G20 members represent around 80% of global GDP, 75% of global exports and 60% of the global population. It includes 19 countries and 2 regions: Argentina, Australia, African Union, Brazil, Canada, China, European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom, United States.

Green transition

The systemic shift from a high-carbon, resource-intensive economy to one that is environmentally sustainable, climate-resilient, and socially inclusive. It encompasses decarbonisation efforts the shift to and renewable energy but also includes the protection and restoration of nature and a just transition for workers and communities.

Greenwashing

Commercial practice involving the making of an environmental claim which is false or misleading.

High integrity

The credibility, transparency and robustness of climate actions, policies or market mechanisms, especially carbon credits and removals. In the context of carbon markets, high integrity means that credits are real and quantifiable (represent actual emissions reductions or removals); additional (would not have occurred without the incentive provided by the market); permanent (stored carbon is unlikely to be released back into the atmosphere); independently verified; transparent and traceable; aligned with net zero pathways.

High-Level Expert Group (HLEG)

The High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, convened by the UN Secretary General in 2022 to help ensure credibility and accountability of net zero pledges.

International Court of Justice (ICJ)

The principal judicial organ of the United Nations. It settles legal disputes between states and gives advisory opinions on legal questions referred to it by authorised international organs and agencies.

International Financial Reporting Standards Foundation (IFRS Foundation)

The IFRS Foundation is a not-for-profit responsible for developing global accounting and sustainability disclosure standards, known as IFRS Standards.

Impacts

The consequences of realised risks on natural and human systems, where risks result from the interactions of climate-related hazards (including extreme weather/ climate events), exposure and vulnerability. Impacts generally refer to effects on lives, livelihoods, health and well-being, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure. Impacts may be referred to as consequences or outcomes and can be adverse or beneficial.

Intergovernmental Panel on Climate Change (IPCC)

The United Nations body for assessing the science related to climate change.

International Sustainability Standards Board (ISSB)

The independent sustainability disclosure standard-setting body of the IFRS Foundation with the objective of developing standards for a global baseline of sustainability disclosures. The ISSB Standards (IFRS S1 and S2) are developed to enhance investor-company dialogue so that investors receive decision-useful, globally comparable sustainability-related disclosures that meet their information needs.

Interoperability

The ability of different policy frameworks, standards, taxonomies, reporting systems and markets to work together seamlessly across jurisdictions, sectors and organisations. Interoperability is a critical goal for effective net zero policy.

Just transition

A set of principles, processes and practices that aim to ensure that no people, workers, places, sectors, countries or regions are left behind in the transition from a high-carbon to a low-carbon economy. It stresses the need for targeted and proactive measures from governments, agencies, and authorities to ensure that any negative social, environmental or economic impacts of economy-wide transitions are minimised, whilst benefits are maximised for those disproportionately affected. Key principles of just transitions include: respect and dignity for vulnerable groups; fairness in energy access and use, social dialogue and democratic consultation with relevant stakeholders; the creation of decent jobs; social protection; and rights at work. Just transitions could include fairness in energy, land use and climate planning and decision-making processes.

Land Use

The arrangements and activities applied to land, including its social and economic purposes.

Least Developed Countries (LDCs)

Countries classified by the UN as having the lowest indicators of socioeconomic development.

Low integrity

Climate actions, policies, or market mechanisms – especially carbon credits, offsets, or disclosures – that lack credibility, robustness, or transparency. In the context of carbon markets, low integrity means the claimed emissions reductions or removals are not real, additional, permanent, or verifiable, and may be subject to issues such as double counting, weak monitoring, or greenwashing.

Maladaptation

Actions that unintentionally increase vulnerability to climate change or cause inequitable outcomes.

Methane (CH₄)

A potent greenhouse gas, major component of natural gas, emitted from fossil fuels, agriculture, and decaying organic matter.

Mitigation (of Climate Change)

Human interventions to reduce GHG emissions or enhance their removal from the atmosphere.

National Adaptation Plan (NAP)

A government-led, country-wide plan that sets out the priorities, objectives, and actions for adapting to the impacts of climate change. It typically includes assessments of climate risks and vulnerabilities, identifies key sectors and regions at risk, and outlines measures to build resilience across society, the economy and ecosystems.

Nature-based Solutions (NbS) / Nature-based approaches

Actions that protect, sustainably manage, and restore natural (or converted) ecosystems and biodiversity to address big societal challenges including climate change, biodiversity loss.

Nationally Determined Contributions (NDCs)

Climate action plans submitted by countries under the Paris Agreement, outlining targets and measures.

Net zero GHG emissions

Condition in which metric-weighted anthropogenic GHG emissions are balanced by metric-weighted anthropogenic GHG removals over a specified period. The quantification of net zero GHG emissions depends on the GHG emission metric chosen to compare emissions and removals of different gases, as well as the time horizon chosen for that metric.

Net zero

Referring to the world as a whole, the IPCC defines net zero as when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period.

Non-state actors (NSAs)

Entities involved in climate action, but not national governments. The HLEG recommendations focus on private and financial sectors, as well as local government and regions.

OECD (Organization for Economic Co-operation and Development)

The Organization for Economic Co-operation and Development is a unique forum where the governments of 38 democracies with market-based economies collaborate to develop policy standards to promote sustainable economic growth.

Offsetting

Purchasing carbon credits to counterbalance one's own GHG emissions.

Overshoot

A situation where global temperatures temporarily exceed a targeted threshold (such as 1.5°C above pre-industrial levels) before being brought back down through rapid mitigation and carbon removal efforts.

Paris Agreement

The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference in Paris, France, on 12 December 2015 (COP21). It entered into force on 4 November 2016.

Policy makers

In the context of this report, individuals or groups – typically within governments, regulatory bodies, or international organisations – who are responsible for designing, enacting, and overseeing laws, regulations, and frameworks that guide climate action and sustainable development. They play a central role in setting national and sectoral climate targets (e.g., net zero, NDCs); developing and implementing climate policies, such as carbon pricing, disclosure requirements and transition planning frameworks; creating enabling environments for private sector action, investment, and innovation; and ensuring that climate policies are credible, effective and aligned with international agreements.

Prudential Framework

Regulatory systems for financial institutions to manage risks, including those related to climate change.

Real Economy

The part of the economy that is concerned with the production and exchange of goods and services, as opposed to the financial sector (which deals with investments, securities and financial products).

Renewable Energy

Any form of energy that is replenished by natural processes at a rate that equals or exceeds its rate of use, such as solar, wind and hydro, etc.

Resilience

The capacity of interconnected social, economic and ecological systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation.

Risk assessment

The systematic process of identifying, analysing, and evaluating potential risks – such as physical, transition, and liability risks – arising from climate change. It involves determining the likelihood and potential impact of climate-related hazards on assets, operations, supply chains, communities and ecosystems.

Rio Conventions

Three major international environmental treaties that were adopted at the 1992 United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, held in Rio de Janeiro, Brazil. The three conventions are:

- United Nations Framework Convention on Climate Change (UNFCCC): Focuses on stabilising greenhouse gas concentrations to prevent dangerous climate change.
- United Nations Convention on Biological Diversity (CBD): Aims to conserve biological diversity, promote sustainable use of its components, and ensure fair and equitable sharing of benefits arising from genetic resources.
- United Nations Convention to Combat Desertification (UNCCD): Seeks to combat desertification and mitigate the effects of drought through national action programmes and international cooperation.

Scenario/climate scenario

A plausible description of how the future may develop based on a coherent and internally consistent set of assumptions about key driving forces (e.g. rate of technological change or prices) and relationships. Note that scenarios are neither predictions nor forecasts but are used to provide a view of the implications of developments and actions.

Scope 1, 2, 3 Emissions

- Scope 1: According to the Greenhouse Gas Protocol, Scope 1 emissions are direct emissions from owned or controlled sources.
- Scope 2: According to the Greenhouse Gas Protocol, Scope 2 emissions are indirect emissions from the generation of purchased energy.
- Scope 3: According to the Greenhouse Gas Protocol, Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Sectoral Roadmap

A government-led plan outlining how a specific sector will decarbonise, including technology, finance, and policy pathways.

Small and Medium-sized Enterprises (SMEs)

Businesses with limited scale, typically defined by employee numbers or turnover.

Small Island Developing States (SIDS)

A distinct group of 39 States and 18 Associate Members of United Nations regional commissions that face unique social, economic and environmental vulnerabilities. Includes low-lying coastal countries and territories that are especially vulnerable to sea level rise, extreme weather events and ocean acidification. Examples include Tuvalu, and The Maldives.

Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs and which balances social, economic and environmental concerns.

Sustainable Development Goals (SDGs)

The SDGs are a set of 17 global goals established by the UN in 2015 as part of the 2030 Agenda for Sustainable Development. They aim to address a broad range of global challenges, including poverty, inequality, climate change, environmental degradation, peace and justice, with a target completion date of 2030. The SDGs provide a shared blueprint for prosperity while protecting the planet and are intended to be universal, applying to all countries regardless of their economic status.

The Taskforce

Taskforce on Net Zero Policy – a multi-stakeholder group convened to assess, guide, and accelerate the development and implementation of high-integrity net zero policies globally. The Taskforce brings together policy makers, regulators, experts, and partner organisations to provide analysis, recommendations, and best practice examples for climate policy reform.

Taxonomy (Sustainable Taxonomy)

A financial classification system defining which economic activities are environmentally sustainable.

Tipping Point

A tipping point in the climate system is a critical threshold at which a small change or disturbance can trigger a significant and often irreversible shift in the state of the system. Once a tipping point is crossed, it can lead to rapid and potentially catastrophic changes, such as the collapse of ice sheets, dieback of rainforests, or disruption of ocean currents.

Transition Pathway Initiative (TPI)

An independent, global initiative that assesses companies' preparedness for the transition to a low-carbon economy. TPI Global Climate Transition Centre at LSE provides publicly available data and analysis on how companies are managing climate risks and opportunities, and how their business models and emissions trajectories align with international climate goals, such as the Paris Agreement.

Transition Plan / Transition Planning

- Transition Plan: A formal document detailing how an entity will achieve its climate goals (e.g., net zero by 2050).
- Transition Planning: The ongoing process of developing and updating strategies to reach climate targets.

United Nations Convention on Biological Diversity (CBD)

Aims to conserve biological diversity, promote sustainable use of its components, and ensure fair and equitable sharing of benefits arising from genetic resources. See Rio Conventions

UNCCD (United Nations Convention to Combat Desertification)

A UN treaty focused on combating desertification and promoting sustainable land management through national action programmes and international cooperation. See Rio Conventions.

UNEP FI (United Nations Environment Programme Finance Initiative)

The UN-convened network of banks, insurers and investors accelerating sustainable development.

UNFCCC (United Nations Framework Convention on Climate Change)

The UN Framework Convention on Climate Change was adopted in May 1992 and opened for signature at the 1992 Earth Summit in Rio de Janeiro. It entered into force in March 1994 and, as of September 2020, had 197 Parties (196 States and the European Union). The objective is the stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (UNFCCC, 1992). The provisions of the Convention are pursued and implemented by two further treaties: the Kyoto Protocol and the Paris Agreement. See Rio Conventions.

